The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

January 31, 2022

D.P.U. 21-120

Petition of The Berkshire Gas Company, pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2022 through 2024.

D.P.U. 21-121

Petition of Eversource Gas Company of Massachusetts, d/b/a Eversource Energy, pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2022 through 2024.

D.P.U. 21-122

Petition of Fitchburg Gas and Electric Light Company, d/b/a Unitil (Gas Division), pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2022 through 2024.

D.P.U. 21-123

Petition of Liberty Utilities (New England Natural Gas Company) Corp., d/b/a Liberty Utilities, pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2022 through 2024.

D.P.U. 21-124

Petition of Boston Gas Company, d/b/a National Grid, pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2022 through 2024.

D.P.U. 21-125

Petition of NSTAR Gas Company, d/b/a Eversource Energy, pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2022 through 2024.

D.P.U. 21-126

Petition of the towns of Aquinnah, Barnstable, Bourne, Brewster, Chatham, Chilmark, Dennis, Eastham, Edgartown, Falmouth, Harwich, Mashpee, Oak Bluffs, Orleans, Provincetown, Sandwich, Tisbury, Truro, Wellfleet, West Tisbury, and Yarmouth, and Dukes County, acting together as the Cape Light Compact JPE, pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2022 through 2024.

D.P.U. 21-127

Petition of Fitchburg Gas and Electric Light Company, d/b/a Unitil (Electric Division), pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2022 through 2024.

D.P.U. 21-128

Petition of Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2022 through 2024.

D.P.U. 21-129

Petition of NSTAR Electric Company, d/b/a Eversource Energy, pursuant to G.L. c. 25, § 21, for approval by the Department of Public Utilities of its Three-Year Energy Efficiency Plan for 2022 through 2024.

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I. INTRODUCTION AND PROCEDURAL HISTORY

On November 1, 2021, The Berkshire Gas Company ("Berkshire Gas"), Eversource Gas Company of Massachusetts, d/b/a Eversource Energy ("EGMA"), Fitchburg Gas and Electric Light Company, d/b/a Unitil (Gas Division) ("Unitil (gas)"), Liberty Utilities (New England Natural Gas Company) Corp., d/b/a Liberty ("Liberty"), Boston Gas Company, d/b/a National Grid ("National Grid (gas)"), NSTAR Gas Company, d/b/a Eversource Energy ("NSTAR Gas"), the Towns of Aquinnah, Barnstable, Bourne, Brewster, Chatham, Chilmark, Dennis, Eastham, Edgartown, Falmouth, Harwich, Mashpee, Oak Bluffs, Orleans, Provincetown, Sandwich, Tisbury, Truro, Wellfleet, West Tisbury, and Yarmouth, and Dukes County, acting together as the Cape Light Compact JPE ("Compact"), Fitchburg Gas and Electric Light Company, d/b/a Unitil (Electric Division) ("Unitil (electric)"), Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid ("National Grid (electric)"), and NSTAR Electric Company, d/b/a Eversource Energy ("NSTAR Electric") (collectively "Program Administrators"), each filed a three-year energy efficiency plan with the Department of Public Utilities ("Department") for calendar years 2022 through 2024 ("Three-Year Plans").[1] The Program Administrators filed their Three-Year Plans pursuant to An Act Relative to Green Communities, St. 2008, c. 169,

[1] The Department docketed these matters as follows: (1) D.P.U. 21-120 for Berkshire Gas; (2) D.P.U. 21-121 for Eversource Gas; (3) D.P.U. 21-122 for Unitil (gas); (4) D.P.U. 21-123 for Liberty; (5) D.P.U. 21-124 for National Grid (gas); (6) D.P.U. 21-125 for NSTAR Gas; (7) D.P.U. 21-126 for the Compact; (8) D.P.U. 21-127 for Unitil (electric); (9) D.P.U. 21-128 for National Grid (electric); and (10) D.P.U. 21-129 for NSTAR Electric.

codified at G.L. c. 25, §§ 19, 21-22, as amended by An Act Relative to Competitively Priced Electricity in the Commonwealth, St. 2012, c. 209 ("Energy Act of 2012"), by An Act to Advance Clean Energy, St. 2018, c. 227 ("Energy Act of 2018"), by An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy, St. 2021, c. 8 ("Climate Act") (collectively "Green Communities Act"), and Investigation by the Department of Public Utilities on its own Motion into Updating its Energy Efficiency Guidelines, D.P.U. 20-150-A (May 3, 2021) ("Guidelines").[2]

Each Program Administrator seeks approval of its Three-Year Plan, including proposed programs, program budgets, cost-recovery mechanisms and, with the exception of the Compact, a proposed performance incentive mechanism. Pursuant to the Energy Act of 2012, the Program Administrators also have incorporated their Residential Conservation Services ("RCS") filings in their respective Three-Year Plans. St. 2012, c. 209, § 32(h), (i).

On November 2, 2021, the Attorney General of the Commonwealth of Massachusetts ("Attorney General") filed, pursuant to G.L. c. 12, § 11E, a notice of intervention as a full party in each Three-Year Plan docket. On November 8, 2021, the Department granted the petitions to intervene as full parties in each Three-Year Plan docket of the Massachusetts

[2] The Guidelines set forth the filing requirements and memorialize the process by which the Department reviews and evaluates the Three-Year Plans. D.P.U. 20-150-A at 1-3. In addition, on October 5, 2021, the Department issued a Procedural Memorandum directing (or, in some instances, reminding) each Program Administrator to provide certain additional information with its Three-Year Plan filing. 2022-2024 Three-Year Energy Efficiency Plans, D.P.U. 21-120 through D.P.U. 21-129, Procedural Memorandum (October 5, 2021).

Department of Energy Resources ("DOER"), Conservation Law Foundation ("CLF"), Low-Income Weatherization and Fuel Assistance Program Network and the Low-Income Energy Affordability Network (together, "LEAN"), Acadia Center ("Acadia"), Northeast Energy Efficiency Council ("NEEC"), and Massachusetts Energy Marketers Association ("MEMA"). Also, on November 8, 2021, the Department granted the petition of Sunrun Inc. ("Sunrun") to intervene as a full party in D.P.U. 21-126 through D.P.U. 21-129. Further, on November 8, 2021, the Department granted the petition to intervene as a full party of National Grid (gas) in D.P.U. 21-126. D.P.U. 21-126, Hearing Officer Ruling at 4 (November 8, 2021). Finally, on November 29, 2021, the Department granted limited participant status to New England Geothermal Professional Association, Inc. ("NEGPA") in each Three-Year Plan docket and to Northeast Clean Energy Council ("NECEC") in D.P.U. 21-126, D.P.U. 21-128, and D.P.U. 21-129. D.P.U. 21-120 through D.P.U. 21-129, Interlocutory Order on Petitions to Intervene of New England Geothermal Professional Association, Inc. and Northeast Clean Energy Council, Inc. (November 29, 2021).

Pursuant to notice duly issued,[3] the Department held two joint public hearings on December 1 and 2, 2021.[4] The Program Administrators sponsored the testimony of

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3 On December 14, 2021, the Department received a motion for leave to file comments out of time from CPower Energy Management ("CPower"). As grounds for its filing comments late, CPower asserts that it engaged in discussions with the Program Administrators to address its concern but was not able to resolve this issue in a timely manner to meet the Department's December 3, 2021 deadline for filing comments (CPower Motion at 1).

A late-filed request will be disallowed as untimely unless good cause is shown for waiver under 220 CMR 1.01(4). Given the 90-day review period for these proceedings, the Department must adhere closely to the established procedural schedule. Accordingly, we find that CPower has not established good cause for filing comments almost two weeks after the deadline for public comments. See Investigation of the Department of Public Utilities, on its own Motion, Commencing a Rulemaking, D.P.U. 16-64-C at 3 n.2 (2016); Joint Petition for Approval of Merger between NSTAR and Northeast Utilities, D.P.U. 10-170-B at 7 n.4 (2012). Accordingly, the Department does not consider the late-filed comments of CPower in ruling on the instant Three-Year Plans.

4 The Department held joint public hearings in each docket. These cases, however, are not consolidated and remain separate proceedings.

39 internal witnesses.[5,6] In addition, intervenors sponsored the testimony of six witnesses.[7] The Department held four days of evidentiary hearings on December 9, 10, 13, and 14, 2021.[8]

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5 The following internal witnesses provided testimony on behalf of the Program Administrators in their respective dockets: (1) Jennifer Boucher, Hammad Chaudhry, and Glen Eigo (Berkshire Gas); (2) Alexandra Abbruscato, Ashley Botelho, Brandy Chambers, Tracy Dyke-Redmond, Erin Engelkemeyer, Ruth Georges, Jennifer Gray Benford, Brian Greenfield, Frank Gundal, John Kibbee, Collin Nantovich, William O'Connor, Katherine Peters, and Tilak Subrahmanian (NSTAR Electric, NSTAR Gas, and EGMA); (3) Cindy Carroll, Mary Downes, and Deborah Jarvis (Unitil (gas) and Unitil (electric)); (4) Kimberly Dragoo, Stephanie Terach; and Autumn Snyder (Liberty); (5) Marie Abdou, Grayson Bryant, Beth Delahaij, Melanie Coen, Amanda Formica, David Gibbons, Gregory Krantz, Antonio Larson, Ezra McCarthy, Steve Menges, Christopher Porter, Tomi Uyehara, and Paul Wissink (National Grid (electric) and National Grid (gas)); and (6) Margaret Downey, Briana Kane, and Margaret Song (Compact).

6 Berkshire Gas sponsored the testimony of one external witness, Matthew Siska of GDS Associates (Exh. Berkshire-2). The Compact sponsored the testimony of two external witnesses, Patrick Knight and Erin Malone of Synapse Energy Economics, Inc. (Exh. Compact-2).

7 CLF sponsored the testimony of Paulina Casasola of Clean Water Action and Luisa de Paula Santos of Community Labor United. MEMA sponsored the testimony of one internal witness, Michael Ferrante, and the following four external witnesses: (1) Raymond Albrecht of Raymond J. Albrecht, LLC; (2) Dr. Thomas Butcher of the National Oil Heat Research Alliance; (3) Matthew Herman of the National Biodiesel Board; and (4) Joseph Uglietto of Diversified Energy Specialists, Inc.

8 The Department held joint evidentiary hearings on December 9, 10, and 13, 2021, on common issues. The Department also held a Compact-specific evidentiary hearing on December 14, 2021.

On December 29, 2021, the Program Administrators (jointly), Attorney General, DOER, Acadia, CLF, LEAN, NEEC,[9] MEMA, and NEGPA filed briefs in each docket; National Grid (gas) and the Compact filed supplemental briefs in D.P.U. 20-126; NECEC filed a brief in D.P.U. 21-126, D.P.U. 21-128, and D.P.U. 21-129; and Sunrun filed a brief in D.P.U. 21-126 through D.P.U. 21-129. On January 6, 2022, the Program Administrators (jointly), Attorney General, DOER, Acadia, CLF, LEAN, and MEMA filed reply briefs in each docket; and National Grid (gas) and the Compact filed supplemental reply briefs in D.P.U. 21-126. The evidentiary record in each docket includes numerous exhibits and the Program Administrators' responses to five record requests.[10,11]

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9 NEEC filed a letter in lieu of brief noting its "full support" for all arguments presented in the initial brief of NECEC (NEEC Brief at 1). Accordingly, the arguments of NECEC set forth herein also represent those of NEEC.

10 The combined total number of exhibits for all dockets is approximately 3000. Tr. 4, at 651; D.P.U. 21-120 through D.P.U. 21-129, Joint Exhibit List (December 6, 2021).

11 On its own motion, the Department strikes those portions of the responses to RR-DPU-1 and RR-DPU-3 that are unresponsive in that they go beyond the narrow scope of the information sought by the record requests and constitute extra-record evidence. The evidentiary record in these proceedings remained open to receive responses to the record requests (Tr. 4, at 651). Such responses become part of the evidentiary record unless challenged as unresponsive and stricken in whole or in part. Electronic Filing Guidelines, D.P.U. 15-184-A, App. I (Standard Ground Rules), at G. Providing information beyond the scope of that sought by the record request constitutes supplemental testimony that is extra-record evidence, which is prejudicial and inappropriate without a motion to reopen the record upon a showing of good cause. 220 CMR 1.11(8); D.P.U. 15-184-A, App. I (Standard Ground Rules), at G. See, e.g., Western Massachusetts Electric Company, D.T.E. 98-51, at 9 (1998). No such motion was filed, or showing made, here. Further, regarding RR-DPU-3, the Department conducted a procedural teleconference with the Program Administrators to

II. BACKGROUND

A. Development of Three-Year Plans

Pursuant to the Green Communities Act, all Program Administrators are required to develop energy efficiency plans that "provide for the acquisition of all available energy efficiency and demand reduction resources that are cost effective or less expensive than supply." G.L. c. 25, § 21(b)(1). The Green Communities Act establishes an Energy Efficiency Advisory Council ("Council")[12] and directs Program Administrators, in

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further clarify the information to be provided—and the information to be excluded—from RR-DPU-3 prior to filing, and the Program Administrators still filed a response with supplemental, unrequested, extra-record information that could not be tested on cross-examination.

With respect to the response to RR-DPU-1, the Department strikes the two full paragraphs on page 2, the entire portion of page 3 following the bullet list, and pages 4 and 5 in their entirety. The attachments to RR-DPU-1 are not stricken and are part of the evidentiary record in these proceedings. With respect to RR-DPU-3, the Department strikes everything appearing in the response after the third sentence. Footnote 1 and the attachments to RR-DPU-3 are not stricken and are part of the evidentiary record in these proceedings.

[12] The Council's 15 voting members represent the following interests: (1) residential consumers; (2) the low-income weatherization and fuel assistance program network; (3) the environmental community; (4) businesses, including large commercial and industrial end-users; (5) the manufacturing industry; (6) energy efficiency experts; (7) organized labor; (8) the Commonwealth of Massachusetts Department of Environmental Protection ("DEP"); (9) the Attorney General; (10) the Commonwealth of Massachusetts Executive Office of Housing and Economic Development; (11) the Massachusetts Non-profit Network; (12) a city or town in the Commonwealth of Massachusetts; (13) the Massachusetts Association of Realtors; (14) a business employing fewer than ten persons located in the Commonwealth of Massachusetts that performs energy efficiency services; and (15) DOER. G.L. c. 25, § 22(a). The Council membership also includes one non-voting member representing each Program Administrator, one from the heating oil industry, one from ISO New England Inc. ("ISO-NE"), and one from energy efficiency businesses. G.L. c. 25, § 22(a).

coordination with the Council, to prepare a three-year, statewide energy efficiency plan ("Statewide Plan"). G.L. c. 25, § 21(b)(1).

Programs contained in the energy efficiency investment plan (i.e., the Statewide Plan) may include, but are not limited to: (1) efficiency and load management programs, including programs for energy storage and other active demand management technologies and strategic electrification; (2) demand response programs; (3) programs for research, development, and commercialization of products or processes that are more energy-efficient than those generally available; (4) programs for the development of markets for such products and processes, including recommendations for new appliance and product efficiency standards; (5) programs providing support for energy use assessment, real time monitoring systems, engineering studies and services related to new construction or major building renovation, including integration of such assessments, systems, studies and services with building energy codes programs and processes, or those regarding the development of high performance or sustainable buildings that exceed code; (6) programs for the design, manufacture, commercialization, and purchase of energy-efficient appliances and heating, air conditioning, and lighting devices; (7) programs for planning and evaluation; (8) programs providing commercial, industrial, and institutional customers with greater flexibility and control over demand-side investments funded by the programs at their facilities; (9) programs for public education regarding energy efficiency and demand management; and (10) programs that resulted in customer switching to renewable energy sources or other clean energy technologies. G.L. c. 25, § 21(b)(2).

Pursuant to G.L. c. 25, § 21(c), the Program Administrators must submit a draft Statewide Plan to the Council every three years on or before April 30th. The Council must then review the Statewide Plan and submit its approval or comments to the Program Administrators not later than three months after submission of the draft Statewide Plan.[13] The Program Administrators may make any changes or revisions to the draft Statewide Plan to reflect the input of the Council. G.L. c. 25, § 21(c).

Every three years, each Program Administrator also must develop and file with the Department an individual Three-Year Plan based on the Statewide Plan. G.L. c. 25, § 21(d)(1). On or before October 31st of the applicable year, each Program Administrator must submit its Three-Year Plan to the Department together with the Council's approval or comments and a statement of any unresolved issues. G.L. c. 25, § 21(d)(1).

The Department is required to conduct a public hearing to allow interested persons to be heard on the Three-Year Plans. G.L. c. 25, § 21(d)(1). Within 90 days of the filing date, the Department must approve, modify, or reject and require the resubmission of the Three-Year Plans. G.L. c. 25, § 21(d)(2).

As required by the Green Communities Act, the Council worked with the Program Administrators to develop the energy efficiency programs and budgets in the Statewide Plan.

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[13] The Council's statutory role in the development of the Statewide Plan concludes three months after submission of the Statewide Plan by the Program Administrators at which time the Council must offer its approval or comments to the Program Administrators. G.L. c. 25, § 21(c). Approval of a Statewide Plan requires a two-thirds majority vote of the Council. G.L. c. 25, § 22(b).

G.L. c. 25, § 22(b). As part of the development of the Statewide Plan, the Program Administrators participated in six sector-specific workshops convened by the Council and nine public comment listening sessions in 2020 and 2021 (Statewide Plan, Exh. 1, App. A at 46). On March 24, 2021, the Council issued a resolution containing certain recommendations to the Program Administrators (Statewide Plan, Exh. 1, App. A at 46). The Program Administrators also participated in several meetings of an equity working group[14] convened by the Council and held one-on-one meetings with various stakeholders related to the development of the Statewide Plan (Statewide Plan, Exh. 1, at 7, 20 & App. A at 46-47).

Consistent with G.L. c. 25, § 21(c), the Program Administrators filed the draft Statewide Plan with the Council on April 30, 2021. The Council issued a resolution three months later on July 28, 2021, providing comments on the Statewide Plan (Statewide Plan, Exh. 1, App. L at 1-16). Following the passage of the July resolution, the Council continued to meet with the Program Administrators to provide further input on the development of the Statewide Plan (Statewide Plan, Exh. 1, App. A at 47). On September 22, 2021, the Program Administrators submitted draft benefit-cost ratio ("BCR") screening models and energy efficiency data tables to the Council, and on October 6, 2021, the Program Administrators submitted an additional draft Statewide Plan to the Council

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[14] The equity working group was established by the Council and includes members that were not appointed by the Department pursuant to G.L. c. 25, § 22. The Department is not clear whether the working group operated pursuant to open meeting law, G.L. c. 30A, § 20.

(Statewide Plan, Exh. 1, App. A at 47).

The Council provided additional input to the Program Administrators at several Council and one-on-one meetings throughout October 2021 (Statewide Plan, Exh. 1, App. A at 47). On October 25, 2021, the Program Administrators, the Attorney General, and DOER reached a 40 page "Term Sheet" agreement that served, in part, as a guide for the Program Administrators to finalize the Statewide Plan (Statewide Plan, Exh. 1, App. M).[15] On October 27, 2021, the Council unanimously passed a resolution supporting the final Statewide Plan and the Program Administrators' respective Three-Year Plans, to the extent they are consistent with the Statewide Plan (Statewide Plan, Exh. 1, App. N). Finally, five days later on November 1, 2021, the Program Administrators filed their Three-Year Plans with the Department.[16]

B. Department Review of Three-Year Plans

Pursuant to the Green Communities Act, each Program Administrator's Three-Year Plan must provide for the acquisition of all available energy efficiency resources that are cost

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[15] The Term Sheet includes a number of "key terms" agreed to by the Program Administrators, the Attorney General, and DOER to be included in the final Statewide Plan (Statewide Plan, Exh. 1, App. M at 5-8). The Term Sheet also describes a number of approaches, goals, and policies that were not included in the Statewide Plan (Statewide Plan, Exh. 1, App. M at 2-10). The Term Sheet is addressed in Section IV.D.3.f.iv., below.

[16] Because October 31, 2021 fell on a Sunday, each Program Administrator filed its Three-Year Plan on the next succeeding business day consistent with G.L. c. 4, § 9 (when the last day for the performance of any act authorized or required by statute falls on Sunday or a legal holiday, the act may be performed on the next succeeding business day).

effective or less expensive than supply. G.L. c. 25, §§ 19(a), 21(a), 21(b)(1), 21(b)(2), 21(d)(2). Further, a Program Administrator must demonstrate that it will meet its resource needs first through cost-effective energy efficiency and demand reduction resources in order to mitigate capacity and energy costs for all customers. G.L. c. 25, §§ 19(a), 19(b), 21(a), 21(b)(1); see also Guidelines § 3.4.7. The Three-Year Plans must provide for the acquisition of these resources with the lowest reasonable customer contribution. G.L. c. 25, § 21(b)(1).

A Program Administrator must demonstrate that its Three-Year Plan: (1) establishes a sustainable effort in its continued delivery of energy efficiency; (2) considers new technologies and enhancements; (3) includes the results of avoided costs, potential studies, and evaluation, measurement, and verification ("EM&V") studies; and (4) seeks to design programs to address identified barriers. Guidelines § 3.4.7; 2013-2015 Three-Year Energy Efficiency Plans, D.P.U. 12-100 through D.P.U. 12-111, at 37-40 (2013) ("2013-2015 Three-Year Plans Order"). In addition, when reviewing the Three-Year Plans, the Department must ensure that the Program Administrators: (1) have minimized administrative costs to the fullest extent practicable; (2) will use competitive procurement processes to the fullest extent practicable; and (3) have allocated to the low-income sector at least ten percent of the funds for electric energy efficiency programs and 20 percent of the funds for gas energy efficiency programs. G.L. c. 25, §§ 19(a), (b), (c), 21(b)(3).

On March 26, 2021, the Governor signed the Climate Act into law, effective June 24, 2021. St. 2021, c. 8. The Climate Act makes certain changes to the Green Communities Act and the Global Warming Solutions Act, St. 2008, c. 298 ("GWSA"). In particular, the

Climate Act requires the Secretary of Energy and Environmental Affairs ("EEA") to set a goal, every three years, for the necessary contributions of the Statewide Plan to meeting each greenhouse gas ("GHG") emissions limit and sublimit adopted under the GWSA. St. 2021, c. 8, § 9; see G.L. c. 21N, § 3B. Each Three-Year Plan must be constructed to meet the GHG emissions reduction goals set by the Secretary of EEA pursuant to G.L. c. 21N, § 3B. St. 2021, c. 8, §§ 26A, 28; D.P.U. 20-150-A at 7, 50; Guidelines § 3.4.7.

For the purpose of evaluating cost effectiveness, the Green Communities Act, as amended by the Energy Act of 2018, provides that review occurs at the sector level (i.e., residential, low income, and commercial and industrial ("C&I")). St. 2018, c. 227, § 6; see G.L. c. 25, § 21(b)(3). If a sector BCR exceeds one, then the sector is deemed to be cost effective. St. 2018, c. 227, § 6; see G.L. c. 25, § 21(b)(3). If, however, a sector fails the cost-effectiveness test, then its component programs shall be modified so that the sector is cost effective, or the program must be terminated. St. 2018, c. 227, § 6; see G.L. c. 25, § 21(b)(3). The Climate Act also requires that when determining cost-effectiveness the calculation of benefits must include the "social value of GHG emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling." St. 2021, c. 8, § 21; see G.L. c. 25, § 21. In addition, the Climate Act requires that the Department and the entities it regulates (e.g., the Program Administrators) prioritize safety, security, reliability of service, affordability, equity, and reductions in GHG emissions to meet statewide GHG emission limits and sublimits established pursuant to G.L. c. 21N. St. 2021, c. 8, § 15; see G.L. c. 25, § 1A. The

Department addresses these priorities on a case-by-case basis as relevant to each proceeding. See, e.g., Massachusetts Municipal Wholesale Electric Company, D.P.U. 21-29, at 31 n.15 (2021); Boston Gas Company, D.P.U. 21-GC-10, at 3-4 (2021).

The Department has found that in the pursuit of all cost-effective energy efficiency, the Program Administrators must balance the additional flexibility in program design and implementation afforded by sector-level cost-effectiveness review under the Energy Act of 2018, with bill impacts and the prudent use of ratepayer funds. 2019-2021 Three-Year Energy Efficiency Plans, D.P.U. 18-110 through D.P.U. 18-119, at 72-74 (2019) ("2019-2021 Three-Year Plans Order"). In doing so, the Program Administrators must consider cost-efficiency, as well as cost-effectiveness.[17]

Finally, to recover costs related to energy efficiency, electric Program Administrators must first fund the Three-Year Plans from other revenue sources.[18] The Department may also approve funding from gas and electric ratepayers through a fully reconciling funding

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[17] To assess cost-efficiency and, thereby, the prudence of expenditures, the Department requires the Program Administrators to report cost-effectiveness at the program and core initiative levels, in addition to the sector level. 2019-2021 Three-Year Plans Order, at 73-74; see also 2013-2015 Three-Year Plans Order, at 105; 2019-2021 Three-Year Energy Efficiency Plans, D.P.U. 18-110 through D.P.U. 18-119, Hearing Officer Procedural Memorandum at 2 n.1 (October 3, 2018).

[18] The revenue sources are (1) a mandatory $0.0025 per kilowatt-hour ("kWh"), system benefits charge ("SBC"), (2) revenues from the forward capacity market ("FCM"), administered by ISO-NE, (3) revenues from cap-and-trade pollution control programs (e.g., Regional Greenhouse Gas Initiative ("RGGI")), and (4) other funding sources. Guidelines § 3.2.1; see also G.L. c. 25, § 19(a).

mechanism, after considering the rate and bill impacts on consumers. G.L. c. 25, § 19(a), (b); Guidelines §§ 3.2.1; 3.2.2.

III. OVERVIEW OF PROCEEDING AND THREE-YEAR PLAN DEVELOPMENT

In this Order, the Department approves the gas and electric Program Administrators' 2022-2024 Three-Year Plans, with modifications. G.L. c. 25, § 21(d)(2). Under the Three-Year Plans, the Program Administrators will invest approximately $4.0 billion in energy efficiency and demand reduction resources that will cost-efficiently reduce energy use and demand. Over the next three years, pursuant to the directives in this Order, the Program Administrators will work to motivate customers to optimize their energy use in a manner that lowers costs for customers and reduces GHG emissions. The 2022-2024 Three-Year Plans, consistent with the Energy Act of 2018, emphasize strategic electrification[19] and improve equitable access to energy efficiency programs by reducing barriers to participation for customers that historically have yet to participate in these programs. Consistent with the requirements of the Climate Act, the energy efficiency programs are designed to contribute their share of GHG emissions reductions to achieve the Commonwealth's aggressive 2030 GHG emissions reduction targets and continue progress towards net-zero emissions by 2050. The Three-Year Plans contain the roadmap to achieve these goals; however, the

[19] By including strategic electrification in the Three-Year Plans, the Legislature has established a pathway to decarbonize portions of the building sector in an optimal manner. As discussed below, strategic electrification within the context of the energy efficiency programs maximizes the effectiveness of electrification by ensuring that customers weatherize buildings and adopt right-sized heating equipment that lowers a customer's net energy use.

achievement of these goals will be based entirely on motivating customer decisions and acceptance of the measures offered under the Three-Year Plans. Achieving the energy and GHG emissions reduction goals will require cooperation among stakeholders to educate and motivate customers across the Commonwealth to embrace energy efficiency through the Mass Save programs.

The Department recognizes the efforts of the Program Administrators and stakeholders to develop the Three-Year Plans, as well as the significant ongoing efforts across the Commonwealth to further our state's energy and environmental policies. The Department is responsible for overseeing the Program Administrators' implementation of the Three-Year Plans to ensure that each Program Administrator pursues all cost-effective energy efficiency and demand reduction resources in a sustained manner and executes its programs in a way that also achieves the GHG reduction goals set pursuant to G.L. c. 21N, § 3B. In addition, ensuring the Program Administrators prioritize affordability, equity and GHG emissions reductions, as well as safety, reliability, and security, has been a central aspect of the Department's review of the Three-Year Plans and the Department examines each of these elements throughout the Order.

In our review of a Three-Year Plan, the Department examines the costs and bill impacts of the proposed programs from both a participant and non-participant perspective to ensure customers experience bill reductions from the energy efficiency measures adopted and ratepayers receive benefits through reduced overall energy system costs commensurate with the proposed budget. 2013-2015 Three-Year Plans Order, at 122-123; D.P.U. 08-50-A

at 58. The Department also assesses affordability of the programs in consideration of short-term bill impacts balanced against long-term benefits. Investigation by the Department of Public Utilities on its own Motion into Updating its Energy Efficiency Guidelines, D.P.U. 08-50-D at 11-12 (2012). As electrification efforts expand, ensuring affordability is of particular importance to ensure the cost of electricity remains affordable for customers in order to continue the progress towards decarbonization without overburdening customers.

In assessing equity, the Department requires the Program Administrators to dedicate certain portions of their budgets solely for the implementation of low-income programs to ensure that the Three-Year Plans benefit our most vulnerable residents. The Department also requires the Program Administrators to address barriers to participation to ensure all customers can access and benefit from the energy savings opportunities supported under the Green Communities Act. See, e.g., 2016-2018 Three-Year Energy Efficiency Plans, D.P.U. 15-160 through D.P.U. 15-169, at 26 (2016) ("2016-2018 Three-Year Plans Order") (approving renter specific offering, enhanced incentives for moderate income customers, assessment of the effectiveness of the small business program); 2013-2015 Three-Year Plans Order, at 46-47 (approving a community partnership program that targeted increased participation from lower income and working-class communities).

Achieving GHG emissions reductions has been a central focus of the energy efficiency programs since the passage of the GWSA, and the Department requires the Program Administrators to assess and track the GHG emissions impact of their programs. 2013-2015 Three-Year Plans Order, at 43-44 (finding the three-year plans supported the

emissions reduction targets in the 2020 Climate Plan). In this Order, the Department ensures that the 2022-2024 Three-Year Plans are constructed consistent with the GHG emissions reduction goals established pursuant to G.L. c. 21N, § 3B. At the same time, the Department requires the Program Administrators to assess the impact the programs, particularly strategic electrification, have on the distribution system to avoid unintended reliability issues, while also ensuring that the programs are delivered in a safe manner.

Under the Green Communities Act, the Department must review each element of the Three-Year Plans and adjudicate all disputes related to the proposed programs within 90 days. G.L. c. 25, § 21(d)(2). Completing a full, fair, and thorough evaluation of every element of the Three-Year Plans in this short amount of time is an extremely important but difficult task.[20] The Department must dedicate significant resources to these proceedings to meet this statutory deadline. Therefore, it is imperative that a Three-Year Plan be complete, accurate, and reviewable the day it is filed, as well as clearly supported by testimony to minimize the need for discovery and evidentiary hearings. The Department has developed and refined Guidelines and filing requirements over the years to ensure that the Department and stakeholders have sufficient and accurate information to review the filing within the 90-day period. D.P.U. 08-50-B at 4-5; see generally Investigation by the Department of Public Utilities on its own Motion into Updating its Energy Efficiency Guidelines, D.P.U. 20-150-A (2021); Investigation by the Department of Public Utilities on its own

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[20] In comparison, pursuant to G.L. c. 164, § 94, the Department has ten months to adjudicate a distribution rate case filing.

Motion into Updating its Energy Efficiency Guidelines, D.P.U. 11-120-A (2013). In addition, given the evolving landscape of energy policy and the continuous transformation of the energy efficiency market, the Department issues a pre-filing memorandum to identify any additional information the Program Administrators must include in their filings to facilitate the Department's review and reduce the need for discovery. See, e.g., D.P.U. 21-120 through D.P.U. 21-129, Hearing Officer Procedural Memorandum at 2-3 (October 5, 2021) ("Pre-Filing Memorandum"); D.P.U. 18-110 through D.P.U. 18-119, Procedural Memorandum (October 3, 2018). Despite this guidance and repeated directives to file clear, complete, accurate, and fully supported Three-Year Plans, the Department is disheartened with the problems and deficiencies that arose upon our review of the 2022-2024 Three-Year Plans filings.

This is the fourth Three-Year Plan the Program Administrators have filed with the Department and they have been running nation-leading energy efficiency programs for more than a decade. The Program Administrators have demonstrated that they are more than capable of planning and executing regulatory filings on tight deadlines. In developing and executing their energy efficiency investment plans, the Program Administrators have proven to be adaptable — incorporating cutting edge technologies and embracing changing policies that fundamentally challenge traditional utility company roles. They have done this in a manner that has allowed the Department to review and understand complex new processes and how they relate to current policy and legislation. However, these Three-Year Plan filings were a step in the wrong direction.

First, as noted above, in a Three-Year Plan filing (or any regulatory filing), it is imperative that the filing contain all required information, is accurate, and reviewable. Documents should be easy to follow, allow for efficient review, and be as free from errors as possible. A Three-Year Plan must contain all elements identified in G.L. c. 25, §§ 19, 21 and required by the Department. In these Three-Year Plans, several required elements were missing or included in appendices in a way that made them difficult to discover. The Department had to issue multiple rounds of discovery to gather information that should have been included in the initial filings and supplement information that was incomplete or unclear (see, e.g., Exhs. DPU-Comm 3-1; DPU-Comm 3-2; DPU-Comm 4-1 through DPU-Comm 4-3; DPU-Comm 5-1; DPU-Comm 6-1 through DPU-Comm 6-8).[21] The Department directed the Program Administrators to provide pre-filed testimony addressing certain issues we have previously recognized as priorities. However, the Program Administrators largely ignored these directives and either did not provide the required testimony, provided incomplete testimony, or provided common statewide testimony, disregarding the directive to provide service territory-specific information.[22] Of particular concern is the incompleteness of the required testimony on potential studies. The Program

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21 This is not a complete list of the additional discovery required.

22 For example, in the Pre-Filing Memorandum at 2, the Department requested Program Administrator-specific testimony with how the Program Administrators addressed participation barriers for renters, hard-to-reach communities, municipalities, healthcare facilities, education institutions, non-profits, the hospitality industry, and small and medium size businesses. Instead, the Program Administrators provided only identical, high-level testimony (see, e.g., Exh. BGC-2, at 67-69).

Administrators are required to conduct territory-specific potential studies and provide individual testimony on how each Program Administrator incorporated the findings of its own potential study in the development of its own savings goals during the planning process. 2019-2021 Three-Year Plans Order, at 38; Pre-Filing Memorandum at 2. Instead, the Program Administrators provided generic, high-level testimony that did not even include any reference to their individual potential study results (see, e.g., Exh. BGC-2, at 21-36).[23]

Further, since 2012, the Department has repeatedly stated that the Program Administrators must address the participation barriers and achievement of deeper participant savings for renters. See 2019-2021 Three-Year Plans Order, at 39, 41-43, 95; 2016-2018 Three-Year Plans Order, at 26-27; 2013-2015 Three-Year Plans Order, at 45-48. Accordingly, the Program Administrators knew that the review of their plan for serving renters is a top priority of the Department. In testimony, the Program Administrators explained at a high level how they served renters in the 2019-2021 Three-Year Plan term[24]

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[23] During the investigation of the 2019-2021 Three-Year Plans, the Program Administrators repeatedly argued that potential studies should be service-territory specific and use different methods to ensure the studies produce actionable information based on each Program Administrator's unique service-territory characteristics. 2019-2021 Three-Year Plans Order, at 18-19. However, the testimony provided in these proceedings does not discuss the actionable information for each Program Administrator.

[24] The Program Administrators highlight that in 2019-2021, the renter energy savings packages were a key element of their service to renters (see, e.g., Exh. EGMA-2, at 58). These packages included light bulbs, faucet aerators, and smart strips (Statewide Plan, Exh. 1, at 50). However, the Program Administrators planned to stop offering lighting measures and, at the time of the Three-Year Plan filings, could not identify what would be included in the renter energy savings package going

and the results of certain studies (see, e.g., Exh. EGMA-2, at 56-61). However, for the 2022-2024 Three-Year Plan term, the Program Administrators indicated that they will not develop their renter strategic plan until the second quarter of 2022 and will not roll out the strategy until the second half of 2022 (Statewide Plan, Exh. 1, App. M at 9). The strategies that the Program Administrators intend to implement should be developed prior to and included in the Three-Year Plans. Waiting to develop core strategies, particularly strategies for serving hard-to-reach customers, until after filing the Three-Year Plans with the Department, is not consistent with the Green Communities Act. As discussed in Section IV.D.3.a.ii below, the Department now must expend additional administrative resources to review the proposal at a later date.

Further, as discussed in Section V.D.1 below, the Department previously directed the Program Administrators to undertake a study on the best practices for minimizing administrative costs and adopt the recommendations of the study. 2019-2021 Three-Year Plans Order, at 50; 2016-2018 Three-Year Plans Order, at 42. Specifically, the Department directed the Program Administrators to work with the Council to develop a formal process to address Council data requests in a way that balances the reporting of beneficial data/information and the minimization of administrative costs. D.P.U. 20-150-A at 12 n.9. Not only did the Program Administrators not submit the formal process with this filing, they

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forward (Statewide Plan, Exh. 1, at 50). Instead, the Program Administrators merely stated that the renter energy savings packages would "continue to evolve" (Statewide Plan, Exh. 1, at 50).

developed the draft proposal for Council consideration less than two weeks before filing the Three-Year Plans (Exh. DPU-Comm 10-13 (Rev.)). On January 20, 2022, almost three months after the Three-Year Plans were filed with the Department (and less than two weeks before the statutory deadline to issue this Order), the Program Administrators finally submitted the proposal for Department review. The lack of action by the Program Administrators to advance the Council data request proposal in a timely manner is troubling. Again, the Department will need to expend administrative resources to review a proposal that should have been finalized well before these proceedings.

Regarding the substance of the filings, the Department is disappointed in the multiple inaccuracies and incomplete information provided by the Program Administrators in the Three-Year Plans.[25] Similar to the renter strategic plan discussed above, the filing includes references to multiple key plans or proposed protocols that will not be developed until months after the conclusion of the Department's review. For example: (1) a proposal for allowing mixed-income buildings to participate in the low-income programs will not be developed until the second quarter of 2022; (2) the final portion of the budget the Program Administrators intend to use to target environmental justice communities will be adjusted by

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25 A significant portion of each Three-Year Plan was dedicated to discussing priorities and describing areas of future exploration; however, the actual program descriptions were limited and high level. Key elements of program designs were scattered throughout multiple sections and appendices in the filings. Going forward, the Program Administrators shall include in their Three-Year Plans, full descriptions of each program (including structure, eligibility requirements, measures, and incentive levels), presented in a more comprehensive and clear manner.

the end of the second quarter of 2022; and (3) the development of key performance indicators to assess performance will not occur until the first quarter of 2022 (Statewide Plan, Exh. 1, App. M at 8, 19, App. N at 10). The initial Three-Year Plan filings also included errors in data tables, which the Program Administrators knew about but still filed with the Department (see, e.g., Exh. NG-Electric-2, at 144-145). During the proceeding, the Department discovered multiple additional data anomalies, including but not limited to NSTAR Electric incorrectly projected its SBC revenues in its initial filing; the proposed EM&V budget in the Three-Year Plans and pre-filed testimony was not consistent with the Energy Efficiency Data Tables; and the National Grid (gas) program planning and administration ("PP&A") Budget Table was inconsistent with the National Grid (gas) Budget Table — a discrepancy of about $13 million (Statewide Plan, Exh. 1, at 179; App. C, Table IV.C.1; see, e.g., NSTAR Electric-2, at 82; Exh. NSTAR Electric-4 (Rev.), Table IV.B.3.1; Exh. NG-Gas-4 (Rev.)). In addition, the threshold triggers for the electrification component were inconsistently described as either 50 or 60 percent of benefits (Statewide Plan, Exh. 1, at 27-29).

Some aspects of the Program Administrators' equity proposal, which is a priority strategy for this Three-Year Plan term, were confusing and inaccurate. For example, the equity component of the performance incentive mechanism states the payout rates for this component are determined by "dividing the portion of the performance incentive pool allocated to the equity component by the planned statewide benefits from eligible equity measures" (Statewide Plan, Exh. 1, App. A at 28 (emphasis added)). In response to a discovery question from the Department requesting that the Program Administrators identify

these measures, the Program Administrators responded that they "have not defined any measure as an equity measure" (Exh. DPU-Comm 3-1). Further, a cornerstone proposal of the Program Administrators' equity efforts is the Community First Partnership Program; however, during evidentiary hearings, the Program Administrators disclosed that they had already issued an application for the program even though they had not yet finalized the criteria for priority communities (Tr. 2, at 249-250). As a result, several municipalities were rendered ineligible for priority status, while others were made newly eligible (Tr. 2, at 260). The Department had to spend time during multiple days of evidentiary hearings sorting through the criteria for the Community First Partnership Program, the reasons for the change in the criteria, and whether municipalities were even notified of the change. The lack of clear explanations from the Program Administrators raises questions about the transparency of the process and criteria used to develop the proposal. This put the Department in the difficult position of needing to rehabilitate an essential proposal to improve service to customers that have historically lower participation rates during our 90-day review period.

In light of the significant changes the Program Administrators propose in this filing and the corresponding budget increase ($1.2 billion or 29.3 percent) compared to the 2019-2021 Three-Year Plans' budget, the Department would expect a clearer, more detailed filing that was structured in a reviewable manner and consistent with the Department's Guidelines and directives. While stakeholders and the Council work with the Program Administrators for almost a year to develop the Three-Year Plan filings, the Department has 90 days to review the filing and adjudicate any issues that arise. Accordingly, the

Department also expects that the Three-Year Plans would be drafted in a manner that transparently explains the proposed programs and ensures that the Department can perform an efficient review.

The Department recognizes that some of these issues are the result of significant changes in the draft Statewide Plan in the month before the Three-Year Plans were filed with the Department. Key program designs, including the changes to the Community First Partnership Program and the decision to remove certain measures from the plan,[26] were made days before the Three-Year Plans were filed. In addition, the proposed avoided cost assumptions were not finalized until days before the filings were made (e.g., social value of GHG emissions reductions discount rate) (Program Administrators Brief at 45, citing Statewide Plan Exh. 1, App. Q, Study 3, at 4-5, 8-20; Exhs. DPU-Comm 1-1; DPU-Comm 11-1). The Department understands that certain minor changes in the plan values and filing may occur close to a filing deadline. However, program eligibility standards and essential underlying avoided costs are not the type of last-minute changes that are appropriate to be made so close to the filing of a multi-billion dollar, ratepayer funded Three-Year Plan. Such actions erode the credibility of the foundational elements that these Three-Year Plans have been built on.

With regard to the avoided energy supply cost study, the Department has previously endorsed the Avoided Energy Supply Components in New England: 2021 Report

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[26] These issues are discussed further in Section IV.D.3.

(“AESC Study”) group process as key to producing reliable avoided cost values to include in the Three-Year Plans. See 2019-2021 Three-Year Plans Order, at 68. The avoided costs form the basis of the benefits used in the Three-Year Plans and the assessment of cost-effectiveness. Establishing reliable benefits early in the planning process is essential to allow the Program Administrators and stakeholders to assess the cost-effectiveness of proposed measures and determine how to develop Three-Year Plans that capture all available cost-effective energy efficiency. Accordingly, the Department will no longer accept supplemental avoided cost studies that are completed after the submission of the April 30th draft Statewide Plan.

Based on the issues described above and others addressed herein, the Department would have sufficient grounds to reject the filing because it was not compliant with our standards and requirements.[27] However, as a practical matter, the Department will not reject the Three-Year Plan filings based solely on the Program Administrators’ filing and procedural deficiencies. Unlike other filings, the energy efficiency plans are designed solely for the purpose of delivering energy saving measures to customers. Further, as discussed above, the energy efficiency programs are an essential pathway to meeting the

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[27] It is a general principle that the Department has no duty to rehabilitate a company's deficient filing through discovery. Fitchburg Gas and Electric Light Company, D.T.E. 99-110 (Phase II) at 54-55 & n.37 (2001). Instead, discovery is intended to reduce hearing time, narrow the scope of issues, protect the rights of the parties, and ensure that a complete and accurate record is compiled. 220 CMR 1.06(5)(c)(1). Further, the burden of proof rests with the company, as the proponent of the approval of its petition. See also Aquarion Water Company of Massachusetts, D.P.U. 08-27, at 32 (2009); Bay State Gas Company, D.P.U. 05-27, at 93-96 (2005).

Commonwealth's GHG emissions reduction goals. Accordingly, the Department finds that rejecting these Three-Year Plans outright would not be in the best interest of ratepayers.

While the quality of the Three-Year Plan filings are in question, the Program Administrators' overall ability to implement the Three-Year Plans and continue to deliver nation-leading energy efficiency services is not in question. The Department must acknowledge the nation-leading status of the Program Administrators; their innovation and success in the area of energy efficiency remains a cornerstone of the Commonwealth's clean energy policy. The recognition of this excellence only deepens our disappointment with the poor quality of these filings. As discussed in Section VII.D.2 below, the Department will address the filing deficiencies and other issues in the form of a reduction to the performance incentive pool.[28]

The Department recognizes the work that the Program Administrators, DOER, the Attorney General, LEAN, the Council, and other stakeholders must undertake during the development of a Statewide Plan under the Green Communities Act. We also acknowledge that the timing of the passage of the Climate Act created additional challenges. The Climate Act, as discussed above, required the inclusion of new benefits in the benefit cost screening model and required the EEA Secretary to establish the GHG emissions reduction goals for

[28] In Section VII.D.2 below, the Department reduces the proposed performance incentive pool by ten percent. The Department emphasizes that a continued failure by the Program Administrators to comply with Department directives, or if the Program Administrators' future filings are deficient, the Department will further reduce or eliminate performance incentives.

the Three-Year Plans. While the draft Statewide Plan was submitted to the Council on April 30, 2021, the EEA Secretary, consistent with St. 2021, c. 8, § 106, established the GHG emissions reduction goal on July 15, 2021 (Statewide Plan, Exh. 1, App. D). This timing created a challenge for the Program Administrators and for the Council, which has a clear and defined statutory role in the Statewide Plan development process.

The Council's role in reviewing the Statewide Plan is set forth in G.L. c. 25, § 21(c). The Program Administrators submit a draft Statewide Plan to the Council on April 30th every three years. The Council then "shall review the [Statewide Plan] and any additional information and shall submit its approval or comments to the [Program Administrators] not later than [three] months after submission of the [Statewide Plan]." The Program Administrators then "may make any changes or revisions to reflect the input" of the Council prior to filing the Three-Year Plans with the Department on or before October 31st. G.L. c. 25, § 21(c).

In its statutorily authorized advisory capacity, the Council should provide either an approval of the draft Statewide Plan or comments. Between the time the Council issues its resolution on the draft Statewide Plan and the submission of the Three-Year Plans to the Department, the Program Administrators are expected to modify the draft Statewide Plan to address the Council's recommendations or provide a statement and justification of any unresolved issues. G.L. c. 25, § 21(d)(1). Accordingly, given that the EEA Secretary's GHG emissions reduction goals were finalized approximately two weeks prior to the

Council's resolution, it is understandable that some additional coordination and Council input was required in the development of this final Statewide Plan.

While a certain amount of additional coordination is appropriate under the circumstances, the Program Administrators are still responsible for ensuring that they develop and file complete and accurate Three-Year Plans with the Department by the deadline established by statute. The Council's advisory role cannot interfere with the Department's statutory role in reviewing the Three-Year Plans and determining whether to approve the use of ratepayer funds for the programs. In future years, the GHG emissions reduction goals will be set prior to the filing of the April 30th draft Statewide Plan thereby alleviating the timing challenges experienced in the development of these Three-Year Plans. Nevertheless, the Department finds that the Program Administrators must take certain steps in the future to ensure that their Three-Year Plan filings are complete, accurate, and reviewable. In addition, the Program Administrators must ensure that the Statewide Plan development process is sufficiently transparent to ensure that stakeholders are made aware of any significant revisions from the draft to final Statewide Plan.

During prior three-year energy efficiency planning cycles, while not envisioned by the Green Communities Act, the Program Administrators continued to work with the Council and stakeholders to resolve issues after the Council issued its July resolutions. In particular, the Program Administrators worked with DOER and the Attorney General to develop term sheets setting forth certain agreements that served as a guide for the Program Administrators to finalize the Statewide Plan. Based on the term sheets, the Program Administrators submitted

a revised draft Statewide Plan to the Council, which since 2009, has then voted in support of the Statewide Plan days before the Program Administrators submit their final three-year plans to the Department for review and approval (see, e.g., Statewide Plan, Exh. 1, App. N).

While the Department supports the Program Administrators' collaboration with the Council and other stakeholders to reach consensus and narrow areas of dispute, this process has not led to a complete resolution of all issues in a timely manner that is consistent with the Green Communities Act. See generally 2019-2021 Three-Year Plans Order; 2016-2018 Three-Year Plans Order; 2013-2015 Three-Year Plans Order. The timing of this collaboration, in relation to the filing deadline with the Department, negatively impacts the ability of the Program Administrators to develop and present a complete, accurate, and reviewable Three-Year Plan filing, including quality testimony to support all elements of the filing.[29] Further, if the Program Administrators are still in discussions with DOER, the Attorney General, and the Council on key elements of the programs late in the process, the Program Administrators cannot also focus on compliance with the Department's filing requirements and directives, as described above. Finally, last-minute changes to the

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[29] For example, it was not initially clear to the Department whether the Program Administrators agreed or disagreed with the Council's resolution and comments because this information was not provided with the initial filing (Exh. DPU-Comm 10-9, Att.).

Statewide Plan prompted by these ongoing discussions impact stakeholders' ability to formulate informed positions on the changes.[30]

To address the issues described above, the Department will require the Program Administrators to submit a final written response to the Council's comments or recommendations no later than 45 days after the Council issues the July resolution required by G.L. c. 25, § 21(c).[31] In this response, the Program Administrators shall include a summary of each Council recommendation or comment, and specify whether and how the Program Administrators intend to address the issue in the Three-Year Plans. The Program Administrators also shall include a description of any program design changes from the draft Statewide Plan that they intend to incorporate in the Three-Year Plans filed with the Department, regardless of whether these changes were prompted by the Council's comments. The Program Administrators shall not be permitted to make any further substantive changes to the Statewide Plan after submitting their final written response to the Council.[32]

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30 For example, last-minute changes to the Statewide Plan may impact a stakeholder's decision on whether to petition to intervene or otherwise participate in the Three-Year Plan proceedings.

31 Because the GHG emissions reduction goals are finalized prior to the filing of the April 30th draft Statewide Plan, the Department does not expect or anticipate significant disagreements between the Program Administrators and the Council surrounding savings goals in the Statewide Plan.

32 The Program Administrators shall submit the Council's resolution and their final response with the Three-Year Plans filings. <u>See</u> G.L. c. 25, § 21(d).

We emphasize again, the Department has only 90 days to review the Three-Year Plans, which we have recognized is not ideal given the size and increasing complexity of the filings before us. As we have discussed above, in order to ensure that the Department can perform its statutorily mandated review of the Three-Year Plans to determine whether they meet the requirements of the Green Communities Act, it is imperative that the initial filings are complete, accurate, reviewable, and consistent with all Department policies, directives, and precedent. Requiring the Program Administrators to submit a final written response to the Council's comments or recommendations no later than 45 days after the Council's July resolution and fixing the time when substantive changes to the draft Statewide Plan can be made should ensure that the Program Administrators have a sufficient opportunity to finalize their Three-Year Plans to the standard the Department requires. It will also preserve the ability of the Program Administrators to work collaboratively with the Council and stakeholders during the 45-day period (which is in addition to the months of collaboration before the July resolution) to address the issues raised in the Council's resolution and attempt to narrow the areas of dispute.[33] Finally, it will put stakeholders on notice of anticipated changes to the draft Statewide Plan and allow them to formulate their positions on the issues of interest, prior to the start of the Department's 90-day review.

As much as the Program Administrators require sufficient time to finalize the Three-Year Plans before they are filed with the Department, they also must be able to

[33] The Department will also meet with the Council's consultants to ensure the Department process and guidance are being incorporated into the planning process.

dedicate their staff resources to support the investigation of the Three-Year Plans after they are filed with the Department. In this regard, the Department notes that the Program Administrators filed four motions for extension of time to provide discovery responses and two motions seeking additional time to respond to record requests. D.P.U. 21-120 through D.P.U. 21-129, Program Administrators' Motion for Extension of Time to Respond to RR-DPU-4 (December 16, 2021); D.P.U. 21-120 through D.P.U. 21-129, Program Administrators' Revised Motion for Extension of Time to Respond to RR-DPU-3 (December 15, 2021); D.P.U. 21-120 through D.P.U. 21-129, Program Administrators' Motion for Extension of Time to Respond to DPU-Comm 10-12 (November 30, 2021); D.P.U. 21-120 through D.P.U. 21-129, Program Administrators' Motion for Extension of Time to Respond to DPU-Comm 10-6, DPU-Comm 10-7, and DPU-Comm 10-9 (November 26, 2021); D.P.U. 21-120 through D.P.U. 21-129, Program Administrators' Supplemental Motion for Extension of Time to Respond to DPU-Comm 3-2, DPU-Comm 3-7, DPU-Comm 3-15, and DPU-Comm 3-16 (November 18, 2021); D.P.U. 21-120 through D.P.U. 21-129, Program Administrators' Motion for Extension of Time to Respond to the Department's Third Set of Common Information Requests (November 17, 2021).

In the November 18, 2021 motions for extension of time to respond to discovery, the Program Administrators cited as good cause their staff's competing need to prepare for and present at a November 17, 2021 Council meeting. Similarly, in the initial December 14, 2021 motions for extension of time to respond to a record request, the Program

Administrators cited as good cause their staff's competing need to prepare for and present at a December 16, 2021 Council meeting.[34] While the Council may hold meetings during the Department's review of the Three-Year Plans, the Program Administrators' participation in those meetings cannot in any way impede the Department's review of the Three-Year Plans. As we have stated above, the Department must review the individual goals, budgets, programs, and supporting documentation of ten Program Administrators and issue an Order within 90 days. Responding to discovery and record requests in a timely manner is essential to facilitate an efficient adjudicatory proceeding. The need for Program Administrator staff to prepare for competing Council meetings during the 90-day Department review period should not be offered as good cause for any future extension requests. Further the Program Administrators shall not participate in any Council meetings from the date the Three-Year Plans are filed with the Department through filing of briefs. This directive does not alleviate the Program Administrators of their statutory obligation to file quarterly reports with the Council pursuant to G.L. c. 25, § 22(d).

IV. ALL COST-EFFECTIVE ENERGY EFFICIENCY

A. Introduction

The Green Communities Act requires each Program Administrator's Three-Year Plan to provide for the acquisition of all available cost-effective energy efficiency resources.

[34] The Program Administrators filed a revised motion on December 15, 2021 that did not include the conflict with the December 16, 2021 Council meeting as grounds to grant the motion.

G.L. c. 25, §§ 19(a), 19(b), 21(a), 21(b)(1); see also Guidelines § 3.4.7. In addition, the EEA Secretary must set a goal for the necessary contributions of the Statewide Plan to meeting each GHG emissions limit and sublimit adopted under the GWSA. G.L. c. 21N, § 3B. Each Three-Year Plan must be constructed to meet the GHG emissions reduction goals set by the EEA Secretary pursuant to G.L. c. 21N, § 3B. St. 2021, c. 8, §§ 26A, 28; D.P.U. 20-150-A at 7, 50; Guidelines § 3.4.7. In order to achieve this mandate, the Program Administrators coordinate with the Council to develop the programs contained in the Statewide Plan. G.L. c. 25, § 21(b)(1). The Department requires that the Program Administrators use a net lifetime all fuel savings metric for each energy efficiency program and core initiative. Guidelines § 3.4.7.2.[35] The net lifetime all fuel savings goal is measured in MMBtus, inclusive of the embedded energy used to generate the electricity. D.P.U. 20-150-A at 50; 2019-2021 Three-Year Plans Order, at 156-157.

When reviewing the individual savings goals, the Department must ensure that each Program Administrator demonstrates that its Three-Year Plan (1) establishes a sustainable effort in its continued delivery of energy efficiency, (2) has considered new technologies and enhancements, (3) has included the results of avoided costs, potential and EM&V studies, and (4) has sought to design programs to address identified barriers. 2019-2021 Three-Year Plans Order, at 10-11; 2016-2018 Three-Year Plans Order, at 25-27; 2013-2015 Three-Year Plans Order, at 37-40. These issues are relevant to the Department's ultimate determination

[35] The Department also requires that Program Administrators to report net savings by fuel and electric demand savings. Guidelines § 3.4.7.2.

of whether the Three-Year Plans will provide for the acquisition of all available cost-effective energy efficiency and demand reduction resources. See G.L. c. 25, §§ 19(a), 19(b), 21(b)(1).

B. Program Administrators Proposal

1. Plan Goals

The Program Administrators set savings goals and GHG emissions reduction goals for the term, both individually and in the aggregate (Statewide Plan, Exh. 1, Apps. C.1 – Electric (Rev.), C.2 – Gas (Rev.)). The Program Administrators calculated the net lifetime all fuel savings goal by converting all savings to MMBtu savings (Statewide Plan, Exh. 1, App. A at 3). When converting electric savings, the Program Administrators used conversion factors to account for the embedded energy with heat values from a mix of fuels that generate the electricity (Statewide Plan, Exh. 1, App. A at 3). The aggregate MMBtu savings and GHG emissions reduction goals, and each Program Administrator's individual savings and GHG emissions reduction goals, are shown below in Tables 1 and 2, respectively.

Table 1: Individual Electric Program Administrator Goals (2022-2024 Term Total)[36]

	Lifetime Savings (MMBtus)	Avoided GHG Emissions (metric tons CO_2e in 2030)
National Grid (electric)	64,787,408	248,871
NSTAR Electric	54,103,563	188,338
Unitil (electric)	1,013,084	3,317
Compact	9,906,529	35,009
Aggregate Statewide Goal	129,390,960	474,518

Table 2: Individual Gas Program Administrator Goals (2022-2024 Term Total)[37]

	Lifetime Savings (MMBtus)	Avoided GHG Emissions (metric tons CO_2e in 2030)
National Grid (gas)	62,349,032	207,694
NSTAR Gas	23,116,686	78,356
EGMA	23,976,009	75,324
Unitil (gas)	594,239	2,475
Berkshire	1,511,687	4,814
Liberty	1,624,516	5,533
Aggregate Statewide Goal	113,172,168	374,195

36 Sources: For aggregate electric statewide savings and GHG emissions reduction goals, Statewide Plan, Exh. 1, App. C.1 – Electric (Rev.). For each electric Program Administrator, see, e.g., Exh. FGE Electric-4 (Rev.), Tab "Savings," Columns Y, AC, Row 127.

37 Sources: For aggregate gas statewide savings and GHG emissions reduction goals, Statewide Plan, Exh. 1, App. C.2 – Gas (Rev.). For each gas Program

On July 15, 2021, the EEA Secretary established the GHG emissions reduction goals for the current Statewide Plan. The Secretary established an overall goal to reduce CO_2e emissions by 845,000 metric tons by 2030, with 504,000 metric tons allocated to the electric Program Administrators and 341,000 metric tons allocated to the gas Program Administrators (Statewide Plan, Exh. 1, App. D at 3, Table 1).

According to the Program Administrators, the Statewide Plan incorporates the EEA Secretary's total goal to reduce 845,000 metric tons of CO_2e by 2030 (Statewide Plan, Exh. 1, Apps. C.1-Electric (Rev.) at 30; C.2 – Gas (Rev.) at 25). The Program Administrators propose to revise the allocation of this total goal to the gas and electric Program Administrators from the allocation established by the EEA Secretary (Statewide Plan, Exh. 1, Apps. C.1 – Electric (Rev.) at 30; C.2 – Gas (Rev.) at 25). In particular, the Program Administrators propose to allocate 475,018 metric tons of CO_2e emissions reductions to the electric Program Administrators and 370,898 metric tons of CO_2e emissions reductions to be delivered by the gas Program Administrators (Statewide Plan, Exh. 1, Apps. C.1 – Electric (Rev.) at 30; C.2 – Gas (Rev.) at 25). The Program Administrators' proposed reallocation involves the shifting 28,982 metric tons of CO_2e emissions reductions from the electric allocation to the gas allocation (see, e.g., Exh. NSTAR Gas-2, at 37). In other words, the Program Administrators propose to count approximately 30,000 metric tons of CO_2e emissions reductions from the gas Program Administrators towards the electric

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Administrator, see, e.g., Exh. EGMA-4 (Rev.), Tab "Savings," Columns Y, AC, Row 127.

Program Administrators' goal where the emissions reductions are derived from projects involving gas-to-electric fuel switching (see, e.g., Exh. NSTAR Gas-2, at 37).

In setting the goals listed above, the Program Administrators state that they considered: (1) the need for long-term program sustainability; (2) the directives, priorities, and recommendations of the Council and other stakeholders; (3) avoided costs; (4) the Department's directives in prior energy efficiency Orders; (5) customer bill impacts; (6) cost drivers; (7) energy efficiency potential studies;[38] (8) recent EM&V study results; (9) efficiency standards; and (10) the Program Administrators' experience implementing energy efficiency programs (Statewide Plan, Exh. 1, App. A at 8-14). Each Program Administrator set an individual goal that they state accounts for multiple service territory-specific factors, including: (1) the mix of customers, markets, venders, and building types; (2) customer demographics; (3) population density; (4) economic conditions; (5) penetration of natural gas and delivered fuels; and (6) depth of community engagement (Statewide Plan, Exh. 1, App. A at 13; see, Exh. DPU-Comm 6-1).

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[38] To provide them with a better understanding of the remaining technical, economic, and achievable energy efficiency savings opportunities within their service territories, each Program Administrator states that it completed an energy efficiency potential study that was consistent in terms of timing, formatting, and definition, with a common statewide deadline (Statewide Plan, Exh. 1, App. A at 11).

2. Offerings and Enhancements

a. Sector Based Strategic Enhancements

i. Residential Sector

The Program Administrators propose several new efforts in the residential sector for the 2022-2024 Three-Year Plan term (Statewide Plan, Exh. 1, at 64). During the term, the Program Administrators seek to increase participation by pursuing more equitable distribution of program benefits to all customers (Statewide Plan, Exh. 1, at 65-68).[39] The Program Administrators intend to implement a Community First Partnership Program,[40] a new version of their 2019-2021 Municipal and Community Partnership Strategy, which prioritizes

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[39] In the context of energy efficiency, the Program Administrators define equity as "the process of establishing more equal access to and participation in energy efficiency programs, particularly among those groups who have historically participated at lower rates, including renters/landlords, moderate-income customers, and English-isolated families" (Statewide Plan, Exh. 1, at 17, 65).

[40] While the Program Administrators refer to the Community First Partnership Program as a program, the Program Administrators did not include the Community First Partnership Program in the Energy Efficiency Data Tables or BCR model as a separate program. The Three-Year Plan must include sufficient information to allow the Department to review each energy efficiency program (i.e., descriptions, budgets, savings goals, customer participation rates, BCRs, all relevant assumptions underlying the cost-effectiveness evaluation). Guidelines § 3.4; D.P.U. 08-50-B at 11. The Department is aware that the Program Administrators refer to many of their offerings as programs, such as the Community First Partnership Program and ConnectedSolutions Program (https://www.masssave.com/saving/residential-rebates/connectedsolutions-batteries). In the interest of transparency and to avoid customer confusion, going forward the Program Administrators shall include all program offerings, using the full name as marketed to customers, in their three-year plans. Each of these programs shall be presented as a separate program in all data tables and screened separately for cost-effectiveness.

partnerships[41] with municipalities and community-based organizations focused on increasing participation rates and addressing barriers to participation for hard-to-reach customers (Statewide Plan, Exh. 1, at 68-70). The Program Administrators also propose to develop and implement a rental unit strategic plan with tactics to increase renter and landlord participation and agree to finalize the strategic plan by the third quarter of 2022 (Statewide Plan, Exh. 1, at 22, 67 & App. M at 9).

The Program Administrators also plan to enhance their workforce development plan to grow and diversify the workforce supporting energy efficiency programs (Statewide Plan, Exh. 1, at 70-73). Specifically, the Program Administrators will seek to expand the energy efficiency and HVAC workforce by recruiting and training individuals that live in environmental justice communities speak languages in addition to English, and are low-to-moderate income (Exh. DPU-Comm 13-9).

In order to increase participation, the Program Administrators also propose a series of short- and long-term strategies to provide flexibility to participate in the programs, as well as address barriers to participation, including time and lack of understanding (Statewide Plan, Exh. 1, at 81). For example, the Program Administrators intend to: (1) continue to use virtual home energy assessments and remote verification of installations, which were developed during the COVID-19 pandemic to provide customer flexibility to safe

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[41] The Program Administrators define partnerships as "intentionally designed relationships with public and private entities to decrease all customers' energy burden and increase decarbonization" (Statewide Plan, Exh. 1, at 68).

participation in the programs; (2) examine facilitated pre-weatherization barrier mitigation, such as assisting customers with locating contractors for knob and tube wiring remediation or combustion safety issues; and (3) simplify and accelerate rebate application process (Statewide Plan, Exh. 1, at 81).

For moderate-income customers, the Program Administrators aim to increase participation through new and enhanced weatherization and HVAC incentives and streamlining the income verification process (Statewide Plan, Exh. 1, at 66). The Program Administrators propose to offer a 100 percent weatherization incentive for moderate-income customers, in addition to an increased incentive for installing weatherization measures as a prerequisite to new HVAC equipment (Statewide Plan, Exh. 1, at 66).

The Program Administrators additionally propose to implement a language access plan by 2023 to increase participation of limited English-proficiency customers in all sectors, with a $9.14 million budget (Statewide Plan, Exh. 1, at 22, 68). The proposed language access plan will describe how to provide services to limited English-proficiency individuals, including people who speak the most commonly spoken languages in the Commonwealth after English (e.g., including Spanish, Portuguese, and Mandarin) (Statewide Plan, Exh. 1, at 22, 49-50, 68). The Program Administrators further state that they will partner with multilingual community-based organizations, translate materials into the most commonly spoken languages, and establish a process so that customers who speak additional languages that are widely spoken in the Program Administrators' territories are able to access and participate in energy efficiency programs (Statewide Plan, Exh. 1, at 22, 68, 140, 145). Finally, the

Program Administrators state they will continue efforts from the 2019-2021 Three-Year Plan term to reach service-territory specific limited English-proficiency populations through targeted marketing and educational outreach to communities where English is not the primary language (Statewide Plan, Exh. 1, at 183-184).

The Program Administrators also plan to continue to offer residential financing options (Statewide Plan, Exh. 1, at 115). All residential customers are eligible to apply for a HEAT Loan on qualified measures, including HVAC and building envelope improvements (Statewide Plan, Exh. 1, at 115). The HEAT Loans are offered at zero percent interest to customers, up to a total of $25,000 (Statewide Plan, Exh. 1, at 115). For the 2022-2024 Three-Year Plan term, the Program Administrators plan offer a specific electrification HEAT Loan of up to $25,000, including up to $5,000 for electrification barriers such as electrical panel upgrades, for customers who install heat pumps in their homes (Statewide Plan, Exh. 1, at 116).

In addition to measure-specific offerings, the Program Administrators plan to continue their Residential Education program which provides educational outreach to teach grades K-12+ students how to be efficient energy consumers (Statewide Plan, Exh. 1, at 117-118). Through this program, the Program Administrators provide educator workshops on the science of energy, introduction to energy efficiency, integrating energy efficiency into other subject areas, insulation and air infiltration, and energy audit tools (Statewide Plan, Exh. 1, at 118). Educators are also provided kits with materials needed to implement the lessons in their classrooms and learning environments (Statewide Plan, Exh. 1, at 118).

The Program Administrators also provide resources for students, including science fair project ideas, energy information and resources guides, youth participation awards, and leadership opportunities (Statewide Plan, Exh. 1, at 118). In addition to the student resources, some of the Program Administrators use hands-on, interactive exhibits and games at community-based events in their service areas to further conduct outreach to K-12 students (Statewide Plan, Exh. 1, at 118).

For the 2022-2024 Three-Year Plan term, the Program Administrators plan to leverage the Residential Education programs to further their efforts to increase outreach to hard-to-reach communities with lower-than-average historical participation (Statewide Plan, Exh. 1, at 119). Specifically, as a complement the Community First Partnership Program, the Program Administrators plan to introduce the Mass Save Energy Efficiency Education Grant which will offer community-based organizations an enhanced opportunity to participate in residential education efforts by partnering with the Program Administrators to offer energy efficiency outreach and education geared toward renters, landlords, limited English-proficiency customers, customers with low- and moderate-income, K-12 students and young adults (Statewide Plan, Exh. 1, at 119). This program design will not, however, be completed until the second quarter of 2022 (Statewide Plan, Exh. 1, at 119).

The Program Administrators have also distributed Kill-a-Watt kits (devices that measure how much electricity an appliance or electronic uses) to libraries across the state, which customers can borrow to learn more about their energy usage at home (Statewide Plan, Exh. 1, at 118). The Program Administrators also plan to increase their coordination with

vocational/technical and other public high schools through the Residential Education programs as a complement to their workforce development efforts in order to offer energy efficiency career education curriculum and pathways into internships and the workforce (Statewide Plan, Exh. 1, at 26, 72).

In addition, NSTAR Electric, NSTAR Gas, and EGMA state that they intend to offer enhancements to the Residential Education programs (Statewide Plan, Exh. 1, App. G.2 - Eversource at 1).

ii. Income-Eligible Sector

The Program Administrators, in collaboration with LEAN, propose to further improve and streamline the income-eligible customer experience, increase energy savings opportunities for single and multifamily income-eligible customers, and provide customers in all building types with opportunities for cost-effective electrification[42] (Statewide Plan, Exh.1, at 111-112). The Program Administrators state that they also will coordinate with LEAN to streamline the income-eligible customer experience by adopting a more centralized and consistent intake experience (Statewide Plan, Exh. 1, at 113). This will include a new centralized LEAN single-family intake website, to be made available in Spanish, Portuguese, and English (Statewide Plan, Exh. 1, at 113).

The Program Administrators' proposed improvements for the income-eligible sector include: (1) an emphasis on heat pumps paired with weatherization and active demand

[42] The Program Administrators state that they use the terms "income-eligible customers" and "low-income customers" interchangeably (Exh. DPU-Comm 12-2).

reduction ("ADR"); (2) development of a centralized single-family intake website to complement LEAN's existing multifamily website; (3) increased multifamily opportunities, inclusive of customized deep energy retrofit approaches, incentives for common area laundry facilities, remote monitoring and building optimization, and a targeted small multifamily landlord engagement strategy; (4) an updated statewide mixed-income protocol for homes with three to four units where only one unit is income-eligible; and (5) improved remote assessments and interactions in light of COVID-19 (Statewide Plan, Exh. 1, at 111-115). The Program Administrators proposed to continue to support local Community Action Agency partners by offering fully subsidized trainings to new entrants interested in becoming income-eligible energy specialists, including heat pump technology trainings (Statewide Plan, Exh. 1, at 27-28).

iii. Commercial and Industrial Sector

The Program Administrators propose several strategies for the C&I sector, which include: (1) increasing participation of microbusinesses through the Main Streets[43] offering; (2) developing a technically proficient and diverse workforce; (3) improving participation through a focus on awareness, understanding, and accessibility of program offerings; (4) providing technical assistance and tools to increase customer and vendor knowledge in energy efficiency program guidelines; and (5) providing additional C&I optimization

[43] The Program Administrators state that the Main Streets offering reaches businesses through door-to-door efforts and provides a comprehensive approach for offering instant, on-site savings measures (Statewide Plan, Exh. 1, at 139).

measures, such as developing prescriptive weatherization and air sealing offerings, introducing low-cost tuning measures for existing equipment and controls, and developing custom express tools for repeatable low-cost C&I measures (Statewide Plan, Exh. 1, at 138-157).

The Program Administrators state that, in the C&I sector, they have identified limited awareness, understanding, and accessibility of energy efficiency opportunities as participation barriers (Statewide Plan, Exh. 1, at 144). The Program Administrators propose to overcome these organizational- and information-based barriers by simplifying all incentive application materials, reorganizing the Mass Save website with updated information, and developing additional information about the various participation pathways (Statewide Plan, Exh. 1, at 144). Additionally, the Program Administrators, together with DOER, propose to convene a working group for the purpose of obtaining input from customers, contractors, and stakeholders who have experience with the programs (Statewide Plan, Exh. 1, at 144). The Program Administrators explain that the working group will share and discuss how they have considered and incorporated that input into their program design and implementation activities (Statewide Plan, Exh. 1, at 144).

iv. Hard-to-Reach Customers

As mentioned in Section III.B.2.a, above, the Program Administrators propose to implement the Community First Partnership Program to increase the reach of energy

efficiency savings, especially among renters,[44] moderate-income customers, limited English-proficiency customers, and small businesses in environmental justice communities (Statewide Plan, Exh. 1, at 18, 21). Specifically, the Program Administrators propose the following changes to municipal and community partnership efforts: (1) prioritize service to a subset of municipalities (described below), although all municipalities and community-based organization applicants proposing to focus their work in a municipality with at least one EEA-designated environmental justice census block are eligible to apply to participate; (2) change award levels for participating municipalities from $5,000-$25,000 a year to $25,000-$60,000 total for three-years; (3) provide larger, guaranteed financial awards and provide 50 percent of the award upfront; (4) allow participants, rather than Program Administrators, to set goals; (5) use an implementation vendor to coordinate and streamline program and data tracking; and (6) provide two marketing assistance pathways, one leveraging Program Administrator-developed marketing materials and one leveraging community partner-developed marketing materials (Exhs. DPU-Comm 7-9; DPU-Comm 13-9; DPU-Comm 13-18, Att. at 7).

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[44] The Program Administrators propose to further target renters by providing a 100 percent weatherization incentive for individually-metered rental units and by developing a strategic plan to better serve renters and landlords in 2022 (Statewide Plan, Exh. 1, at 67).

The Program Administrators identified 38 communities across the Commonwealth as priorities for investment in energy efficiency ("38 Targeted Communities")[45] (Statewide Plan, Exh. 1, at 21). These 38 Targeted Communities will receive priority status in being selected as a Community First Partner (Statewide Plan, Exh. 1, at 21;_Exh. DPU-Comm 13-18, Att. at 7). The Program Administrators selected the 38Targeted Communities using the following criteria: (1) greater than 33 percent of the municipality's population resides in block groups that meet the criteria for an environmental justice population as defined by EEA;[46] (2) at least one census block group in the municipality meets the state's environmental justice population income criteria and at least one additional criterion (e.g., minority or limited English-proficiency); (3) past energy efficiency program participation rate does not exceed the

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45 The 38 Targeted Communities are Attleboro, Boston, Brockton, Chelsea, Chicopee, Eastham, Everett, Fall River, Fitchburg, Gardner, Gloucester, Great Barrington, Haverhill, Holbrook, Lawrence, Lowell, Lynn, Malden, Methuen, Montague, New Bedford, North Adams, Northampton, Palmer, Peabody, Pittsfield, Quincy, Randolph, Revere, Southbridge, Springfield, Stoughton, Taunton, Wareham, Webster, West Springfield, Williamstown, and Worcester (Statewide Plan, Exh. 1, at 21). The Program Administrators state that, given the size and diversity of Boston, the following eight neighborhoods are Targeted Communities: Allston, Brighton, Dorchester, East Boston, Fenway, Mattapan, Mission Hill, and Roxbury (Statewide Plan, Exh. 1, at 21). As discussed in Section VII, below, the Program Administrators propose to receive a performance incentive for achieving benefits in these same 38 Targeted Communities (Statewide Plan, Exh. 1, at 21, 52& App. A at 28).

46 For the EEA's definition and list of environmental justice populations, see https://www.mass.gov/info-details/environmental-justice-populations-in-massachusetts.

statewide average of 32 percent;[47] (4) median household income is less than 100 percent of state median household income; and (5) the municipality is served by Program Administrators for electric and/or gas accounts (Statewide Plan, Exh. 1, at 21).

b. Strategic Electrification

The Program Administrators plan to increase their electrification efforts (i.e., encourage customers to transition away from traditional fossil-fuel based heating and cooling measures during the 2022-2024 term) (Statewide Plan, Exh. 1, at 11). The Program Administrators plan to focus on increasing the scope and scale of building retrofits, weatherization, and the efficient electrification of space and water heating with high-efficiency heat pump technologies including air source, water source, ground source (geothermal), and variable refrigerant-flow heat pumps (Statewide Plan, Exh. 1, at 11-12).

The Program Administrators propose to prioritize serving customers who are more likely to experience reduced heating costs and a seamless installation, while simultaneously working to address the technical and financial hurdles that make electrification more challenging for other customers (Statewide Plan, Exh. 1, at 12-13). Specifically, the Program Administrators will prioritize customers who currently heat with oil, propane, or electric resistance heating, as they are more likely to realize reduced heating costs from

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[47] The Program Administrators define participation as the consumption-weighted location participation from the Residential Non-Participant Customer Profile Study (Exh. DPU-Comm 2-8, Att. A). The Program Administrators state that the statewide average consumption-weighted location participation rate for combined gas and electric service is 32 percent (Exh. DPU-Comm 2-14).

transitioning to a heat pump technology (Statewide Plan, Exh. 1, at 13). For customers heating with natural gas, the gas Program Administrators plan to offer an enhanced incentive, as a customer switching from natural gas to a heat pump, in almost all cases, would realize an increase in the cost to heat their home or business, in addition to the incurred capital cost for system installation (Statewide Plan, Exh. 1, at 13). For market-rate residential customers, the Program Administrators propose to offer additional monetary incentives if the customer weatherizes its home prior to heat pumps installation (Exh. DPU-Comm 11-8). For income qualified moderate-income customers,[48] the Program Administrators state they will require installation of recommended weatherization improvements as a prerequisite for accessing the enhanced moderate-income heat pump incentives (Exh. DPU-Comm 11-7). If the moderate-income customer chooses not to install the recommended weatherization measures, the customer will continue to have access to standard, market-rate heat pump incentives (Exh. DPU-Comm 11-7). Additional electrification strategies will include the introduction of an all-electric new construction pathway for residential buildings (i.e., the New Construction Path-to-Zero offering), increased technical assistance and financial support for all-electric new construction commercial buildings that minimize overall energy consumption, and continued promotion of Passive House certifications for commercial and residential new construction projects (Statewide Plan, Exh. 1, at 13). Other strategies

[48] For the 2022-2024 Three-Year Plan, moderate-income customers are defined as households with incomes greater than 60 percent and equal to or lesser than 80 percent of the state median income (Statewide Plan, Exh. 1, at 7 n.8).

include targeted outreach to customers whose homes have already been weatherized to promote: (1) insulation and heat pump technologies; (2) induction cooktop incentives to displace fossil fuel cooking appliances; and (3) new incentives for electrification of other end uses displacing fossil fuels, such as lawn equipment, forklifts, and other small engine-driven equipment (Statewide Plan, Exh. 1, at 16).

The Program Administrators plan to develop a statewide heat pump education campaign, which includes dedicated heat pump awareness marketing and dedicated heat pump pages on the Mass Save website, and a heating comparison calculator (Statewide Plan, Exh. 1, at 75; Exh. DPU-Comm 7-3). The Program Administrators plan to establish a heat pump installer network of HVAC contractors trained on program offerings, heat pump technologies, heat pump installation, and on the importance of weatherization prior to heat pump installation (Statewide Plan, Exh. 1, at 75; Exhs. DPU-Comm 5-7; DPU-Comm 5-12; DPU-Comm 5-16; DPU-Comm 5-17; DPU-Comm 12-22). The Program Administrators will also engage vocational/technical high school and HVAC training programs by encouraging the inclusion of heat pumps and integrated controls in their training programs (Statewide Plan, Exh. 1, at 75). The Program Administrators will also design an HVAC student heat pump curriculum on the online training platform, designed to help prepare students to enter the HVAC workforce (Statewide Plan, Exh. 1, at 75). The Program Administrators state that the goal of engaging manufacturers and distributors is to generate demand for existing training and certification pathways, and drive changes in inventory stocking practices (Statewide Plan, Exh. 1, at 75). The Program Administrators also will continue to convene

industry-partner working groups to promote the exchange of ideas and information (Statewide Plan, Exh. 1, at 75).

In response to industry feedback acknowledging that most commercial customers have small, standard installations, the Program Administrators developed a small heat pump offering for C&I customers in 2020 (Statewide Plan, Exh. 1, at 152). The Program Administrators also intend to offer standardized weatherization services as enabling measures for some C&I customers who are interested in electrification (Statewide Plan, Exh. 1, at 153). The Program Administrators plan to finalize the details of their deep energy retrofit offering for C&I customers in 2022 (Statewide Plan, Exh. 1, at 153). The Program Administrators also plan to develop a GHG emissions reduction competition for C&I customers (Statewide Plan, Exh. 1, at 153).

c. Active Demand Reduction

The electric Program Administrators have included the following four new proposed ADR offerings in the Statewide Plan: (1) income-eligible direct load control;[49] (2) electric vehicle ("EV") load management; (3) C&I technology-neutral daily dispatch; and (4) solar

[49] For income-eligible customers, the electric Program Administrators propose to offer customers with home Wi-Fi connectivity the option of smart thermostats (see, e.g., Exh. NSTAR-Electric-2, at 93). The electric Program Administrators also propose to offer income-eligible customers with central cooling information about enrolling in the electric Program Administrators' ADR offerings (see, e.g., Exh. NSTAR-Electric-2, at 93).

photovoltaic ("PV") inverters[50] (see, e.g., Exh. NG-Electric-5 (Rev.)). The electric Program Administrators also propose to continue to include the following seven ADR offerings in the Statewide Plan: (1) residential direct load control;[51] (2) residential battery storage daily dispatch; (3) C&I technology-neutral targeted dispatch; (4) C&I interruptible load; (5) C&I battery storage daily dispatch; (6) C&I battery storage targeted dispatch; and (7) custom ADR (see, e.g., Exh. NG-Electric-5 (Rev.)). The electric Program Administrators anticipate that the proposed ADR offerings will result in approximately 280 megawatts ("MW") of peak demand reduction by 2024 (Statewide Plan, Exh. 1, App. C.1-Electric (Rev.), Table IV.D.3.2.i).

With respect to the daily dispatch offerings, the electric Program Administrators propose to offer a five-year incentive rate lock for certain participants (Statewide Plan, Exh. 1, at 173). Additionally, for customers or developers who seek to install eligible commercial batteries with behind-the-meter assets greater than 50 kilowatts ("kW"), upon submission of a completed interconnection application to the electric distribution company, customers or developers can request a commitment letter from the Program Administrator that allows the customer two years to enroll in the daily dispatch program for a five-year

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50 The Department addresses National Grid (electric)'s proposed solar PV inverter measure in Section IV.D.3.d, below.

51 For the residential sector, the electric Program Administrators propose to implement a direct load control offering that provides incentives to customers with eligible communications devices to allow the Program Administrators to control central air conditioning load during system peak times in response to an event signal (see, e.g., Exh. NSTAR-Electric-2, at 92).

term at the incentive rate in effect at the time the commitment letter was issued (Statewide Plan, Exh. 1, at 174).[52]

The electric Program Administrators propose to develop an unspecified statewide EV load management offering (Statewide Plan, Exh. 1, at 106). The electric Program Administrators state that they generally intend to offer incentives to customers with EVs to encourage them to charge their vehicles during certain event windows (see, e.g., Exh. NSTAR-Electric-2, at 93). In particular, NSTAR Electric and National Grid (electric) are currently conducting a self-evaluation of the EV activities they undertook during the 2019-2021 Three-Year Plan term (Statewide Plan, Exh. 1, at 106). NSTAR Electric and National Grid (electric) state that they have not yet decided which approach they will use during the 2022-2024 Three-Year Plan term (Statewide Plan, Exh. 1, at 106). Nonetheless, NSTAR Electric and National Grid (electric) each propose to implement an EV load management offering or offerings by summer 2022 (Statewide Plan, Exh. 1, at 106). The Compact and Unitil (electric) state that they intend to monitor the progress for potential implementation of a statewide EV measure at a later time (Statewide Plan, Exh. 1, at 106).

d. Solar Photovoltaic Inverters

During the 2019-2021 Three-Year Plan term, National Grid (electric) implemented a new offering for customers with existing inverters connected to residential solar PV

[52] To the extent the customer enrolls in the daily dispatch offering more than two years after the issuance of the commitment letter, any time in excess of two years will be counted towards the five-year rate lock term (Statewide Plan, Exh. 1, at 174).

installations (Statewide Plan, Exh. 1, at 105).[53] National Grid (electric) states that this offering was designed to leverage the ability of solar PV inverters to provide power factor correction, helping to address feeders with excessive reactive power (Statewide Plan, Exh. 1, at 105). National Grid (electric) further states that it implemented the solar PV inverter control offering as part of its new measure development efforts (D.P.U. 21-128, Exh. DPU-Electric 2-4, at 1).[54]

National Grid (electric) proposes to offer the solar PV inverter control offering as a measure during the Three-Year Plan term (Statewide Plan, Exh. 1, at 105). The other electric Program Administrators state they also may also offer this measure during the Three-Year Plan term (Statewide Plan, Exh. 1, at 105).

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53 National Grid (electric) states that 2,032 customers participated in the solar PV inverter control offering at a total cost of $135,016 during the 2019-2021 Three-Year Plan term (i.e., $47,125 in customer incentives, $21,630 in device enrollment and service fees, and $66,264 in performance evaluation) (D.P.U. 21-128, Exh. DPU-Electric 2-5).

54 National Grid (electric) states that the solar PV inverter control measure did not meet the requirements for a pilot or formal demonstration program because it was not designed "to provide the information required to assess a project's potential for measurable, cost-effective savings and benefits that can be scaled to be included in programs" (D.P.U. 21-128, Exh. DPU-Electric 2-4, at 1). Rather, National Grid (electric) states that the offering was conducted as part of the new measure development efforts that it and the other Program Administrators perform "as a matter of course" during all three-year plan terms (D.P.U. 21-128, Exh. DPU-Electric 2-4, at 1). National Grid (electric) maintains that if initial research shows that a measure implemented through new measure development efforts is "cost-effective, technically feasible, and appropriate," the Program Administrators are able to offer the measure without a separate demonstration (D.P.U. 21-128, Exh. DPU-Electric 2-4, at 1).

National Grid (electric) states that the proposed measure is designed to achieve savings at the feeder level while also providing system benefits (Statewide Plan, Exh.1, at 173, D.P.U. 21-128, Exh. DPU-Electric 2-3). Over the Three-Year Plan term, National Grid (electric) proposes to enroll 14,322 residential customers and 165 C&I customers in the solar PV inverter control offering with a total customer incentives budget of $608,982 (D.P.U. 21-128, Exh. NG-Electric-5 (Rev.) (December 21, 2021)).

National Grid (electric) does not propose to offer any incentives for the installation of new solar PV inverters as part of this measure (D.P.U. 21-128, Exh. DPU-Electric 2-3). Instead, National Grid (electric) proposes to offer incentives to customers who permit the Program Administrator to adjust settings on existing solar PV inverters (D.P.U. 21-128, Exh. DPU-Electric 2-3). In this regard, National Grid (electric) describes the proposed solar PV inverter control measure as a "bring your own device" offering where it will provide an incentive to control an existing customer-owned and sited asset (D.P.U. 21-128, Exh. DPU-Electric 2-5). National Grid (electric) states that, in the future, it may seek to extend this measure to other customers or leverage the offering to provide grid benefits other than power factor correction (Statewide Plan, Exh. 1, at 105).

e. Lighting

The Program Administrators maintain that the remaining cost-effective savings from residential market rate lighting are limited and, therefore, they have eliminated[55] the

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[55] The Program Administrators discontinued their support of the Department-approved midstream market-rate residential lighting incentives at the end of 2021

residential lighting upstream program and in-unit direct install lighting for market rate customers as of year-end 2021, and do not propose to offer these measures again in their 2022-2024 Three-Year Plans (see, e.g., Exhs. NG-Gas-2, at 87; DPU-Comm 2-4). The Program Administrators propose to continue to offer lighting to income-eligible participants through a direct install channel (i.e., Income Eligible Coordinated Delivery) (Statewide Plan, Exh. 1, at 63-64; Exh. DPU-Comm 9-1).

Additionally, the Program Administrators propose to remove claimable residential lighting savings for renters (Statewide Plan, Exh. 1, at 63-64; Exh. DPU-Comm 9-2). Although the Program Administrators do not propose to continue to offer lighting incentives to renters, they state that they are considering offering certain lighting packages to renters (Statewide Plan, Exh. 1, App. M at 6; Exh. DPU-Comm 9-2). The Program Administrators maintain, however, that in determining whether to offer lighting packages to renters, they would first need to determine whether a renter lighting offering would generate claimable savings and be cost-effective (RR-DPU-4; Exh. DPU-Comm 9-2).

3. Evaluation, Measurement, and Verification

The Program Administrators propose to continue the evaluation framework that they previously employed to support third-party EM&V efforts (Statewide Plan, Exh. 1, at 176).

(Exh. DPU-Comm 2-4). The Program Administrators state that they based this decision to suspend lighting incentives on LED market share data, based on their assessment that Massachusetts LED market share will continue to grow absent lighting incentives (Exh. DPU-Comm 2-4).

In particular, the Program Administrators propose to focus their EM&V activities on the following four research areas: (1) residential energy efficiency; (2) C&I energy efficiency; (3) demand in Residential, Income Eligible, and C&I Sectors; and (4) special and cross-cutting[56] (Statewide Plan, Exh. 1, at 178). Within each research area, the Program Administrators propose to conduct the following types of EM&V studies: (1) impact evaluations; (2) baseline studies; (3) net-to-gross studies; (4) market effects evaluations; (5) non-energy impact ("NEI") studies; (6) cost and measure life studies; (7) market characterization studies; and (8) process evaluations (Statewide Plan, Exh. 1, at 178-179). The Program Administrators propose to allocate $57,587,446 (or 1.5 percent of the total proposed budget) for statewide EM&V activities during the upcoming Three-Year Plan term (Statewide Plan, Exh. 1, Apps. C.1 – Electric (Rev.) at 12, C.2 Gas (Rev.) at 8). The EM&V study budget is included in the Evaluation and Market Research line item under the hard-to-measure category, along with other evaluation and market research costs, such as potential studies, the AESC Study, maintenance of the Technical Reference Manual ("TRM"), internal staff labor, non-study consultant costs, and Program Administrator market research efforts (Statewide Plan, Exh. 1, at 179 & Apps. C.1 – Electric (Rev.) at 12, C.2 – Gas (Rev.) at 8).

The Program Administrators state their proposed EM&V evaluation efforts support electrification by quantifying and documenting the conditions under which heat pumps will

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[56] The Program Administrators state that certain studies may be cross-sector (i.e., study both the residential and C&I sectors) (Statewide Plan, Exh. 1, at 180).

benefit customers and save energy, while addressing barriers to heat pump adoption and making progress toward HVAC market transformation to favor heat pump adoption (Statewide Plan, Exh. 1, App. H at 4).

The Program Administrators state that EM&V will provide research to support increased participation among key demographic groups that have historically low participation rates, such as renters, moderate-income customers, and limited English-proficiency customers (Statewide Plan, Exh. 1, App. H at 4). Additionally, the Program Administrators plan to implement a workforce development program with a focus on introducing new skills to the existing workforce and bringing underrepresented groups into the field (Statewide Plan, Exh. 1, App. H at 4). Through EM&V research, the Program Administrators state that they will identify indicators of workforce development success, track progress, and clarify program theory (Statewide Plan, Exh. 1, App. H at 4).

The Program Administrators state that they have established an Evaluation Management Committee that serves as a steering committee for statewide evaluation issues, providing guidance and direction to each of the evaluation research areas, and assisting in setting research priorities (Statewide Plan, Exh. 1, at 177). Finally, the Program Administrators state that, together with the Evaluation Management Committee, they have developed a strategic evaluation plan that will serve as a long-term planning document to guide evaluation activities in the 2022-2024 Three-Year Plan term (Statewide Plan, Exh. 1, App. H at 4).

C. Positions of the Parties

1. Program Administrators

The Program Administrators claim that, consistent with G.L. c. 25, § 21(b)(1), the Three-Year Plan includes savings goals that are designed to achieve all available cost-effective energy efficiency and demand reduction measures for the three-year period beginning January 1, 2022, and that the Three-Year Plan is constructed to attain GHG emissions reduction targets set by the EEA Secretary (Program Administrators Brief at 14, 16-17). The Program Administrators argue that the Three-Year Plan includes aggressive statewide energy savings and GHG reduction goals, even as energy efficiency markets are becoming saturated and baselines for claimable savings increase (Program Administrators Brief at 16, citing Statewide Plan, Exh. 1, at 8 & App. N).

The Program Administrators argue that the Three-Year Plans are designed to meet or exceed the GHG emissions reduction goals set by the EEA Secretary pursuant to the Climate Act (Program Administrators Brief at 14). In this regard, the Program Administrators maintain that, together, the Three-Year Plans are designed to meet the EEA Secretary's overall goal to reduce CO_2e emissions by 845,000 metric tons by 2030 (Program Administrators Brief at 10). Moreover, the Program Administrators maintain that the Three-Year Plans include a detailed description of the design of each program that acts as a roadmap for the attainment of the requisite GHG emissions reductions (Program Administrators Brief at 11, citing Statewide Plan, Exh. 1, App. A at 8-9).

The Program Administrators maintain that they engaged in a collaborative planning process for setting the savings goals and budgets contained in the Statewide Plan (Statewide Plan, Exh. 1, App. A at 7). In addition, the Program Administrators assert that development of the Statewide Plan involved discussions between the Program Administrators, the Council, DOER, the Attorney General, LEAN, contractors, consultants, and other stakeholders regarding program savings and GHG emissions reduction goals, budgets, and key priorities (Statewide Plan, Exh. 1, at 8 & App. A at 14, 46-47).

The Program Administrators argue that it is critical to increase the pace with which heat pumps are installed in customers' homes and businesses in order to achieve the widescale transition of heating systems away from fossil fuels (Program Administrators Brief at 17). The Program Administrators claim that by engaging the electrification market through all market actors (i.e., manufacturers, distributors, contractors, and customers) and through several channels, such as offering enhanced incentives, training, education, and marketing, the goal of whole market transformation can be realized (Program Administrators Brief at 17-18).

According to the Program Administrators, educating customers about how electrification measures affect their comfort, economic interests, and the environmental impacts of their energy consumption choices, is critical to the long-term success of their market transformation efforts (Program Administrators Brief at 18). To that end, the Program Administrators state that they are developing a public-facing heating comparison calculator that will allow customers to compare costs (both installation and operating), energy

savings, and GHG emissions reductions resulting from the installation of high efficiency heating systems, including heat pumps (Program Administrators Brief at 18). The Program Administrators assert that they plan to create a pathway for customers to have targeted discussions with HVAC specialists about the various savings scenarios that exist depending on the customer's existing heating system and heating fuel, the role of integrated controls, potential energy cost savings when fuel switching, heat pump system types and design, and about the capabilities and efficiencies of different equipment (Program Administrators Brief at 18).

To ensure that electrification offerings do not negatively affect income-eligible customers' economic interests, the Program Administrators assert that they will work with LEAN to offer electrification measures to income-eligible customers only where the economics are positive (Program Administrators Brief at 19, citing Exh. DPU-Comm 3-6). The Program Administrators claim that they will encourage weatherization prior to the installation of heat pumps by providing customers with information about the benefits of both, so they can make the best choice for themselves (Program Administrators Brief at 19). The Program Administrators also claim they will include a disclosure on residential customer facing materials regarding potential economic impacts (addressing total energy spending as well as utility bill impacts in isolation) associated with electrification (Program Administrators Brief at 20, citing Exhs. DPU-Comm 3-6; DPU-Comm 5-11; DPU-Comm 11-7; DPU-Comm 11-8).

The electric Program Administrators maintain that the proposed C&I and residential (including income-eligible) ADR offerings are cost-effective (Program Administrators Brief at 30). Responding to Sunrun's concerns about process-related issues, the Program Administrators assert that they work closely with participating stakeholders and strive to provide clear, understandable programs (Program Administrators Reply Brief at 18, citing Sunrun Brief at 3-8). To that end, the electric Program Administrators propose to hold an annual meeting to provide an overview of ADR programs and coordinate at least one public session per year to solicit feedback on their ADR offerings (Program Administrators Reply Brief at 18, citing Sunrun-Comm 1-4). The electric Program Administrators note that they will continue to make minor changes and clarifying updates to their ADR offerings, on an as-needed basis, as a result of stakeholder feedback and/or third-party evaluation recommendations (Program Administrators Reply Brief at 18, citing Sunrun-Comm 1-4).

The Program Administrators argue that broad residential lighting offerings are no longer a cost-effective way to generate savings (Program Administrators Brief at 35). The Program Administrators claim that consumers are increasingly adopting LEDs on their own, without incentives, because they have become familiar with LEDs and the value they provide (Program Administrators Brief at 34). Further, the Program Administrators contend that lighting suppliers expect LEDs will continue to experience growth in market share, even without program incentives (Program Administrators Brief at 35).

The Program Administrators maintain that the rapid market change in LED adoption limits the effective measure lives for direct-install programs (Program Administrators Brief

at 34). The Program Administrators contend that there is a high and growing market share of LEDs and when an existing bulb fails, it will be replaced by an LED bulb absent program intervention (Program Administrators Brief at 34, citing Exh. DPU-Comm 2-4). Therefore, the Program Administrators argue that there is insufficient value in offering direct install lighting measures given it would only slightly accelerate the adoption of LEDs (Program Administrators Brief at 34).

The Program Administrators maintain that, in addition to eliminating residential market rate lighting measures, they have also removed some incentives for heating equipment, including propane, and gas-fired heating measures with condensing baselines and oil boilers, as these measures no longer provide significant savings (Program Administrators Brief at 35-37; Program Administrators Reply Brief at 8-9). The Program Administrators argue that the savings from residential propane and gas condensing heating measures are now very small because the baseline is already efficient and, therefore, do not require program intervention (Program Administrators Brief at 36). Further, the Program Administrators contend that it is unclear what an appropriate incentive level for these measures would be, given that incremental costs range from $31.00 to $1,034.00 (Program Administrators Brief at 37, citing Exh. DPU-Comm 10-12). The Program Administrators argue that, based on this range, an incentive may not even be necessary for a customer to replace their heating system (Program Administrators Brief at 37, citing Tr. 1 at 80; Exh. DPU-Comm 13-11). According to the Program Administrators, a higher incentive may be an imprudent use of

ratepayer-provided energy efficiency funds (Program Administrators Brief at 37, citing Exh. DPU-Comm 10-12).

The Program Administrators argue that the program-efficiency level for oil boilers is the same as the code requirement; resulting in removal of oil boilers from the program entirely, given there are no claimable savings or opportunities for program intervention (Program Administrators Brief at 35-36, citing Exh. DPU-Comm 10-12). In response to MEMA's argument that existing Mass Save rebates for efficient heating oil equipment that use low-carbon biofuels should be preserved, the Program Administrators argue that the use of biofuels, on its own, does not lead to a reduction in customer energy consumption or demand and would, therefore, not qualify as an energy efficiency measure (Program Administrators Reply Brief at 8-9, citing Tr. 1, at 77). Therefore, the Program Administrators recommend the Department approve their proposal to remove this incentive from the Three-Year Plans (Program Administrators Reply Brief at 9).

In response to NEGPA's concerns that the spreadsheet provided by the Program Administrators in Exh. DPU-Comm 10-3, Att. does not include ground source heat pump measures for the residential new construction, multifamily, and income-eligible sectors, or that fully displace gas furnaces, or certain C&I measures, the Program Administrators confirm that prescriptive and custom ground source heat pump measures are included in the residential and income-eligible sectors (Program Administrator Reply Brief at 9-10). The Program Administrators maintain that the spreadsheet shows residential prescriptive measures as individual line items with distinct measure lives (including ground source heat pumps fully

displacing gas furnaces), but does not show the residential new construction, multifamily and income-eligible measures individually because they have historically been treated as custom measures and, therefore, are not shown as separate line items (Program Administrator Reply Brief at 10).

The Program Administrators assert that, going forward, they will continue to offer ground source heat pumps as a custom measure but are also in the process of adding prescriptive C&I ground source heat pump offerings separate from custom C&I projects (Program Administrators Reply Brief at 10). The Program Administrators argue that it is more appropriate to apply a 25-year measure life to prescriptive C&I ground source heat pump offerings rather than the 30-year measure life recommended by NEGPA[57] (Program Administrators Reply Brief at 10-11). The Program Administrators contend that custom measures will continue to have custom measure lives (Program Administrators Reply Brief at 11). Additionally, the Program Administrators agree with NEGPA that ground source heat pump measures should not have a baseline, except in circumstance of upgrade or replacement of an existing ground source heat pump installation (Program Administrators Reply Brief at 10-11).

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57 The Program Administrators argue that a 25-year measure life is consistent with the recent Ground Source Heat Pump TRM Measure Review, which incorporates the DOE Office of Energy Efficiency & Renewable Energy's expected lifetime of 25 years for the indoor portion of the ground source heat pump (Program Administrators Reply Brief at 10-11). The Program Administrators further state that they will continue to apply a 30-year measure life to residential prescriptive ground source heat pump measures, because the study only focused on C&I (Program Administrators Reply Brief at 11, citing Exh. DPU-Comm 10-3(Att.)).

Lastly, in response to CLF's recommendations relating to the implementation of "equity initiatives,"[58] including expanding data collection and reporting, the Program Administrators argue that these recommendations are beyond the equity initiative envisioned by the Statewide Plan, and are time consuming and duplicative of much of the data or information already provided by the Program Administrators (Program Administrators Reply Brief at 12-18). Further, the Program Administrators argue that CLF's proposed expansion of data collection does not strike an appropriate balance between the value and usefulness of the data requested with the cost to provide the data (Program Administrators Reply Brief at 13-14, citing Statewide Plan, Exh. 1, at 21). The Program Administrators further maintain that CLF's concerns about customer displacement stemming from program implementation would be better suited for other groups or government agencies that focus on housing or tenant rights (Program Administrators Reply Brief at 17).

2. Attorney General

The Attorney General confirms that she reached an agreement with the Program Administrators on the key terms of the Statewide Plan and recommends that the Department approve the Three-Year Plans as filed (Attorney General Brief at 14). The Attorney General supports the Program Administrators' proposal to reallocate approximately 30,000 metric tons of CO_2e from the gas Program Administrators to electric Program Administrators for

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58 The term "equity initiative" or "equity measure" is not defined or used in the Statewide Plan (see Exh. DPU-Comm 3-1). There is a reference to "equity initiatives" in a note to Figure 1-4; however, there is no explanation of what qualifies as an "equity initiative" (see Statewide Plan, Exh. 1, at 23).

fuel switching projects (Attorney General Brief at 10-11). The Attorney General asserts that her support for this proposal is conditioned on an expressed commitment that no other savings from other efficient natural gas equipment are counted towards the achievement of the electric Program Administrators' goal (Attorney General Brief at 11).

The Attorney General expresses that equity, climate goals, and workforce development are prioritized appropriately in the Statewide Plan, which strikes an appropriate balance in accommodating cost-effective energy savings investments, achievement of GHG emissions requirements, and customer rate impacts (Attorney General Brief at 12-14, 18-20).

The Attorney General argues that in order for the Statewide Plan to meet Climate Act requirements, ambitious electrification goals are required (Attorney General Brief at 14). The Attorney General claims that the Program Administrators' portfolio of electrification measures will lower customer costs over the lifetime of the installation (Attorney General Brief at 14). The Attorney General explains that electrification of the heating sector has been identified as a preferred pathway to reduce fossil fuel heating (Attorney General Brief at 15). The Attorney General recommends that the Department approve the Program Administrators' proposed electrification programs without modification (Attorney General Brief at 15).

3. Department of Energy Resources

DOER maintains that the Statewide Plan complies with the Green Community Act's mandate to capture all cost-effective energy efficiency and demand reduction resources and minimizes bill impacts on customers (DOER Brief at 21-23). DOER also argues that the Statewide Plan complies with the Climate Act and the EEA Secretary's overall GHG

emissions reduction goal (DOER Brief at 11). DOER further asserts that the Program Administrators appropriately applied established measure lives and emissions factors to account for the Statewide Plan's contribution to meeting the 2030 limits (DOER Brief at 12). DOER maintains so long as each Program Administrator's Three-Year Plan is consistent with the Statewide Plan, the Program Administrator will be able to meet the GHG emissions reduction goals (DOER Brief at 11).

DOER supports the Program Administrators' electrification proposals, including incentives for customers fuel-switching from fossil fuels to cold-air heat pumps (DOER Brief at 23). DOER argues that the Program Administrators' electrification approach is aligned with the Commonwealth's long-term climate and energy policy goals by generating clean electricity while lowering emissions and costs (DOER Brief at 24). DOER claims that the Program Administrators' approach to increase electrification, expand eligible measures to include gas-to-electric fuel-switching, enhance incentives for all-electric new construction, and invest in workforce development and market transformation is necessary to help meet the 2030 GHG emissions reduction goals (DOER Brief at 24).

In response to Sunrun's concerns regarding mid-cycle changes to ADR offerings, DOER argues that the Council is the appropriate venue for stakeholders to raise such concerns and provide feedback on program changes that do not trigger mid-term modifications (DOER Reply Brief at 9-10, citing Sunrun Brief at 3). DOER maintains that the Council's stakeholder process enables feedback on program successes, program challenges, and proposed program changes (DOER Reply Brief at 9-10).

DOER supports the Program Administrators' proposal to eliminate the residential lighting upstream program and in-unit direct install lighting for market rate customers, further stating that the Program Administrators' reduced investments in lighting reflects the priorities of DOER (DOER Brief at 7, 11). DOER contends that lighting incentives are mature measures that no longer provide net savings (DOER Brief at 7). In addition, DOER asserts that widespread adoption of LEDs has reduced measure lives and claimable program savings (DOER Brief at 13). DOER argues that the elimination of the lighting measures will allow the Program Administrators to focus energy efficiency funding on long-term measures that will have a greater effect on the Commonwealth's emissions reduction goals and using ratepayer funds to support lighting measures is no longer appropriate (DOER Brief at 13). For these reasons, DOER argues that the Program Administrators' proposed discontinuance of lighting incentives is appropriately aligned with the Statewide Plan priorities as well as the Commonwealth's climate and environmental justice goals (DOER Brief at 7, citing Climate Act).

DOER argues that the Department should not adopt NECEC's proposal to restore language from Section 3.8.6 of the October 6th draft Statewide Plan or otherwise mandate the Program Administrators' pursuit of renewable natural gas combined heat and power ("CHP") energy efficiency measures in the Three-Year Plans (DOER Reply Brief at 8-9). DOER asserts that Section 3.8.6 of the October 6th draft Statewide Plan did not include appropriate requirements for a minimum blend of renewable natural gas or provisions related to customer

commitments for the duration of time that the project would be required to use renewable natural gas (DOER Reply Brief at 9).

Further, DOER maintains that renewable natural gas CHP energy efficiency projects for the upcoming Three-Year Term are addressed in the Term Sheet, which provides that "any additional applications for CHP will only be established consistent with Commonwealth policies and if parameters are agreed upon in advance by DOER" (DOER Reply Brief at 8, citing Statewide Plan, Exh. 1, App. M § IV.C.2). DOER argues that this language in the Term Sheet provides the flexibility sought by NECEC because it contains a mechanism for the Program Administrators, DOER, and the Council to collaboratively establish appropriate parameters for renewable natural gas CHP projects (DOER Reply Brief at 8).

4. Acadia Center

Acadia argues that the Department should approve the Statewide Plan as filed because it is consistent with the requirements of the Green Communities Act and is constructed to meet or exceed overall GHG reduction goals with cost-effective programs (Acadia Brief at 7-14). Acadia maintains that, while the GHG emissions reductions from the electric sector fall short of the goals established by the EEA Secretary, the achievement of overall GHG emissions reduction is paramount (Acadia Brief at 13). In this regard, Acadia asserts that the Three-Year Plans will meet the combined GHG emissions reduction goal due to estimated performance in the gas sector (Acadia Brief at 13).

Acadia opines that the electrification of gas customers is allowed under the amended Green Communities Act and does not result in cross-funding between programs (Acadia Brief

at 14). Acadia explains that because fuel switching measures significantly reduce total gas energy usage and deliver benefits to both gas customers and the gas system, the offerings to electrify gas-fueled buildings are appropriate and consistent with how the Program Administrators claim and pay for savings for all other measures in their portfolios (Acadia Brief at 14, citing Exh. DPU-Comm 5-15). Acadia acknowledges that some electrification measures are projected to be non-cost effective (i.e., with BCR under 1.00) but notes that all program offerings are cost-effective at the core initiative level (Acadia Brief at 14). Acadia argues that the electrification measures that are not cost-effective are necessary to build the market for widespread electrification adoption (Acadia Brief at 14-15). Acadia argues that these measures serve the same function as heat pumps, which the Department approved in the 2019-2021 Three-Year Plans as CHP measures (Acadia Brief at 16).

Acadia disputes MEMA's arguments relating to biofuels, oil-fired heating rebates, and the policy goals of the Statewide Plan (Acadia Reply Brief at 2-7). Acadia disagrees with MEMA's assertion that biofuels are inherently a low-carbon fuel and argues biofuels can have different feedstocks, extraction methods, and GHG emissions profiles (Acadia Reply Brief at 2-3, citing MEMA Brief at 4; Tr. 2, at 314). Acadia contends that biofuels are not an energy efficiency measure and the Program Administrators properly excluded them from the Three-Year Plans (Acadia Reply Brief at 2-3). Acadia asserts that, by statute, the energy efficiency measures included in the Three-Year Plans must focus on a reduction of electric or natural gas demand or consumption (Acadia Reply Brief at 2). Acadia further argues that, despite MEMA's arguments to the contrary, the oil-fired heating equipment rebates were

properly discontinued due to high cost, price volatility, and policy goals associated with the reduction of fossil fuels (Acadia Reply Brief at 3-4). Finally, Acadia argues that the Program Administrators and the Council explicitly made a policy decision to support electrification rather than low-carbon biofuels in the Statewide Plan (Acadia Reply Brief at 4-5).

5. Conservation Law Foundation

CLF supports the Three-Year Plans, as proposed, and requests the Department approve them in full (CLF Brief at 6, 53). CLF argues that, with the Program Administrators' proposed termination of residential lighting incentives, the remaining measures within a renter's control will only have a modest effect on utility bills (CLF Brief at 25, citing Statewide Plan, Exh. 1, at 63-64). Therefore, CLF argues that the Program Administrators should continue to offer lighting measures to renters and moderate-income customers; however, such measures should not count towards satisfying the equity component of the proposed performance incentive mechanism (CLF Brief at 25-26, citing Statewide Plan, Exh. 1, App. M at 6). CLF argues that this proposal will help hold the Program Administrators accountable for improving outreach to underserved individuals (CLF Brief at 25-26, citing Statewide Plan, Exh. 1, App. M at 6).

CLF recommends several metrics and implementation steps that the Program Administrators could take to increase participation while minimizing risks of displacement and gentrification (CLF Brief at 29-43). These recommendations include: (1) making program information available through additional marketing mediums such as print, radio,

television, and door-to-door canvassing; (2) expanding the Mass Save website to be a one-stop shop for energy efficiency information for renters and landlords; and (3) identifying additional factors that influence the participation of renters, low-income, and limited English-proficiency customers (CLF Brief at 21, 29, 35). CLF also recommends that the Program Administrators expand their data collection and reporting to include race, income, language spoken at home, and other demographic data on participation in energy efficiency programs to evaluate program performance and ensure that equity-related goals are met (CLF Brief at 22-23, citing Exh. CLF-PC-5 (Rev.), at 81).

CLF expresses concerns about the potential ramifications of energy efficiency upgrades for renters, which may affect such factors as the amenities available to customers, the building's property value, and the landlord's determination of rent charges (CLF Brief at 30, citing Exh. CLF-LS-5, at 88). CLF requests that the Program Administrators work with advocates during program implementation to expand energy efficiency access for renters and landlords while minimizing risks of displacement and gentrification (CLF Brief at 30). CLF also requests that the Program Administrators (1) further develop their participation goals by building size and plans for serving C&I rental properties and (2) devote 25 percent of their marketing budgets to community initiatives (CLF Brief at 36, 43). Finally, CLF argues that all Program Administrators should (1) customize their outreach to landlords and communicate through one point of contact during the weatherization process and (2) explain to landlords and renters how any new equipment works (CLF Brief at 36, citing Exh. CLF-PC (Rev.) at 4).

CLF supports the Program Administrators' push to electrify fossil fuel appliances and argues that reducing heating costs and maintaining comfort will be important for environmental justice communities (CLF Brief at 51, citing Statewide Plan, Exh. 1, at 12). CLF argues that the Program Administrators' electrification plan aligns with the Climate Act (CLF Brief at 51-52). Lastly, CLF argues that increasing electrification will reduce expenses for customers (CLF Brief at 52).

CLF argues that MEMA's contentions regarding the adverse effects of the costs associated with heat pumps on low-income households and customers living in environmental justice communities are unfounded, and that the Three-Year Plans incorporate a holistic approach to overcoming the technical and financial barriers of electrification (CLF Reply Brief at 2-3, citing MEMA Brief, at 7-9). CLF argues that the EEA Secretary has stated a clear policy need to ramp up electrification and transition away from fossil fuels (CLF Reply Brief at 3-4, citing Statewide Plan, Exh. 1, App. D at 4).

6. Low-Income Energy Affordability Network

LEAN asserts that the Statewide Plan provides structure for continuing energy efficiency collaboration, innovation, and leadership, while contributing to aggressive GHG emissions reductions and meeting the legislative goals of equity and affordability (LEAN Brief at 3). Accordingly, LEAN argues that the Department should approve the Program Administrators Three-Year Plans as submitted (LEAN Brief at 3, LEAN Reply Brief at 5). LEAN, however, proposes to clarify the Program Administrators' statements on brief pertaining to elimination of lighting and fossil-fuel heating system measures for

income-eligible participants (LEAN Reply Brief at 2-4, citing Program Administrators Brief at 34-36). Specifically, LEAN claims that although these offerings were removed for other customers, the 2022-2024 Three-Year Plans provide exceptions with respect to low- and moderate-income lighting measures, and low-income fossil fuel heating measures (LEAN Reply Brief at 2-4, citing Statewide Plan, Exh. 1, at 79, 109, App. M at 6, 7; Exhs. DPU-Comm 13-10; DPU-Comm 13-13). LEAN explains that the intent is to limit and reduce these measure offerings for low-income participants over time, not eliminate them outright (LEAN Reply Brief at 2-4).

7. Northeast Clean Energy Council

NECEC supports the Statewide Plan and argues it is designed to meet the EEA Secretary's overall GHG emissions reduction goals (NECEC Brief at 12). NECEC asserts that the Three-Year Plans encompass all cost-effective energy efficiency and demand reduction resources, strive for greater participation in underserved communities, and appropriately promote equity (NECEC Brief at 14-19). NECEC asserts that the Program Administrators' proposed strategic electrification measures are eligible energy efficiency measures under the Green Communities Act, as amended by the Legislature in 2018 (NECEC Brief at 23). NECEC further argues that neither the Green Communities Act nor the Department's Guidelines specifically require individual customer reduction in energy usage in order for inclusion in a three-year plan (NECEC Brief at 26).

NECEC supports the inclusion of the ConnectedSolutions ADR program in the Three-Year Plans, with a few proposed adjustments (NECEC Brief at 20-22). Specifically,

NECEC argues that additional oversight should be required for proposed changes to ConnectedSolutions. In addition, NECEC argues that, the Program Administrators should be required to implement a more transparent change process, including at least two annual meetings with stakeholders (NCEC Brief at 20-22).

NECEC argues that the Department should direct the Program Administrators to: (1) restore language from Section 3.8.6 of the October 6th draft Statewide Plan allowing the Program Administrators to pursue renewable natural gas CHP energy efficiency measures during the upcoming Three-Year Plan term; or (2) otherwise find that projects using Renewable Energy Portfolio Standard ("RPS") Class I-eligible fuels (i.e., renewable natural gas) should be offered under the Three-Year Plans as energy efficiency measures (NECEC Brief at 33-34).[59] NECEC asserts that the October 6th draft Statewide Plan appropriately recognized that: (1) biogas and landfill gas are considered zero emissions fuels; (2) CHP energy efficiency measures would follow the RPS regulations to determine renewable gas eligibility; and (3) customers would be required to demonstrate that their project is cost effective, does not contribute to 2030 GHG emissions, and delivers either MMBtu or electric demand savings (NECEC Brief at 32-33).

NECEC argues that restoration of the language from Section 3.8.6 of the October 6th draft Statewide Plan would provide the Program Administrators with additional flexibility to

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59 The Massachusetts RPS requires retail electricity suppliers (both regulated distribution utilities and competitive suppliers) to obtain a percentage of the electricity for their customers from qualifying renewable energy facilities. 225 CMR 14.07.

encourage the use of RPS-eligible fuels for CHP facilities and exclusion of such fuels from efficiency measures during the upcoming Three-Year Plan term has created market uncertainty (NECEC Brief at 33). NECEC asserts that allowing the Program Administrators to pursue renewable natural gas CHP energy efficiency measures during the upcoming Three-Year Plan term will ensure that emissions-reducing resilience options will be available (NECEC Brief at 33). Without a RPS-compliant option, NECEC argues that facilities requiring resilient on-site power likely will select diesel back-up generators (with high GHG emissions and local pollutant profiles) instead of renewable natural gas (NECEC Brief at 33).

8. New England Geothermal Professional Association

NEGPA supports the Three-Year Plans and recommends Department approval (NEGPA Brief at 4). NEGPA asserts, however, that the Statewide Plan inappropriately omits several measures that cause it to misrepresent the cost-effectiveness of ground source heat pumps, the role of ground source heat pumps in achieving net zero GHG emissions by 2050, and the contribution of ground source heat pumps on mitigating peak summer and winter electric demand (NEGPA Brief at 2). NEGPA maintains that the Statewide Plan does not include ground source heat pump measures for residential new construction, multifamily and income-eligible offerings, nor for fully displacing gas furnaces (NEGPA Brief at 3, citing Statewide Plan, Exh. 1, App. O at 152 n.4; Exh. DPU-Comm 10-3, Att.). NEGPA argues that the Program Administrators should: (1) change measure life for each ground source heat pump measure to 30 years and the baseline comparison to an existing fuel for retrofits or a reasonably available fuel for new construction; and (2) ensure that ground source heat pump

measures only have a ground source heat pump baseline in the case of an upgrade or replacement to an existing ground source heat pump installation (NEGPA Brief at 4).

9. Massachusetts Energy Marketers Association

MEMA argues that the Department should direct the Program Administrators to modify the Three-Year Plans to preserve existing Mass Save rebates for efficient heating oil equipment (MEMA Brief at 1, 8). MEMA asserts that the goals for partial replacement heat pumps agreed to in the Term Sheet set a minimum number of fossil-fueled heating systems that will continue to play a role in residential heating during the winter and, therefore, oil boiler replacements will provide substantial savings and should remain eligible for incentives (MEMA Brief at 2-3; MEMA Reply Brief at 2-3). Second, MEMA urges the Department to consider opportunities for immediate GHG emissions reductions with biofuels and other low carbon fuels, while recognizing the higher costs of heat pumps and marginal grid emissions impacts, rather than an average grid emissions profile (MEMA Brief at 3-5; MEMA Reply Brief at 3-5). Lastly, MEMA argues that overreliance on heat pumps and higher electricity usage may be particularly harmful to low-income customers and customers living in environmental justice communities and, therefore, preserving rebates for efficient fossil-fuel heating equipment could immediately reduce GHG emissions and grid demand over the next three years (MEMA Brief at 4, 7-9; MEMA Reply Brief at 7-8).

10. Sunrun

Sunrun supports the electric Program Administrators' proposed ADR programs (Sunrun Brief at 3). Sunrun maintains that the ADR measures implemented by the electric

Program Administrators in the 2019-2021 Three-Year Plans and proposed in the 2022-2024 Three-Year Plans, are critical building blocks to unlocking customer-sited distributed energy and other clean energy resources that provide grid and ratepayer benefits (Sunrun Brief at 10-11).

Sunrun raises concerns with the following program implementation process issues: (1) changes to program implementation mid-program cycle; (2) difficulty qualifying of eligible devices; and (3) lack of stakeholder involvement when transitioning demonstration projects to core initiatives or programs (Sunrun Brief at 3). In this regard, Sunrun argues that process improvements to facilitate meaningful stakeholder engagement are needed to maximize ADR program benefits (Sunrun Brief at 10-11). Specifically, Sunrun argues that it is necessary to simplify what are currently complex equipment enrollment procedures and implement a process to solicit meaningful stakeholder input on proposed mid-cycle changes to ADR programs (Sunrun Brief at 10-11).

Sunrun states that it supports the concept of a solar PV inverter offering as presented in National Grid (electric)'s Three-Year Plan (Sunrun Brief at 9). Sunrun raises concern, however, with the lack of detail National Grid (electric) provided about the proposed offering, given that it intends to transition the offering from a "demonstration program" to a full measure in 2022 (Sunrun Brief at 9). In particular, Sunrun argues that National Grid (electric) provided limited detail on the implementation of the solar PV inverter demonstration offering during the 2019-2021 Three-Year Plan term, much less a framework for stakeholder input on (1) refining the demonstration program for implementation as a

statewide measure or (2) addressing potential modifications that may be needed in subsequent program years (Sunrun Brief at 9). To correct these issues, Sunrun argues that National Grid (electric) should be required to file the following information before it is allowed to implement the proposed solar PV inverter measure: (1) proposed incentive values and program structure; (2) eligibility criteria; (3) terms and conditions for participation, including interaction with other programs; and (4) proposed framework for stakeholder engagement (Sunrun Brief at 9).

D. Analysis and Findings

1. Introduction

Energy savings represent the electricity, natural gas, heating oil, propane, and other resources saved as a result of the deployment of energy efficiency. The Department considers energy savings in order to evaluate the degree to which the proposed Three-Year Plans achieve their mandate of planning to achieve all cost-effective energy and demand resources. In addition, the Department must determine if the Three-Year Plans are constructed to meet or exceed the GHG emissions reduction goals set by the EEA Secretary pursuant to G.L. c. 21N, § 3B. When reviewing individual savings goals, the Department must ensure that each Program Administrator has taken appropriate steps to demonstrate that its Three-Year Plan: (1) establishes a sustainable effort in its continued delivery of energy efficiency; (2) has considered new technologies and enhancements; (3) has sought to design programs to address identified barriers; and (4) has included the results of avoided costs, potential and EM&V studies. 2019-2021 Three-Year Plans Order, at 10-11;

2016-2018 Three-Year Plans Order, at 25-27; 2013-2015 Three-Year Plans Order, at 37-40. In addition, the Department considers whether the proposed programs prioritize safety, reliability, security, affordability, equity, and the GHG limits established pursuant to G.L. c. 21N. G.L. c. 25, § 1A. These issues are relevant to the Department's ultimate determination of whether the Three-Year Plans will provide for the acquisition of all available cost-effective energy efficiency and demand reduction resources. See G.L. c. 25, §§ 19(a), 19(b), 21(b)(1).

The Energy Act of 2018 amended the Green Communities Act to expand the scope of energy efficiency programs that are eligible for inclusion in the Three-Year Plans. Energy Act of 2018, at § 2. In pursuit of the achievement of all cost-effective energy efficiency and demand reduction resources, the Program Administrators include programs that provide energy and demand savings through strategic electrification that result in cost-effective reductions in GHG emissions and minimize ratepayer costs. G.L. c. 25, § 21(b)(2)(iv)(A). The Department maintains that strategic electrification must be a balanced part of the Program Administrators' overall approach in planning to achieve all cost-effective savings. 2019-2021 Three-Year Plans Order, at 155.

2. Plan Goals

The Statewide Plan contains aggregate savings and GHG emissions reduction goals, as well as individual savings and GHG emissions reduction goals for each electric and gas Program Administrator (Statewide Plan, Exh. 1, Apps. C.1 – Electric (Rev.), C.2 – Gas (Rev.)). These goals were developed through a collaborative process that culminated with

the Council's approval of the Statewide Plan as (1) meeting the Green Communities Act's requirement to achieve all available, cost-effective energy efficiency and (2) supporting of the EEA Secretary's GHG emissions reduction goals pursuant to G.L. c. 21N, § 3B (Statewide Plan, Exh. 1, at 8-9 & Apps. A at 7-14, N).

After review, the Department finds that the statewide and individual Program Administrator savings goals developed through this process appropriately take into consideration potential studies, program sustainability, and territory-specific savings drivers (Statewide Plan, Exh. 1, App. A, at 7-14 & App. F; Exhs. BGC-2, at 29-22, 24-30; EGMA-2, at 20-22, 24-31; FGE-Gas-2, at 18-21, 23-30; LU-2, at 18-21, 23-29; NG-Gas-2, at 21-32; NSTAR-Gas-2, at 20-22, 24-31; Compact-2, at 19-21, 23-30; FGE-Electric-2, at 18-21, 23-39; NG-Electric-2, at 21-31; NSTAR-Electric-2, at 20-22, 24-31). Additionally, the Department finds that the net lifetime all fuel savings metric was appropriately calculated by converting all fuel savings to MMBtu and accounts for embedded energy with heat values from a mix of fuels when converting electric savings. Guidelines § 3.4.7.2. Further, the Department finds that the aggregate and individual gas and electric savings goals will be, with the required modifications for heating systems and lighting addressed below, consistent with the achievement of all available cost-effective energy efficiency (Statewide Plan, Exh. 1, at 144-151).

In addition, each Three-Year Plan must be designed to meet the GHG emissions reduction goals set by the EEA Secretary pursuant to G.L. c. 21N, § 3B. St. 2021, c. 8, §§ 26A, 28; D.P.U. 20-150-A at 7, 50; Guidelines § 3.4.7. As described above, the EEA

Secretary established an overall goal to reduce CO_2e emissions by 845,000 metric tons by 2030, with 504,000 metric tons allocated to the electric Program Administrators and 341,000 metric tons allocated to the gas Program Administrators (Statewide Plan, Exh. 1, Apps. C.1-Electric (Rev.) at 30; D at 3, C.2-Gas (Rev.) at 25, D at 3).

The Statewide Plan is designed to achieve a total of 848,713 metric tons of CO_2e emissions reduction in 2030, directly associated with the energy efficiency measures implemented in 2022–2024, with 374,195 metric tons of CO_2e emissions reduction in 2030 from the gas Program Administrators and 474,518 metric tons of CO_2e emissions reduction in 2030 from the electric Program Administrators (Statewide Plan, Exh. 1, Apps. C.1 - Electric (Rev.), Table IV.D.3.2.i, C.2 - Gas (Rev.), Table IV.D.3.2.i).

As filed, the electric Program Administrators' Three-Year Plans fall short of the electric sector goal set by the EEA Secretary (Statewide Plan, Exh. 1, Apps. D, M at 2-3; see, e.g., Exh. NSTAR Gas-2, at 37). To address this shortfall, the Program Administrators propose to transfer approximately 30,000 metric tons of CO_2e emissions reduction to be achieved by the gas Program Administrators to the electric Program Administrators (Statewide Plan, Exh. 1, at 43-44). The Program Administrators maintain that this transfer of emissions reduction is appropriate because the reductions at issue will be derived from projects that involve gas-to-electric fuel switching (Program Administrators Brief at 14, citing Statewide Plan, Exh. 1, App. A at 8). DOER, Acadia, and NECEC support the Program Administrators' proposal and argue that it is appropriate for the Department to focus on whether the Three-Year Plans are designed to achieve the EEA Secretary's overall GHG

emissions reduction goal rather than the allocated gas and electric sector goals (DOER Brief at 11; Acadia Brief at 13; NECEC Brief at 12).

The Department finds that the 2022-2024 Three-Year Plans are constructed to prioritize measures that provide long-term GHG emissions reductions that exceed the cumulative goal set by the EEA Secretary. While the Program Administrators, the Attorney General, and DOER agree that the Program Administrators may make up for the shortfall in planned electric GHG emissions reduction by relying on gas Program Administrators' electrification efforts, the Department notes that neither the parties, nor the Department have the legal authority to effectively modify the goals established by the EEA Secretary and it is not appropriate for customers of gas Program Administrators to be responsible for the goals of electric Program Administrators. The Department expects that the electric Program Administrators, through their implementation of this plan, will strive to achieve their GHG emissions reduction goal by the end of the Three-Year Plan term.

The Department notes that due to the timing of the Climate Act's passage, the EEA Secretary's goal was set more than two months after the Program Administrators submitted the draft Statewide Plan to the Council on April 30, 2021. Accordingly, the Program Administrators and the Council did not have full advantage of knowing the goals until late in their collaboration to develop the 2022-2024 Three-Year Plans. This will not be the situation for future Three-Year Plan development processes, as pursuant to G.L. c. 21N, § 3B, the EEA Secretary will set the goals for the then-upcoming Three-Year Plan by March 1st of the

planning year (i.e., two months before the Program Administrators submit their draft plan to the Council for review and comment).

Finally, pursuant to G.L. c. 25, § 21(d)(5), 15 months after the conclusion of the final year of the Statewide Plan, the Department must issue a statement regarding the degree to which the activities undertaken by the Program Administrators pursuant to the performance of each Three-Year Plan met the goals for the Statewide Plan set by the EEA Secretary pursuant to G.L. c. 21N, § 3B. Accordingly, in each Annual Report and Term Report for the 2022-2024 Three-Year Plan term, the Program Administrators shall describe in detail how they have implemented the Three-Year Plans in a manner that aligns with the achievement of the EEA Secretary's overall and sector-specific GHG emissions reduction goals.

3. Offerings and Enhancements

a. Sector Based Strategic Enhancements

i. Residential, Income-Eligible, Commercial and Industrial

As described in Section IV.B.2.a. above, the Program Administrators propose several strategic enhancements to address residential, income-eligible, and C&I sector barriers. The Program Administrators plan to enhance their workforce development plan to grow and diversify the workforce supporting energy efficiency programs (Statewide Plan, Exh. 1, at 70). Specifically, the Program Administrators will seek to expand the energy efficiency and HVAC workforce by recruiting and training individuals that live in environmental justice

communities, speak languages in addition to English, and are low-to moderate income (Exh. DPU-Comm 13-9).

In order to increase participation, the Program Administrators also propose a series of short- and long-term strategies to provide flexibility to participate in the programs, as well as address barriers to participation, including time and lack of understanding (Statewide Plan, Exh. 1, at 81). The Program Administrators also developed a targeted moderate income offering designed to provide enhanced HVAC incentives if a customer is income qualified and completes required weatherization measures prior to installing the HVAC equipment (Exh. DPU-Comm 5-7). The Program Administrators plan to develop an income verification process for this offering (Exh. DPU-Comm 5-7).

Among other efforts, the Program Administrators plan to continue their Residential Education program which provides educational outreach to teach Grades K-12+ students how to be efficient energy consumers (Statewide Plan, Exh. 1, at 117-118). The Department reminds the Program Administrators that the information they provide to schools must be accurate and in alignment with the Commonwealth's energy policies and goals.

NSTAR Electric, NSTAR Gas, and EGMA also propose to offer Program Administrator-specific enhancements to the Residential Education Program (Statewide Plan, Exh. 1, App. G.2 - Eversource). The Department notes, however, that most of the purported enhancements to the Statewide Plan mirror elements of the Residential Education Program. For example, the elements of the proposed enhancement to expand the vocational high school work force development program to include internship opportunities, the

Kill-a-Watt meters at local libraries, and teacher workshops are part of the statewide program (c.f., Statewide Plan, Exh. 1, at 117-119 and App. G.2 - Eversource at 1). The inconsistent classification of almost identical statewide and Program Administrator-specific offerings added an unnecessary and unappreciated layer of complexity to the Department's review of the Three-Year Plans. Going forward, each Program Administrator shall share its specific enhancements with the other Program Administrators sufficiently in advance of finalizing the Three-Year Plans to ensure that they accurately differentiate statewide and Program Administrator-specific offerings.

The Program Administrators' proposed improvements for the income-eligible sector include: (1) emphasis of heat pumps paired with weatherization and ADR; (2) development of a centralized single-family intake website to complement LEAN's existing multifamily website; (3) increased multifamily opportunities inclusive of customized deep energy retrofit approaches, incentives for common area laundry facilities, remote monitoring and building optimization, and a targeted small multifamily landlord engagement strategy; (4) an updated statewide mixed-income protocol for homes with three to four units, where only one unit is income eligible; and (5) improved remote assessments and interactions in light of the COVID-19 pandemic (Statewide Plan, Exh. 1, at 111-115).

The Program Administrators propose several strategies for the C&I sector, which include: (1) increasing participation of microbusinesses through the Main Streets offering; (2) developing a technically proficient and diverse workforce; (3) improving participation focusing on awareness, understanding, and accessibility of program offerings; (4) providing

technical assistance and tools to increase customer and vendor knowledge in energy efficiency program guidelines; and (5) providing additional C&I optimization measures, such as developing prescriptive weatherization and air sealing offerings, introducing low-cost tuning measures for existing equipment and controls, and developing custom express tools for repeatable low-cost C&I measures (Statewide Plan, Exh. 1, at 138-157). The Department finds that these strategic enhancements are reasonably designed to track and address identified barriers and emphasize new technologies.

With respect to NEGPA's recommendation to use a measure life of 30 years for each ground source heat pump measure, the Program Administrators state that they are developing prescriptive C&I ground source heat pump offerings with measure lives of 25 years (Statewide Plan, Exh. 1, at 134-135; Exh. DPU-Comm 10-3 (Att.)). Recognizing that strategic electrification is an evaluation research priority for the 2022-2024 Three-Year Plan term, the Department directs the Program Administrators to perform a review of the TRM for each prescriptive electrification offering before the next Three-Year Plan filing to ensure the accuracy of measure assumptions (Statewide Plan, Exh. 1, App. H, at 17).

ii. Hard-to-Reach

As described in Section IV.B.2.a.iv above, the Three-Year Plans include several proposed strategies to address participation barriers for hard-to-reach customers in order to deliver more equitable access to and participation in energy efficiency, particularly among

those groups who have historically participated at lower rates[60] (Statewide Plan, Exh. 1, at 17). The Department finds that these efforts, as modified herein, will promote equity and help the Program Administrators pursue all cost-effective energy efficiency. G.L. c. 25, §§ 1A, 21(b)(1).

One identified strategy is the Community First Partnership Program, which is the second iteration of the Municipal & Community Partnership Strategy initially launched during the 2019-2021 Three-Year Plans term (Statewide Plan, Exh. 1, at 18). Under the Community First Partnership Program, the Program Administrators will partner with local communities to increase the reach of energy efficiency savings, with an emphasis on environmental justice communities (Statewide Plan, Exh. 1, at 68-70). The Program Administrators intend to give priority to the 38 Targeted Communities in this program.

The Department supports the Program Administrators' efforts to leverage the community and municipal partnerships to increase participation in energy efficiency programs by historically underserved populations. The data driven approach and reliance on the results of third-party evaluations to identify key barriers to participation, particularly non-financial barriers, will help the Program Administrators to develop program delivery models to

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[60] The Program Administrators conducted a series of studies during the 2019-2021 Three-Year Plan term to assess participation rates and barriers to participation. These studies include the 2013-2017 Residential Non-Participant Profile Study, the Residential Non-Participant Market Characterization and Barriers Study, and the C&I Small Business Non-Participant Customer Profile Study (Exh. DPU-Comm 2-8, Att. (a)-(c)).

improve access of hard-to-reach customers (Statewide Plan, Exh. 1, at 22, 66-68; Exh. DPU-Comm 2-12).

The Department is concerned, however, with the roll out of the Community First Partnership Program. The Program Administrators state that they released the application for the Community First Partnership Program prior to finalizing the list of 38 Targeted Communities (Tr. 2, at 249-250). The Program Administrators explain that, after the release of the application, they made two adjustments to the criteria used to select the priority communities based on conversations with DOER. Specifically, the Program Administrators increased the maximum historical combined gas and electric participation rate from 30 percent to 32 percent and added an additional criterion that median household income of the community must be less than 100 percent of state median household income (Tr. 2, at 258-260). As a result, several municipalities were rendered ineligible for priority status, while others were made newly eligible (Tr. 2, at 260). The Program Administrators state, however, that they did not communicate the changes to the selection criteria to the affected municipalities (Tr. 1, at 167-168). Further, as of the close of the evidentiary record, the Community First Partnership Program application had not yet been updated to reflect the correct priority municipalities.[61] The poor timing of the criteria changes and lack of

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[61] The Community First Partnership Program application is available at: https://www.masssave.com/-/media/Files/PDFs/Partners/1121-MS-COMM-2664490-2022-Application.pdf?la=en&hash=5E84EFC3C3B9F9363AC38FF2CE67C51FB43FC9F4 (last visited December 17, 2021).

communication and transparency in the eligibility process for the Community First Partnership Program create unnecessary confusion for municipalities and added an unnecessary and unappreciated layer of complexity to the Department's review of the Three-Year Plans (see Tr. 1, at 166-172; Tr. 2, at 250-261). Going forward, the Program Administrators shall finalize all critical details of Three-Year Plan offerings well in advance of filing with the Department. In addition, the Program Administrators must ensure that they communicate appropriately with potential program participants, especially with respect to eligibility criteria, deadlines, and other requirements that may affect participation.

Despite our concerns with the roll out of the Community First Partnership Program, the Department finds that the proposed approach is appropriate to address barriers and increase participation among communities/customer segments with historically lower participation rates. While, as discussed below, the Department modifies the criteria used to identify specific communities for targeted investment, to increase participation, as well as for the purpose of performance incentives, we will not require the Program Administrators to change the priority municipalities for the Community First Partnership Program. One purpose of the Community First Partnership Program is to test methods for overcoming systemic barriers to participation for certain populations (Tr. 2, at 255). Because the Program Administrators are seeking to test strategies that may lead to broader programmatic changes, the Department finds that it is appropriate for the Community First Partnership Program to focus on communities that have higher concentrations of lower income customers, even if the community does not have historically lower participation (Tr. 2,

at 248, 255-256). Further, by design, the Community First Partnership Program is not intended to serve all 38 Targeted Communities and may include communities outside of the 38 Targeted Communities (Exh. DPU-Comm 13-18, Att.).

The Program Administrators state that one of the key strategic priorities of the 2022-2024 Three-Year Plans is establishing more equal access to and participation in energy efficiency, particularly among those groups who have historically participated at lower rates, including renters/landlords, moderate income customers, limited English-proficiency customers, and microbusinesses (Statewide Plan, Exh. 1, at 17). During the 2019-2021 Three-Year Plans term, the Program Administrators commissioned a series of studies that were completed in 2020, including the Residential Non-Participant Customer Profile Study, the Residential Non-Participant Market Characterization and Barriers Study, and the C&I Small Business Non-Participant Customer Profile Study (Statewide Plan, Exh. 1, at 17). These studies identified groups of customers that were less likely to participate in the energy efficiency programs (Statewide Plan, Exh. 1, at 17). Specifically, the studies found that limited English-proficiency customers were more likely to be unaware of the programs than customers who are more proficient; however, there was little difference in participation rates based on language proficiency (Exh. DPU-Comm 2-8, Att. B). Further, the study found that limited English-proficiency customers were more likely to be renters (Exh. DPU-Comm 2-10).

The studies further found that moderate income customers were equally likely to be participants as nonparticipants; however, moderate income customers were six percent less

likely to participate than customers with higher incomes (Exh. DPU-Comm 2-11). The studies did not include findings regarding race and participation rates (see Exh. DPU-Comm 2-8, Atts. A and B).[62] The most significant factor affecting participation was renter status (Statewide Plan, Exh. 1, at 19). The studies showed that renters were ten percent less likely to participate in the energy efficiency programs and more than 30 percent less likely to be aware of the programs (Statewide Plan, Exh. 1, at 19).[63]

The Program Administrators testified that, in collaboration with DOER, the Attorney General, and the Council's equity working group, they determined that the best way to focus on increasing participation from customer segments with historically lower participation rates was to use a geographic approach to select a set of communities with high concentrations of low-participation customers (Tr. 2, at 246). The Department, however, has concerns with the final criteria the Program Administrators used to identify the 38 Targeted Communities. Specifically, the Department finds that the final set of criteria was overly limiting, placing focus on too narrow a subset of municipalities based primarily on income. While income is a factor in participation rates, the Residential Non-Participant Customer Profile Study and the Residential Non-Participant Market Characterization and Barriers Study show that limited

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[62] The studies also provided the historic participation rates of residents by municipality (Exh. DPU-Comm 2-14).

[63] As discussed below, the Department has repeatedly stated that the Program Administrators must address the participation barriers and achievement of deeper participant savings for renters. See 2019-2021 Three-Year Plans Order, at 39, 41-43, 95; 2016-2018 Three-Year Plans Order, at 26-27; 2013-2015 Three-Year Plans Order, at 45-48.

English proficiency and renter status are more significant factors in participation rates (Exh. DPU-Comm 2-8, Atts. A and B). Further, the Department finds that a 32 percent threshold to measure past participation is not appropriate, given that it meets the statewide average combined gas and electric consumption-weighted participation rate and, therefore, does not address historically low participation. Overall, the Department determines that the set of eligibility criteria established by the Program Administrators is not appropriately tailored to achieve the goal of increased equity by focusing on communities with lower participation rates and hard-to-reach customers (Exh. DPU-Comm 2-14; Tr. 2, at 246-260).

Based on the discussion above, the Department determines that it is appropriate to use a geographic approach and target communities with verified lower participation rates through evaluation studies to determine eligibility for the Program Administrators' targeted equity investment and outreach strategies. Accordingly, the Program Administrators shall use the three-pronged test described below to identify communities eligible for the Program Administrators' targeted equity investment and outreach strategies ("Targeted Hard-to-Reach Communities").[64] Eligible municipalities must: (1) be served by an electric and/or gas Program Administrator; (2) contain at least one environmental justice population as defined by the EEA Environmental Justice Policy,[65] and (3) have historically low participation rates.

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[64] As discussed in Section VII, below, the Program Administrators also shall use the three-prong test for the equity component of the performance incentive model.

[65] The EEA Environmental Justice Policy defines environmental justice populations as neighborhoods (U.S. Census block group data for minority criteria, and American Community Survey data for state median income and English isolation criteria) that

The Department defines "historically low" participation as those municipalities with a combined consumption-weighted participation rate of 27 percent or less, as presented in "Column E" of Exh. DPU-Comm 2-14, Att. A. The Department finds that setting the participation rate at five percent below the statewide average to identify Targeted Hard-to-Reach Communities ensures that the Program Administrators focus on communities with historically lower participation rates.[66]

Municipality-wide, the City of Boston would not meet the criteria for inclusion as a Targeted Hard-to-Reach Community. The City of Boston, however, contains nearly a tenth of the Commonwealth's population (see Statewide Plan, Exh. 1, at 21). The Department finds the Program Administrators' proposal to prioritize specific neighborhoods in the City of Boston is appropriate to enhance participation among renters and environmental justice populations (see Statewide Plan, Exh. 1, at 21). Accordingly, the Program Administrators shall include the following neighborhoods in the City of Boston as Targeted Hard-to-Reach

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meet one or more of the following criteria: (1) annual median household income is not more than 65 percent 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. See Environmental Justice Policy of the Executive Office of Energy and Environmental Affairs) (Updated June 24, 2021) available at https://www.mass.gov/doc/environmental-justice-policy6242021-update/download.

[66] The statewide average combined consumption-weighted participation rate is 32 percent (Exh. DPU-Comm 2-14(b)).

Communities: Allston, Brighton, Dorchester, East Boston, Fenway, Mattapan, Mission Hill, and Roxbury (see Statewide Plan, Exh. 1, at 21).[67]

In addition, as the Program Administrators explained, the subsets of customers that are identified as having lower participant rates are captured in the definition of environmental justice populations (i.e., lower income customers and limited English-proficiency customers). Accordingly, the Department finds that using the EEA Environmental Justice Policy definition of environmental justice populations captures the communities and customer characteristics that the Residential Non-Participant Customer Profile Study and the Residential Non-Participant Market Characterization and Barriers Study identified correlate with hard-to-reach customers, as well as aligns with the Commonwealth's equity policies.

Application of the three-pronged criteria for the Targeted Hard-to-Reach Communities increases the number of environmental justice communities eligible for targeted enhanced energy efficiency investments and outreach that otherwise would have been left out using the Program Administrators' proposed criteria. A stated goal of the Three-Year Plans is to ensure a more equitable distribution of energy efficiency savings and benefits for

[67] The Program Administrators shall submit a compliance filing identifying Targeted Hard-to-Reach Communities that meet the criteria set forth above. The Program Administrators shall determine planned benefit levels with the method used to establish planned benefits for the original 38 Targeted Communities (Tr. 3, at 413). Each Program Administrator shall examine actual achievements in the Targeted Hard-to-Reach Communities from 2017 through 2019 (based on their tracking systems) to create a comparable three-year baseline (Tr. 3, at 413). The Program Administrators then shall examine the percentage of production in those years and apply that percentage to this Three-Year Plan with an equivalent increase (Tr. 3, at 413).

hard-to-reach customers. The Department finds that our revised criteria to identify the Targeted Hard-to-Reach Communities better positions the Program Administrators to accomplish this goal.

In order to evaluate the success of the targeted efforts to increase participation and deliver programs in an equitable manner, the Department directs the Program Administrators to track participation in all service territories by municipality[68] and to conduct an updated residential non-participant customer profile study prior to the 2025-2027 Three-Year Plan filing. Each Program Administrator also shall include detailed Program Administrator-specific testimony in the 2025-2027 Three-Year Plan filing (1) describing how the Program Administrator sought to increase participation in the communities that meet the above criteria and (2) an analysis of whether actual increases occurred.

In addition, the Program Administrators state that they are developing a renter-unit strategic plan with marketing and outreach strategies beyond what is included in the Three-Year Plans, and they intend to implement this strategic plan in the third or fourth quarter of 2022 (Exhs. DPU-Comm 5-13; DPU-Comm 12-24).[69] Since 2012, the Department repeatedly has stated that the Program Administrators must address the participation barriers and achievement of deeper participant savings for renters. See

[68] The Program Administrators shall track participation by neighborhood for the City of Boston.

[69] The Program Administrators did not intend to file the finalized plan with the Department (Exh. DPU-Comm 12-24).

2019-2021 Three-Year Plans Order, at 39, 41-43, 95; 2016-2018 Three-Year Plans Order, at 26-27; 2013-2015 Three-Year Plans Order, at 45-48. The Program Administrators did not, however, submit the formal plan in their filings to address how they will serve renters. Further, the Program Administrators' strategic plan currently in development will not be implemented until 2022 is almost over. Contrary to the Program Administrators' assertions, the Department is unconvinced that incentives for electric lawn mowers, leaf blowers, trimmers, and chainsaws are appropriate enhancements for renters at this time (Tr. 2, at 236-237, 244).[70] Accordingly, no later than September 30, 2022, the Program Administrators shall file a finalized strategic renter plan with the Department, describing what new protocols have been put into place and what additional steps remain to be taken to increase service to renters and landlords.

Finally, the Department has recognized that tracking demographic data specific to age, race, ethnicity, disability, income, and primary language could implicate customer privacy issues and may deter participation in energy efficiency programs and initiatives by customers who do not want to disclose this information. 2019-2021 Three-Year Plans Order, at 166-167. For these reasons, the Department will not adopt CLF's data tracking recommendations. Nonetheless, the Department reminds the Program Administrators of their

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[70] As discussed in Section IV.D.3.b, below, the Department supports the expansion of the programs to include incentives for electric lawn mowers, leaf blowers, trimmers, and chainsaws as part of the Program Administrators' strategic electrification efforts where the measures result in lower overall energy use, decreased energy costs, and reductions in GHG emissions.

obligation to continuously improve customer outreach and other methods of attracting customers to maximize participation. The Department fully expects the Program Administrators will appropriately track participation to inform the implementation of the Three-Year Plans.

b. Strategic Electrification

i. Introduction

The Program Administrators propose to prioritize strategic electrification efforts during the 2022-2024 Three-Year Plan term. The Program Administrators maintain that the Three-Year Plans demonstrate a necessary and measurable shift toward electrification and away from traditional fossil-fuel based heating and cooling measures (Statewide Plan, Exh. 1, at 11). The Program Administrators further claim that expanded strategic electrification offerings are needed to meet the GHG emissions reduction goals set by the EEA Secretary (Statewide Plan, Exh. 1, at 11). In this regard, the Program Administrators and many intervenors state that increased strategic electrification will help the Commonwealth achieve its net zero GHG emissions goals by reducing use of fossil-fuel heating and leveraging low-carbon electricity from the grid.

Strategic electrification through energy efficiency alone will not achieve the Commonwealth's climate goals. Many other policies and customer decisions outside the scope of energy efficiency programs must be put in place to ensure that load growth from electrification will, in fact, reduce GHG emissions. In particular, energy policies including RPS, the Solar Massachusetts Renewable Target ("SMART") Program (PV feed-in tariff),

offshore wind procurement, and imports of hydroelectric power are additional and necessary pathways that will increase the proportion of low-carbon electricity on the grid and, in time, provide cleaner energy to meet the needs of a growing electric load in Massachusetts (Statewide Plan, Exh. 1, at 11).

The Program Administrators' strategic electrification approach includes robust incentives for heat pumps, as well as the development of a heating comparison calculator and a heat pump installer network to provide the tools and workforce necessary to achieve the Three-Year Plan goals (Statewide Plan, Exh. 1, at 15-17). Additional strategic electrification strategies include the introduction of an all-electric new construction pathway for residential buildings (New Construction Path-to-Zero offering), increased technical assistance and financial support for all-electric new construction commercial buildings that minimize overall energy consumption, and continued promotion of Passive House certifications for commercial and residential new construction projects (Statewide Plan, Exh. 1, at 13). In addition to their strategic electrification efforts, the Program Administrators state that they will continue to focus on weatherization as a foundational measure that reduces energy use and prepares residential and commercial buildings for strategic electrification (Statewide Plan, Exh. 1, at 13). These proposed strategies received wide support from intervenors.

Consistent with the Climate Act, the Department supports efforts to cost-effectively reduce energy use and GHG emissions, while minimizing costs to ratepayers. NECEC argues that neither the Green Communities Act nor the Department's Guidelines specifically require strategic electrification to result in an individual customer reduction in energy usage

for inclusion in the Three-Year Plans (NECEC Brief at 26). However, contrary to NECEC's assertions, strategic electrification in the context of G.L. c. 25, § 21, requires that electrification reduce customer energy consumption to be incorporated in the efficiency investment plan. In addition, electrification must meet the additional statutory requirements of cost-effectively reducing GHG emissions and lowering costs for customers.[71] In this regard, the Department agrees with the Program Administrators' assessment that their "mandate [is] focused on providing interventions in the market to support customers in their adoption of measures that produce benefits through the reduction of energy consumption or peak demand," while measures that reduce emissions, such as low-carbon fuels or electricity, "except to the extent that they would lead to a reduction in energy consumption and/or demand, would not be a component of [the Program Administrator's] mandate" (Tr. 1, at 76-77).

The Department finds that, with the required modifications discussed below, the Program Administrators' strategic electrification offerings are consistent with the

[71] During evidentiary hearings, the Program Administrators indicated that they use the terms "electrification" and "strategic electrification" interchangeably (Tr. 3, at 450, 456). The Program Administrators indicate that they do not see a difference between the terms but consider their proposals to be "strategic electrification" (Tr. 3, at 456). There is, however, a difference between electrification, in general, and strategic electrification in the context of the Green Communities Act. Specifically, the Green Communities Act authorizes the Program Administrators to implement strategic electrification in the context of delivering energy efficiency that cost-effectively reduces GHG emissions and minimizes ratepayer costs.

requirements of G.L. c. 25, § 21.[72] Below, the Department addresses the Program Administrators' proposed strategies regarding the requirements to weatherize, the heating comparison calculator, and cost-effectiveness.

ii. Weatherization

The Program Administrators plan to make strategic electrification a point of focus under the Three-Year Plan (Statewide Plan, Exh. 1, at 11). The Program Administrators state that they will continue to focus on weatherization as part of their strategic electrification efforts because weatherization reduces energy use, and prepares residential and commercial buildings for electrification (Statewide Plan, Exh. 1, at 13; Exh. DPU-Comm 5-9). To encourage adoption of weatherization prior to electrification, the Program Administrators intend to provide extensive customer education and provide an online heating comparison calculator, discussed below (Exh. DPU-Comm 5-9). The Program Administrators claim they will also follow up with customers that receive heat pump rebates but did not receive weatherization services (Exh. DPU-Comm 5-9). In terms of incentives, the Program Administrators intend to require weatherization as a prerequisite for moderate income

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[72] The Program Administrators calculate GHG emissions reductions from all electric energy efficiency measures using an average electric emission factor (see, e.g., Exh. BGC-5 (Rev.)). This method is consistent with the EEA Secretary's calculation of GHG emissions reductions for 2025 and 2030 under G.L. c. 21N, § 3B (Statewide Plan, Exh. 1, App. D at 8). However, in order for the Department to assess the GHG emissions impacts of strategic electrification pursuant to G.L. c. 25, § 21(b)(2), particularly as the Commonwealth deploys intermittent renewable generation, the Program Administrators shall evaluate the GHG emissions impacts of strategic electrification using electric generation emissions aligned with measure load shapes.

customers to receive an enhanced incentive for heat pumps (Exh. DPU-Comm 12-18). In regard to low-income customers, the Program Administrators state that weatherization is provided along with heating system upgrades (Exh. DPU-Comm 12-18). The Program Administrators assert, however, that weatherization will not be required for a customer to get a heat pump incentive through the program in order to give flexibility to customers and contractors (Exh. DPU-Comm 12-18).

The Green Communities Act states that strategic electrification may increase electricity consumption, but stipulates that such efforts must be designed to result in cost-effective reductions in GHG emissions while minimizing ratepayer bill impacts. G.L. c. 25, § 21(b)(2)(iv)(A). Further, the Program Administrators, as entities regulated by the Department, must deliver their strategic electrification efforts in a manner that prioritizes safety, reliability, security, affordability, equity, as well as GHG emissions reductions pursuant to G.L. c. 21N, § 3B.[73] To meet these competing but essential requirements, the Program Administrators must motivate customers to adopt clean energy heating systems in an optimized manner.

As the Program Administrators state, weatherization is a foundational measure that reduces energy use and prepares residential and commercial buildings for electrification (Statewide Plan, Exh. 1, at 13). Without prior weatherization customers will need to install

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[73] Increased bill impacts are of particular concern as customers across the Commonwealth, particularly lower income customers, continue to struggle with the on-going impacts of the COVID-19 pandemic.

higher capacity heat pumps, which may not be right-sized and operate less efficiently under colder outside air temperatures (Tr. 3, at 483-484; Exhs. DPU-Comm 3-6; DPU-Comm 3-8; DPU-Comm 5-9; DPU-Comm 5-10; DPU-Comm 5-11; DPU-Comm 5-12; DPU-Comm 5-17; DPU-Comm 12-13). While the Program Administrators state that they will encourage right-sizing through customer and contractor education efforts, the Program Administrators do not intend to require contractors to certify (1) that a customer's home is properly weatherized in advance of heat pump installation or (2) that the contractor properly sized the heat pump prior to installation (Exh. DPU-Comm 12-11). Failing to weatherize and to properly size a heat pump prior to installation potentially increases energy costs for customers (Tr. 3, at 474).[74] The Department finds that the Three-Year Plans should be designed to ensure weatherization is completed prior to electrification to the extent possible in order minimize the bill impacts, particularly for low- and moderate income customers.

The Department also considers the impact of electrification on the Commonwealth's electric grid. The Program Administrators anticipate increased electricity usage from electrification measure installations; however, they have not considered the effects that this increase in demand would have on electric grid resiliency and reliability (Tr. 3, at 462-463; Exh. DPU-Comm 12-14). Considering the potential energy savings lost from customers not

[74] The Department notes that the risk of installing heat pumps without weatherization is exacerbated because the Program Administrators plan to receive enhanced performance incentives for electrification rather than weatherization. The Department addresses the potential for perverse performance incentives through the electrification component in Section VII, below.

weatherizing their households before heat pump installation, electrification may cause unnecessarily high demand on the electric grid which, in turn, may impact system resiliency and reliability. Further, system upgrades may be necessary to accommodate the higher than needed electric load, resulting in increased costs for all ratepayers.

Due to the potential unintended impacts on the safety, reliability, security, and affordability on the electric distribution system, and the potential issues of affordability and equity for customers adopting electrification measures, the Department finds that encouragement of weatherization prior to heat pump installation through education alone may not be a sufficient safeguard.[75] The Program Administrators must seek to weatherize prior to or as part of an electrification project in order to ensure that overall energy consumption will decrease, while minimizing ratepayer bill impacts for purposes of acquiring all cost-effective energy efficiency under the Green Communities Act. The Department notes that prioritizing weatherization is consistent with the Massachusetts 2050 Decarbonization Roadmap at 48-49,[76] which notes that combining weatherization with electrification, allows building occupants to benefit from superior thermal comfort, noise reduction, greater resiliency, and improved ventilation and indoor air quality, as well as reduce the need for investment in the

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75 The Department notes that the obvious synergy between weatherizing a home to reduce thermal loss and right-sizing heating equipment, which both lead to collectively reducing a customer's bill, have been consistent and key benefits provided by the Mass Save program.

76 The Massachusetts 2050 Decarbonization Roadmap (December 2020) was prepared by the Executive Office of Energy and Environmental Affairs, and is available at: https://www.mass.gov/info-details/ma-decarbonization-roadmap.

electricity distribution system to meet that load, and for additional renewable energy generation and reliability resources.

Some of the Program Administrators' proposals seek to address the above concerns. The Program Administrators require weatherization for some moderate income customers as a prerequisite to accessing enhanced heat pump incentives (Exhs. DPU-Comm 5-7; DPU-Comm 12-11; DPU-Comm 12-21). A differentiated incentive approach, like the proposed moderate income offering, may provide some customers with needed flexibility, while increasing the likelihood that customers will weatherize prior to electrifying their heating and cooling systems. The Department finds that it is prudent, particularly during the early phases of the Program Administrators' strategic electrification efforts, to ensure that a similar differentiated incentive offer is available to market rate customers, in order to motivate all residential customers to optimize fuel conversions by lowering energy consumption as much as possible and then right-sizing new clean energy heating systems. Accordingly, the Program Administrators shall encourage all residential market rate customers to weatherize their homes prior to installing heat pumps through robust education[77] and by offering them an incentive structure similar to that of moderate income customers (i.e., a standard incentive for heat pump conversions without prior weatherization and an

[77] The Program Administrators shall disclose potential fuel savings and bill impacts to customers seeking to adopt electrification measures. These communications should help customers understand the net impact on their overall energy costs from reducing usage of one fuel and increasing electric usage.

enhanced incentive for prior weatherization).[78] As noted above, the Program Administrators state that weatherization is provided along with heating system upgrades for low-income customers (Exh. DPU-Comm 12-18). Since weatherization and heat pump installations are done at no cost to low-income customers, requiring pre-installation weatherization should not present as many barriers for these customers as it might for market-rate customers. Accordingly, the Department finds that the Program Administrators must weatherize low-income buildings prior to installing heat pumps, unless specific conditions make this impractical. On or before May 2, 2022, the Program Administrators shall file with the Department detailed protocols and programmatic changes consistent with the above directives. In this filing, the Program Administrators shall also include the protocols they will adopt to ensure electrification marketing materials reach all residential customers. The Department supports the Program Administrators' efforts to deploy strategic electrification in a manner that results in a positive customer experience and drives market transformation (Statewide Plan, Exh. 1, at 12). In order to drive the level of decarbonization required by the Climate Act, positive customer experience in terms of comfort, reliability, and operating cost will be essential to drive the levels of electrification envisioned by the Massachusetts 2050 Decarbonization Roadmap.

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[78] The Program Administrators state that they may offer enhanced incentives for comprehensive projects, including those that combine weatherization and heat pumps (Statewide Plan, Exh. 1, at 98).

iii. Heating Comparison Calculator

Regarding the proposed heating comparison calculator, the Program Administrators referenced the project numerous times throughout the record, but do not currently have a working version of the calculator online (see, e.g., Statewide Plan, Exh. 1, at 75; Exhs. DPU-Comm 7-3; DPU-Comm 12-19; DPU-Comm 12-20; Tr. 3, at 365, 380, 464, 472). As the Program Administrators present the heating comparison calculator as a critical component of their strategic electrification plan, no later than May 2, 2022, the Program Administrators shall provide the Department with evidence that the heating comparison calculator is fully operational (including a full description of the final calculator).

iv. Non-Cost-Effective Strategic Electrification Measures

The Program Administrators plan to offer several non-cost-effective electrification measures that still offer energy savings (Exhs. DPU-Comm 5-3; DPU-Comm 5-6). The Program Administrators may offer non-cost-effective strategic electrification measures that reduce customer energy use, lower GHG emissions, and lower customer energy costs within cost-effective strategic electrification offerings. As discussed above, the Green Communities Act requires that strategic electrification offerings themselves be cost-effective. G.L. c. 25, § 21(b)(2)(iv)(A). However, the Program Administrators do not present electrification measures in the Energy Efficiency Data Tables in a manner that allows the Department to determine if the offering, by sector, is cost-effective. Accordingly, the Program Administrators shall revise the Energy Efficiency Data Tables in a manner that provides the allocated costs, benefits, and savings associated with their electrification offerings by sector.

The revised tables shall be submitted as a compliance filing in these proceedings, as well as in future Annual Reports and Term Report proceedings. The Department expects all Program Administrators, regardless of planned cost-effectiveness, to implement their strategic electrification offerings in a cost-effective and cost-efficient manner.

v. Conclusion

Strategic electrification is a key component of the 2022-2024 Three-Year Plans and a significant portion of the Program Administrators' proposed budgets. Even for non-participants, most Program Administrators[79] expect significant bill impacts related to implementing their Three-Year Plans (Exhs. EGMA-6; LU-6 (Non-Participant Bill Impacts); NG-Gas-6, at 10-160; NSTAR-Gas-6; Compact-6; FGE-Electric-6, at 16-20; NG-Electric-6, at 7-22, 26-41, 45-60, 62-77; NSTAR-Electric-6). As discussed in Section VIII, below, to mitigate expected bill impacts, the Department will establish a cap on budgets. More specifically, the Program Administrators will not be permitted to recover any costs in excess of approved program budgets unless the Program Administrator receives approval by the Department to increase the program budget. In order to increase the budget, the Program Administrator must demonstrate that the proposed budget increase will result in an increase in

[79] Berkshire estimates that its energy efficiency surcharge ("EES") for non-participant residential classes will increase in 2022 and decrease in 2023 and 2024, resulting in a net decrease in the EES over the term (Exh. BGC-6, at 1-34). However, Berkshire does expect modest increases for non-participant C&I customers during the Three-Year Plan term (Exh. BGC-6, at 35-40). Unitil (Gas) expects modest decreases in its EES for non-participants during the Three-Year Plan term (Exh. FGE-Gas-6, at 1).

kWh or therm savings and, thereby, provide additional direct resource benefits to electric or gas customers above planned levels.

After review and subject to the directives set forth above, the Department finds that the Program Administrators have demonstrated their proposed strategic electrification strategies are (1) designed to provide cost-effective GHG emissions reductions, while minimizing costs to ratepayers; and (2) an appropriate part of the Program Administrators' overall plan to provide all cost-effective energy efficiency and demand reductions under the Green Communities Act.

c. Active Demand Reduction

The electric Program Administrators propose several statewide ADR offerings as part of their 2022-2024 Three-Year Plans, building off lessons learned through the implementation of similar measures in the 2019-2021 Three-Year Plans (see, e.g., Exh. BGC-2, at 92-93). The ADR offerings seek to lower system peak demand by dispatching controllable, customer-owned, behind-the-meter technologies, such as thermostats, battery energy storage, and lighting controls (Statewide Plan, Exh. 1, at 104-105, 171). The Department addresses the electric Program Administrators' proposed solar PV inverter measure in Section IV.D.3.d. The electric Program Administrators' remaining ADR proposals are addressed below.

The electric Program Administrators propose to offer performance-based incentives for each ADR offering (see, e.g., Exh. EGMA-2, at 92-93). The Department has found that pay-for-performance incentives offer appropriate protection to ratepayers because the

incentives will be paid only for actual performance. 2019-2021 Three-Year Plans Order, at 34. In addition, the electric Program Administrators propose to offer a five-year incentive rate lock for certain participants in the daily dispatch offerings (Statewide Plan, Exh. 1, at 173). The five-year rate lock fixes the rate at which the electric Program Administrators will compensate eligible participants for performance in the daily dispatch offerings; however, it is not a revenue guarantee (Statewide Plan, Exh. 1, at 173). Nonetheless, the Department has found that a rate lock may be appropriate to provide prospective battery energy storage developers and customers with a degree of certainty with respect to the incentive the customer could expect to receive. See 2019-2021 Three-Year Plans Order, at 34. After review, the Department approves the electric Program Administrators' proposal to offer a five-year incentive rate lock for customers installing new battery energy storage systems as part of the daily dispatch offerings. The five-year lock is limited to the installation of new battery energy storage systems; after the expiration of the five-year lock, the customer may receive the then-current performance-based incentive levels.

The Department notes, however, as increasing amounts of battery energy storage are deployed on the grid, a five-year incentive rate lock may no longer be warranted. Accordingly, the electric Program Administrators shall conduct an evaluation of the incentive rate lock to assess its efficacy and whether, as increasing amounts of battery energy storage are deployed on the grid, a five-year incentive rate lock continues to be warranted. 2019-2021 Three-Year Plans Order, at 34-35. The electric Program Administrators shall address the results of this study in their next Three-Year Plan filings.

In describing their residential ADR program, the electric Program Administrators state that most customers learn about the offerings through the thermostat itself (Statewide Plan, Exh. 1, at 106). The Program Administrators explain that many customers installing smart thermostats controlling central air conditioning are prompted to sign up for an ADR program while they are setting up their device (Statewide Plan, Exh. 1, at 106). The electric Program Administrators maintain that this is an effective means to enroll customers in ADR programs (Statewide Plan, Exh. 1, at 106).

For smart thermostat purchases made through the Online Marketplace,[80] the electric Program Administrators will introduce point-of-sale ADR promotions (Statewide Plan, Exh. 1, at 106). The electric Program Administrators state that the point-of-sale ADR promotion will entail pre-enrollment in the ADR program (Statewide Plan, Exh. 1, at 81, 107). The Program Administrators do not, however, describe the pre-enrollment process and whether it is "opt-in" or "opt-out." The Department is concerned about the safety of children, the elderly, and medically compromised individuals residing in a household that is auto-enrolled in an air conditioning ADR program. Accordingly, the Department directs the Program Administrators to employ opt-in customer enrollment for all residential and income-eligible ADR programs, with no automatic enrollment upon smart thermostat purchase or installation.

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[80] The Online Marketplace is a website that allows customers to purchase energy efficiency products net of any incentive (i.e., available rebates are already applied) (Statewide Plan, Exh. 1, at 61).

The electric Program Administrators also seek approval to offer some form of a statewide EV load management offering (Statewide Plan, Exh. 1, at 106). As described above, NSTAR Electric and National Grid (electric) state that they are currently conducting a self-evaluation of the EV activities they undertook during the 2019-2021 Three-Year Plans term, but have not yet decided which approach they will use during the current Three-Year Plans term (Statewide Plan, Exh. 1, at 106).[81] Accordingly, while NSTAR Electric and National Grid (electric) each propose to implement an EV load management offering by summer 2022, they do not describe the proposed offerings in their Three-Year Plans (Statewide Plan, Exh. 1, at 106).[82]

[81] During the 2019-2021 Three-Year Plans term, NSTAR Electric conducted a research and development project assessing the dispatch of signals through connected EV supply equipment (Statewide Plan, Exh. 1, at 106). National Grid (electric) implemented an EV load management offering using a telematics-based approach (Statewide Plan, Exh. 1, at 106). National Grid (electric) conducted a Program Administrator-specific offering and not a demonstration program as suggested by Sunrun (Exh. Sunrun-Common 1-3, at 2; Sunrun Brief at 2, 8-9). 2019-2021 Three-Year Plans Order, at 31.

In the Three-Year Plan filings, NSTAR Electric and National Grid (electric) state that they have not yet decided which approach they will use during the current Three-Year Plans term (Statewide Plan, Exh. 1, at 106). However, in response to discovery, NSTAR Electric and National Grid (electric) state that they each intend to implement both approaches during this Three-Year Plans term (Exh. Sunrun-Common 1-3, at 2). This information was not included in the Three-Year Plan filings.

[82] The electric Program Administrators offer no reason why an EV load management proposal was not fully developed in time to include in the Three-Year Plan filings. This delay is not understandable given that NSTAR Electric and National Grid (electric) have been conducting EV load management activities since 2019. Massachusetts Electric Company/Nantucket Electric Company, D.P.U. 18-118,

The Department strongly supports the various EV activities being undertaken or proposed by the electric distribution companies outside of energy efficiency as an important part of meeting the Commonwealth's climate goals. See, e.g., NSTAR Electric Company, D.P.U. 20-74, at 40 (2021); Grid Modernization, D.P.U. 15-120 through D.P.U. 15-122, at 152, 159, 169 (2018). Similarly, the Department supports the deployment of an appropriate EV load management offering by the electric Program Administrators that reduces peak demand.[83,84] The Department cannot, however, make substantive findings regarding any proposed offering here because of the lack of detail included in the Three-Year

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Statewide Plan, Exh. 1, App. K at 3 (October 31, 2018); NSTAR Electric Company, D.P.U. 18-119, Exh. DPU-NSTAR-Electric 5-1, at 2 (December 5, 2018).

[83] The Department recognizes the potential for overlap between EV programs and the energy efficiency plan. Investigation into the Modernization of the Electric Grid - Phase Two, D.P.U. 20-69-A at 48 (2021). In D.P.U. 20-69-A at 49, the Department directed all electric distribution companies to coordinate and streamline their EV charging incentive offerings and energy efficiency offerings to avoid any potential overlaps. Specifically, the Department found that electric Program Administrators may continue to offer peak demand reduction offerings for EVs through their energy efficiency plans. However, local peak demand reduction or off-peak charging incentives should be included as part of a comprehensive offering under each electric distribution company's EV proposal. D.P.U. 20-69-A at 49 n.32.

[84] The Department has recognized there may be areas of overlap between the EV proposals in the Three-Year Plans and the electric distribution companies' grid modernization plans. The Department strongly cautions the electric Program Administrators that they must scrupulously identify and track all EV program-related costs to ensure that they do not seek to recover the costs twice (i.e., through the EES and another funding mechanism such as the grid modernization targeted cost recovery mechanism). Failure to do so will result in disallowance of those costs. D.P.U. 15-120 through D.P.U. 15-122, at 181 (2018).

Plans. Accordingly, prior to implementation, NSTAR Electric and National Grid (electric) shall file any proposed EV load management offering for Department review and approval. In any such proposal, the Program Administrators must address issues related to customers charging their EVs in multiple service territories.

With respect to the Compact's proposed EV load management offering, the Department notes that the Compact provided information in discovery that directly contradicts information it provided to the Department only one month earlier in its Three-Year Plan filing. In the Statewide Plan, the Compact and Unitil (electric) state that they will "monitor the progress of [the other electric Program Administrators'] offering in order to determine if it is a right fit for their service territories" (Statewide Plan, Exh. 1, at 106). However, in response to discovery, the Compact states that it is "planning to mirror this offering and have it available for summer 2022" (Exh. Sunrun-Common 1-3, at 2). As the Department has addressed elsewhere in this Order, any proposal must be fully described in the initial filing. Accordingly, like NSTAR Electric and National Grid (electric), the Compact shall file any proposed EV load management offering for Department review and approval prior to implementation.

After review, with the exception of the proposed EV load management measure, the Department approves the electric Program Administrators' proposed ADR offerings. The Department addresses the proposed solar PV inverter measure in Section IV.D.3.d, below.

The Department has found that the Compact's ADR offerings have the potential to impact the safety and reliability of the local distribution system in a manner that is different

from other energy efficiency programs.[85] 2019-2021 Three-Year Plans Order, at 133, citing Cape Light Compact, D.P.U. 17-84, at 21 (2018). Accordingly, the Department imposed specific requirements on the Compact as conditions to implement its ADR measures, namely that it was required to reach an agreement with NSTAR Electric regarding distribution system coordination. 2019-2021 Three Year Plans Order, at 133. The memorandum of agreement addressing distribution system coordination expired on December 31, 2021, and there is no evidence in the record to indicate that another memorandum of agreement has been executed. The Compact testified that it and NSTAR Electric had agreed to a new memorandum of agreement, but the version of this document contained in the record is unsigned and undated (Exhs. Compact-2, at 138; Compact-11, at 14). Accordingly, the Compact shall not conduct any ADR offerings until it demonstrates that it has entered into a memorandum of agreement with NSTAR Electric regarding distribution system coordination for the 2022-2024 Three-Year Plans term.

Finally, Sunrun raises concerns regarding certain program implementation process issues (Sunrun Brief at 3, 10-11). The Department's revised Guidelines address the requirements to convert a demonstration offering to a core initiative or program and the Department will not revisit that issue here. See D.P.U. 20-150-A at 24-26; Guidelines at § 3.8. As to Sunrun's remaining concerns regarding the difficulty in qualifying eligible

[85] The Compact is not an electric distribution company and, therefore, does not have the same obligation to provide safe and reliable service. 2019-2021 Three-Year Plans Order, at 138.

devices and the lack of stakeholder involvement when transitioning a demonstration offering to a core initiative or program (Sunrun Brief at 3), the Department agrees with DOER that these concerns are best addressed at the Council level with DOER facilitating stakeholder input.

d. Solar Photovoltaic Inverters

During the 2019-2021 Three-Year Plans term, National Grid (electric) implemented a solar PV inverter control offering as part of its new measure development efforts (Statewide Plan, Exh. 1, at 173; D.P.U. 21-128, Exh. DPU-Electric 2-4, at 1-2).[86] As an initial matter, this proposed offering was not described in the National Grid (electric)'s 2019-2021 Three-Year Plan and does not align with the described purpose of the ADR initiatives in the 2019-2021 Three-Year Plan (i.e., reducing peak demand). Instead, National Grid (electric)'s solar PV inverter control offering meets the definition of a demonstration project (i.e., an offering designed to test whether a measure has the potential for measurable, cost-effective savings and benefits that can be scaled to be included in programs) and, therefore, National Grid (electric) should have sought Department approval prior to offering the measure. Guidelines, §§ 3.8.2; 3.9. Because National Grid (electric) has not received previous approval to implement this offering, the Department treats the proposal as a new offering. The Department will review the prudence of National Grid (electric)'s decision to spend

[86] National Grid (electric) acknowledges that it used "imprecise and potentially confusing language" to describe its efforts regarding the development of the solar PV inverter control measure (D.P.U. 21-128, Exh. DPU-Electric 2-4, at 1, citing Statewide Plan, Exh. 1, at 107, 173).

energy efficiency funds on a demonstration project without receiving Department authorization in the Term Report for its 2019-2021 Three-Year Plan.[87]

National Grid (electric) proposes this new solar inverter offering as a measure in the current Three-Year Plans term (Statewide Plan, Exh. 1, at 105, 173). As discussed below, there is not a sufficient record for the Department to approve the solar PV inverter control measure as proposed.

National Grid (electric) classifies the proposed offering as an ADR measure (Statewide Plan, Exh. 1, at 104-105). In particular, National Grid (electric) maintains that the intent of the measure is to improve the power factor on selected feeders in order to assess whether the improved power factor results in energy savings for all customers on the feeder and provides system benefits (Statewide Plan, Exh. 1, at 173; Tr. 3, at 499). The intent is not to dispatch the asset to achieve peak demand savings, like other ADR measures (see Tr. 3, at 506-508). National Grid (electric) further states that expected savings will vary based on the individual feeder characteristics (Tr. 3, at 500).

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87 The Department recognizes that Program Administrators may attempt to avoid applicable statutory requirements regarding pilots or Department standards regarding demonstration projects by labelling them "new measure development" or some other like name. The name a Program Administrator assigns to an activity is not determinative of whether or not it is a program, core initiative, pilot, or demonstration project. The Program Administrators must seek and receive all required approvals prior to implementing any project or measure that may constitute a demonstration project. Guidelines §§ 3.8.2, 3.9. Where the Program Administrator fails to do so, the Program Administrator risks disallowance of any related expenditures after a prudence review in the applicable Term Report.

Because the evaluation of savings for this measure will occur at the feeder level, the Department finds that National Grid (electric) has not adequately shown how the proposed measure (1) is an ADR measure or an energy efficiency measure,[88] and (2) differs from an electric distribution company's core function of regulating power quality (Statewide Plan, Exh. 1, at 105, 107, 173; Tr. 3, at 499-515). Based on this record, the Department cannot find that the proposed measure is appropriate as an energy efficiency offering.

In addition, the Department finds that the proposed solar PV inverter control measure is still nascent and not sufficiently developed to address the types of issues Sunrun appropriately raises (Statewide Plan, Exh. 1, at 105, 107, 173; D.P.U. 21-128, Exhs. DPU-Electric 2-4; DPU-Electric 2-5; Tr. 3, at 499-515; see also Sunrun Brief at 9-10). National Grid (electric) states that an evaluation study related to its implementation of this new measure development offering during the 2019-2021 Three-Year Plans term is being finalized and is expected to be completed by June 2022 (Tr. 3, at 505). After the completion of the evaluation study, if the Program Administrators wish to pursue solar PV inverter control as part of their energy efficiency programs, the electric Program Administrators may resubmit a detailed and fully supported solar PV inverter control proposal to the Department for review. See, e.g., NSTAR Electric Company/Western Massachusetts Electric Company, D.P.U. 16-178 (2017). Any such proposal must describe

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88 Energy efficiency measures should lower a customer's behind-the-meter energy consumption. ADR offerings include the dispatch of a behind-the-meter customer device that reduces peak demand, such as dispatchable Wi-Fi thermostats or battery systems. Solar inverters as described by National Grid (electric) do not meet either of these definitions.

how such an offering qualifies as an energy efficiency program and is distinguishable from core distribution functions.

Finally, the Department notes its concern about the issue of low power quality from distributed generation raised by National Grid (electric) (Tr. 3, at 513-514). The Department intends to explore this issue as part of its investigation into distributed generation interconnection and system planning. See Investigation by the Department of Public Utilities On Its Own Motion Into Electric Distribution Companies' (1) Distributed Energy Resource Planning and (2) Assignment and Recovery of Costs for the Interconnection of Distributed Generation, D.P.U. 20-75.

e. Lighting

The Program Administrators eliminated the residential lighting upstream program and in-unit direct install lighting for market rate customers (see, e.g., Exh. NG-Gas-2, at 87; Exh. DPU-Comm 2-4). The Program Administrators, however, propose to continue to offer lighting incentives to income-eligible participants through Income Eligible Coordinated Delivery, but plan to eliminate lighting offerings for renters (Statewide Plan, Exh. 1, at 63-64; Exhs. DPU-Comm 9-1; DPU-Comm 9-2).

The Program Administrators have an obligation to deliver programs in a cost-efficient manner, which may require the elimination of programs where market transformation has occurred and where program continuation is no longer a prudent use of ratepayer funds. However, the Program Administrators are also required to achieve all cost-effective energy efficiency. G.L. c. 25, § 21(b)(1). While DOER contends that lighting measures no longer

provide net savings, this fact is neither argued by the Program Administrators nor supported by the record in these proceedings (DOER Brief at 7; Statewide Plan, Exh. 1, at 59). Here, the Program Administrators argue that it is appropriate to eliminate nearly all lighting offerings because of the growth in LED market share and the purported diminishing cost-effectiveness of lighting measures relative to other energy efficiency measures (Exh. DPU-Comm 2-4). Nonetheless, the Program Administrators acknowledge that there are still opportunities to realize savings from lighting offerings, albeit at a lower level (Exh. DPU-Comm 2-4). For measures that have historically been offered by the Program Administrators and have remaining energy savings opportunities that can be cost-effectively achieved at the program level, the Program Administrators should continue to pursue those measures unless doing so is an imprudent use of ratepayer funds. For the reasons discussed below, the Department finds that the Program Administrators should not discontinue offering lighting measures to all residential customers.

The Program Administrators maintain that they intend to focus on delivering energy efficiency measures equitably to all customers in the implementation of their 2022-2024 Three-Year Plans (Statewide Plan, Exh. 1, at 17). While the Program Administrators have experienced significant success in serving customers, some customer segments (e.g., renters, moderate income, and limited English-proficiency) have historically participated in energy efficiency measures such as lighting to a lesser extent (Exh. DPU-Comm 2-8, Att. B). During this Three-Year Plan term, the Program Administrators intend to increase outreach to customers that have yet to participate in energy

efficiency measures (Statewide Plan, Exh. 1, at 17-23). Despite these stated intentions, the Program Administrators chose to terminate all lighting measures for residential customers knowing some customers have not been served, and prior to assessing the remaining savings opportunities for renters, moderate income, minority, and limited English-proficiency customers (Exh. DPU-Comm 9-2). The Department finds that these actions do not further the equitable service of customers.

Further, the Department is unpersuaded by arguments that eliminating lighting, which has limited remaining savings, will allow the Program Administrators to focus energy efficiency funding on long-term measures that will have a greater effect on the Commonwealth's emissions reduction goals. Energy efficiency is one of the most cost-effective means to lower emissions because reduced usage eliminates the need to decarbonize fuel sources. Additionally, under the 2022-2024 Three-Year Plans, the Program Administrators expect that their electrification efforts will lead to an increase in residential lifetime kWh consumption (Statewide Plan, Exh. 1, App. C.1-Electric (Rev.), Table IV.D.3.2.i). Increasing electricity consumption may increase energy and system costs, as well as require accelerated decarbonization efforts of the electric grid to avoid increasing GHG emissions. Continuing to pursue electric savings measures while electrifying the building sector can mitigate these impacts cost-effectively and provide energy savings to customers that have historically not participated in energy efficiency programs.

The Department agrees with CLF that the proposed elimination of lighting offerings for renters significantly reduces the availability and impact of energy efficiency measures that

are within a renter's control (CLF Brief at 25, citing Statewide Plan, Exh. 1, at 63-64). The Program Administrators are obligated to serve renters and the Department encouraged the Program Administrators to explore and implement strategies to better reach renters. 2019-2021 Three-Year Plans Order, at 43-44, 94-95. Eliminating one of the few measures that are within a renter's control and can provide energy savings, without first analyzing the impact on renters and other hard-to-reach customers, is inappropriate and may lead to inequitable outcomes.

The Program Administrators state that they would need to conduct a study to determine the cost-effectiveness of any offering prior to launching a renter-specific lighting program (Exhs. DPU-Comm 2-4; DPU-Comm 9-2). In response to a Record Request, the Program Administrators submitted a proposed scope of work for the evaluation, which involves four tasks: (1) a customer survey to understand purchasing habits of renters; (2) a literature review to examine the lifetime in-service rates and net-to-gross ratios from online store and kit-based lighting efforts; (3) a consensus process to set deemed adjusted measure lives, lifetime in-service rates, and net-to-gross ratios; and (4) the identification of future study needs to provide prospective updates to the measures' gross and net impacts (RR-DPU-4, Att. 1). The Department finds an evaluation is an appropriate means to inform a program design that will capture remaining lighting savings and, therefore, the Program Administrators shall conduct a study that assesses remaining lighting savings opportunities and strategies for renters, as well as moderate income, minority, and limited English-proficiency customers. The evaluation study should assess: (1) the projected

cost-effectiveness of a targeted lighting offering, and (2) pathways (e.g., direct install, upstream, midstream, or retail delivery models) that provide effective ways to reach renters, moderate income, minority, and limited English-proficiency customers. The Program Administrators shall file the final evaluation and implementation plan by September 30, 2022.

Although the Department accepts that measures may need to be discontinued over time as they become non-cost efficient, this decision must be made after full consideration of the Program Administrators' statutory mandate to pursue all cost-effective energy efficiency and to promote equity by targeting customers that historically have not participated in the measures. During the evaluation and development of a targeted lighting offering, the Program Administrators should continue to offer direct install lighting measures through its home energy audits within their Existing Buildings program under existing budgets.

f. Additional Measures Excluded from Statewide Plan

i. Cost-Effective Heating Equipment

The Program Administrators propose to eliminate certain cost-effective heating equipment, arguing that these measures no longer provide significant savings opportunities (Program Administrators Brief at 35, citing Exhs. DPU-Comm 10-12; DPU-Comm 13-10). Specifically, the Program Administrators propose to eliminate cost-effective propane and gas fired heating measures[89] and oil furnaces when the baseline is already a high-efficiency

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89 The Program Administrators state that gas furnaces going from a condensing baseline to an annual fuel utilization efficiency ("AFUE") of 97 are not cost effective (Exh. DPU-Comm 13-10(b)). The Program Administrators do not, however, propose to offer the following cost-effective measures: (1) condensing to condensing propane

condensing[90] unit (Statewide Plan, Exh. 1, at 11-12; Exh. DPU-Comm 10-12). The Program Administrators argue that it is unclear what level of incentive would be appropriate to influence a customer's decision to purchase the high efficiency equipment (Exh. DPU-Comm 10-12).

Excluding certain heating measures from these Three-Year Plans, particularly when participants would realize energy and cost savings, as well as lower GHG emissions from the cost-effective measures, calls into question whether the Program Administrators are fulfilling their statutory obligation to pursue all cost-effective energy efficiency resources (Exh. DPU-Comm 10-12). Cost-effective savings for limited fossil fuel heating are still available (Exh. DPU-Comm 10-12). A participant upgrading from a baseline condensing unit to a high-efficiency condensing unit could experience one MMBtu to 2.5 MMBtu in annual savings, in addition to thermostat savings of 2.1 MMBtu to 2.8 MMBtu, with incremental costs up to $1,034 (Exh. DPU-Comm 10-12). In addition, the savings associated with upgrading condensing fossil fuel heating systems to new condensing fossil fuel heating systems do not result in non-cost effective core initiatives or programs (Exh. DPU-Comm 13-10). Further, G.L. c. 25, § 21 contemplates the continuation of

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boilers; (2) condensing to condensing propane furnaces (95 AFUE and 97 AFUE); (3) condensing to condensing gas boilers; and (4) condensing to condensing gas furnaces (95 AFUE) (Exh. DPU-Comm 13-15(c)).

[90] The Program Administrators state that they may offer incentives to customers who have condensing heating systems in limited income-eligible applications (Exh. DPU-Comm 13-13).

conversions from fossil fuel heating and cooling to fossil fuel heating and cooling, if the measure lowers energy consumption, lowers GHG emissions, and is cost effective without including social value of GHG emissions reductions in the calculation of benefits.

The Department fully supports the Program Administrators prioritization of heat pumps and encouraging adoption of low-carbon technologies through market transformation. However, as the Program Administrators have explained, some customers may face significant technical and financial hurdles to electrification of heating systems (Statewide Plan, Exh. 1, at 13). In addition, the Program Administrators have demonstrated that, at this time, fully displacing oil heat with a mini-split heat pump or a central heat pump, regardless of the installation cost, may actually increase lifetime operating costs by about $4,000 (see, e.g., Exh. NSTAR-Electric-2, Att. A). Pursuant to G.L. c. 25, § 1A, the Program Administrators must prioritize safety, equity, and affordability in implementing their programs. Accordingly, it is imperative that the Program Administrators ensure the subset of customers facing significant technical and financial hurdles to electrification are encouraged to adopt the most efficient, affordable heating system. This subset of customers should not be faced with costly home modifications and potentially higher energy costs if they prefer to install a more familiar heating measure and it is still cost effective to encourage the customer to adopt a higher efficiency, lower GHG-emitting heating system (Exh. DPU-Comm 10-1). Accordingly, the Department directs the Program Administrators to continue offering incentives for these cost-effective heating systems to participants so long as savings opportunities remain.

With regard to the Program Administrators' arguments regarding difficulty determining the appropriate incentive level, the Department notes that the Program Administrators have historically requested flexibility to set incentive levels based on multiple factors (see, e.g., Exh. NSTAR-Electric-2, at 112; see also D.P.U. 18-110 through D.P.U. 18-119, Program Administrators Brief at 16). Further, the Program Administrators conduct evaluation studies to assist in setting appropriate incentive levels (Statewide Plan, Exh. 1, App. I, Study 8). Using their expertise, the Program Administrators have been setting incentive levels for energy efficiency measures for well over a decade. Therefore, the Department directs the Program Administrators to use their knowledge, experience, and evaluation study results to identify an appropriate incentive level for these measures[91] and continue to offer incentives for these heating systems. The Department will review the Program Administrators' incentive level and offering in the Term Report proceeding.

ii. Residential Oil-fired Boilers

The Program Administrators propose to eliminate the residential oil-fired boilers measure, stating that it is no longer cost-effective because of the increase in efficient baselines (Statewide Plan, Exh. 1, at 79; Exhs. DPU-Comm 13-10; DPU-Comm 13-15(a); Tr. 1, at 89). Conversely, MEMA argues that heat pumps will not fully replace fossil-fueled heating systems in the next three years and, therefore, preserving existing rebates for

[91] The Department notes that incentive levels do not have to be set solely based on incremental costs (see Exh. DPU-Comm 10-12).

high-efficiency oil boilers and furnaces could immediately reduce GHG emissions and grid demand with the use of renewable biofuels (MEMA Brief at 2-4).

The Department notes that the Energy Act of 2018: (1) expanded the energy efficiency programs to include oil and propane measures; and (2) changed the cost-effectiveness analysis for energy efficiency to the sector level. St. 2018, c. 227 §§ 1, 6; see 2019-2021 Three-Year Plans Order, at 111 (Program Administrators expanded their programs to include cost-effective oil heat measures). Accordingly, non-cost effectiveness of an oil boiler measure is not determinative of whether a measure may be offered by a Program Administrator.[92]

In effectuating the requirements of the Green Communities Act, the Department must continue to ensure that the use of ratepayer dollars to fund energy efficiency programs and measures is justified by the benefits achieved. 2019-2021 Three-Year Plans Order, at 73. The Program Administrators state that oil boilers for residential customers do not have savings because the baseline is code.[93,94] Where the record does not demonstrate that there is

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92 Although the Climate Act determined that the social value of GHG emissions reductions should be applied on a measure-by-measure basis, the Climate Act did not repeal the Energy Act of 2018's requirement to screen cost-effectiveness at the sector level.

93 The Program Administrators plan to continue to offer oil boilers to income-eligible customers through the Income Eligible Coordinated Delivery Program (Statewide Plan, Exh. 1, at 79; Exh. DPU-Comm 13-10).

94 The Department notes that the TRM uses inconsistent baselines for early replacement measures (Statewide Plan, Exh. 1, App. O). Given the Department has only 90 days to review the Three-Year Plans, we are unable to fully investigate the discrepancies in

an energy savings opportunity, the Department finds that it is imprudent for the Program Administrators to use ratepayer funds to incent the measure.

iii. Biofuels

Regarding MEMA's argument advocating the use of biofuels to reduce emissions, the Program Administrators maintain that the use of biofuels does not lower energy consumption and, therefore, MEMA's proposal is inconsistent with the Green Communities Act (Program Administrator Reply Brief at 9, citing Tr. 1, at 76-77). Although biofuel is a potentially low-carbon renewable energy source, the Department agrees that, regardless of whether biofuels lower carbon emissions, the Green Communities Act requires the Program Administrators to pursue energy efficiency measures that lead to a reduction in energy consumption and lowers GHG emissions. G.L. c. 25, § 21(b)(1); Cape Light Compact JPE, D.P.U. 20-40, at 21 (2021).

The Department acknowledges that the availability of alternative low- or no-carbon fuels may affect the calculation of benefits for certain measures. For example, the Program Administrators appropriately take in to account the decarbonization of the electric grid in the calculation of electrification benefits (Statewide Plan, Exh. 1, at 8). The Department does not currently have enough information to conclude whether decarbonization of fuels is likely and consistent with the Commonwealth's energy policies. In this regard, the Governor

the baselines. Accordingly, the Program Administrators shall file a detailed report fully explaining the method for the establishment of baselines for early replacement measures, including a detailed justification for any differences in baseline assumptions, by May 2, 2022.

recently established a special Commission on Clean Heat to develop a framework for long-term GHG emissions reductions from heating fuels. Executive Order No. 596, § 1 (September 9, 2021).[95] The Department expects that the Commission on Clean Heat and the resulting policy framework will provide additional guidance on the role of various resources in achieving the Commonwealth's net-zero emission targets.

iv. Combined Heat and Power

On April 30, 2021, the Program Administrators submitted to the Council a draft Statewide Plan as required by G.L. c. 25, § 21(c). On October 6, 2021, the Program Administrators submitted to the Council a second, revised draft Statewide Plan. Unlike the April 30th draft Statewide Plan, the October 6th draft Statewide Plan included a provision that would allow the Program Administrators to pursue CHP energy efficiency measures during the upcoming Three-Year Plans term (October 6th draft Statewide Plan § 3.8.6).[96] The CHP

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95 See Executive Order No. 596, § 1 (September 9, 2021). Available at: https://www.mass.gov/executive-orders/no-596-establishing-the-commission-on-clean-heat.

96 Section 3.8.6 of the October 6th draft Statewide Plan provides:

> For measures that use natural gas on site, such as [combined heat and power], the [Program Administrators] will pursue the use of renewable natural gas which is considered a zero emissions fuel. Following the current Renewable Portfolio Standard as an example, biogas or landfill gas would be considered renewable natural gas and it could either be generated on site or conveyed via a common carrier of natural gas from within the ISO-NE Control Area or an adjacent control area. Additionally, when possible, to capture the carbon from exhaust streams, the [Program Administrators] will encourage the customers to use or dispose of the CO_2 and those emissions will be backed out of the CO_2 calculations. While no projects of this nature have been identified and thus

measures would be required to use renewable natural gas (e.g., biogas or landfill gas) and comply with all applicable laws and policies (October 6th draft Statewide Plan § 3.8.6).

On October 25, 2021, the Program Administrators, DOER, and the Attorney General reached agreement on a Term Sheet.[97] With limited exceptions, the Term Sheet precludes the Program Administrators from considering CHP as an energy efficiency measure during the upcoming Three-Year Plans term (Statewide Plan, Exh. 1, App. M § IV.C.2).[98] Consistent with the Term Sheet, the Program Administrators did not include any renewable natural gas CHP proposals in the 2022-2024 Three-Year Plans filed with the Department on November 1, 2021.

As noted above, the April 30th draft Statewide Plan did not address renewable natural gas CHP. Five months after this draft was submitted to the Council, the Program Administrators added the renewable natural gas CHP provision to the October 6th draft

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> budgeted for, if a customer can demonstrate that their project is cost effective, does not contribute to 2030 [greenhouse gas] emissions under the EEA methodology and delivers either MMBtu or electric demand savings, the [Program Administrators] will support these projects.

[97] The Program Administrators included the Term Sheet as an attachment to their Three-Year Plan filings (Statewide Plan, Exh. 1, App. M).

[98] Section IV.C.2 of the Term Sheet provides:

> The 2022-2024 [Three-Year] Plan phases out natural gas CHP incentives. No new natural gas CHP projects will be incentivized in 2022-2024 except for agreed upon, already committed CHP projects specified outside this Term Sheet. Any additional applications of CHP will only be established consistent with Commonwealth policies and if parameters are agreed upon in advance by DOER.

(Statewide Plan, Exh. 1, App. M § IV.C.2).

Statewide Plan.[99] Less than three weeks after submitting the October 6th draft Statewide Plan to the Council, the Program Administrators, DOER, and Attorney General reached agreement on the Term Sheet. Then, on November 1, 2021, the Program Administrators filed their Three-Year Plans with the Department for review; consistent with the Term Sheet, the Three-Year Plans do not contain any renewable natural gas CHP measures.

The Department notes that the various draft plans that go before the Council are not part of the filing here, so we will not decide whether to restore the specific language NECEC has requested. However, as we stated in Section IV.D., above, the Department is concerned that the Program Administrators are not fulfilling their statutory obligation to pursue all cost-effective energy efficiency resources by excluding certain measures from this Three-Year Plan. The Green Communities Act specifically identifies CHP as an energy efficiency measure, which has been included as a measure in prior Three-Year Plans. G.L. c. 25, § 19; 2010-2012 Electric Three-Year Energy Efficiency Plans, D.P.U. 09-116 through D.P.U. 09-120, at 25 (2010) ("2010-2012 Electric Three-Year Plans Order").

Because CHP is considered a custom measure, there may be instances where CHP projects meet all of the following criteria: (1) reduces net energy usage; (2) reduces GHG emissions; (3) screens cost-effective; and (4) complies with all applicable emission requirements and RPS eligibility requirements. Under the requirements of the Green Communities Act, CHP projects that use renewable natural gas and meet all these

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[99] The Council's role in developing the Statewide Plan pursuant to G.L. c. 25, § 21(c) is described in Section III, above.

requirements meet the definition of an energy efficiency measure and, therefore, must be considered by the Program Administrators if the project screens as cost-effective.

As a final matter, the Department must address DOER's arguments about the purported significance of the Term Sheet as it relates to the programs to be implemented in the Three-Year Plans under the Green Communities Act. As noted above, DOER maintains that renewable natural gas CHP energy efficiency projects for the upcoming Three-Year Plans term are sufficiently addressed in the Term Sheet, which provides that such projects may be implemented by the Program Administrators only if the "parameters are agreed upon in advance by DOER" (DOER Reply Brief at 8, citing Statewide Plan, Exh. 1, App. M § IV.C.2). Regardless of any agreement memorialized in the Term Sheet,[100] DOER cannot define what constitutes all cost-effective energy efficiency under the Green Communities Act. Further, the Program Administrators may not purposely exclude established energy efficiency measures that are listed in the Green Communities Act and otherwise meet the requirements from the Three-Year Plans based solely on an agreement with another party. To the extent the Program Administrators develop parameters for implementing projects, these parameters

[100] The Department supports the efforts of the Program Administrators, DOER, the Attorney General, and other stakeholders to resolve disputes prior to the Department's review of the Statewide Plan, particularly given the expedited review timeline set forth in the law. The Department must clarify, however, that the Term Sheet is not part of a Statewide Plan or the Program Administrators' Three-Year Plans. To the extent Program Administrators intend to include any elements addressed in a Term Sheet in their proposed Three-Year Plans, such elements must be fully set forth in the Three-Year Plan (i.e., Statewide Plan, Exh. 1) and supported by record evidence in order to be considered by the Department.

must be set forth in the Three-Year Plans where the Program Administrators have the burden to demonstrate that any proposed conditions meet all requirements set forth in the Green Communities Act.

4. Evaluation, Measurement, and Verification

EM&V is the systematic collection and analysis of information to document the impact and effect of energy efficiency programs, in terms of costs and benefits, and to improve their effectiveness. 2019-2021 Three-Year Plans Order, at 35; 2016-2018 Three-Year Plans Order, at 30; 2013-2015 Three-Year Plans Order, at 58; 2010-2012 Electric Three-Year Plans Order, at 125; 2010-2012 Gas Three-Year Energy Efficiency Plans, D.P.U. 09-110 through D.P.U. 09-115, at 115 (2010) ("2010-2012 Gas Three-Year Plans Order"). The Department's Guidelines require each Three-Year Plan to include an evaluation plan that describes how the Program Administrators will evaluate the energy efficiency programs during the term. Guidelines § 3.5.2; see also, G.L. c. 25, § 21(b)(2); 2019-2021 Three-Year Plans Order, at 36.

The Program Administrators propose a budget of $57.6 million to fund statewide EM&V activities during the Three-Year Plans term (Statewide Plan, Exh. 1, Apps. C.1 - Electric (Rev.) at 12; C.2 - Gas (Rev.) at 8). The Program Administrators' proposed EM&V framework includes the following elements: (1) four EM&V research areas (i.e., residential, C&I, demand, and special and cross-cutting); and (2) eight types of EM&V studies (i.e., impact evaluations, baseline studies, net-to-gross studies, market effects evaluations, NEI studies, cost and measure life studies, market characterization studies, and

process evaluations) (Statewide Plan, Exh. 1, at 178-179). In addition, the Program Administrators have created a strategic evaluation plan to identify evaluation priorities for the upcoming term and the Evaluation Management Committee will provide oversight of the EM&V activities (Statewide Plan, Exh 1, at 177-178).

The Program Administrators have demonstrated that their proposed EM&V framework is appropriate in terms of funding, scope, oversight, and planning (Statewide Plan, Exh. 1, at 176-180 & App. H). Accordingly, the Department finds that the proposed EM&V framework is consistent with the Green Communities Act, Department precedent, and Guidelines. G.L. c. 25, § 21(b)(2); Guidelines § 3.5. Further, because the Program Administrators have shown that EM&V efforts often apply to multiple programs, the Department approves the Program Administrators' proposal to allocate EM&V costs to a single line item under the hard-to-measure category (Statewide Plan, Exh. 1, at 179 & Apps. C.1-Electric (Rev.) at 12; C.2-Gas (Rev.) at 8).

5. Potential Studies

In 2019-2021 Three-Year Plans Order, at 38, the Department directed the Program Administrators to conduct a service territory-specific potential study using common definitions for the various levels of achievable potential and set a common study deadline to submit final potential study results. The Department finds that each Program Administrator conducted an energy efficiency potential study consistent with the Department's directives (Statewide Plan, Exh. 1, Apps. A at 11, F).

The Department recognizes that the implementation of the Climate Act, along with the EEA Secretary's Goal Letter dated July 15, 2021, introduced some uncertainty into the then-ongoing energy efficiency planning process. The Program Administrators state that if they are able to confirm a process for calculating GHG emissions factors and reductions sufficiently in advance of their submission of the April 30th draft Statewide Plan to the Council for the 2025-2027 Three-Year Plans term, they will work with their vendors to incorporate these calculations in future potential studies (Tr. 1, at 70-72). Given the need to construct a three-year plan to achieve the GHG emissions goal set pursuant to G.L. c. 21N, § 3B, the Department finds including an assessment of GHG emissions reduction potential in future potential studies is important to inform program design and provide an important objective measure of savings potential. See 2016-2018 Three-Year Plans Order, at 25. In regard to timing, the Department notes that going forward the EEA Secretary will set the GHG goals by March 1st, two months before the draft Statewide Plan must be filed with the Council which will allow the Program Administrators to incorporate the GHG information into future potential studies. G.L. c. 21N, § 3B. Accordingly, the Program Administrators shall implement GHG emissions reduction analyses in future potential studies, and specifically consider service-territory specific top-down GHG emissions reduction potential in setting their individual 2025-2027 Three-Year Plans goals.

E. Conclusion

For the reasons discussed above, the Department finds that the Program Administrators' Three-Year Plan goals are reasonable and consistent with the achievement of

all available cost-effective energy efficiency. Further, the Department finds that the Program Administrators have appropriately incorporated strategic enhancements to the residential and C&I programs that are designed to incorporate new technologies and address various barriers to participation in energy efficiency programs.

With the Department's revised criteria to identify Targeted Hard-to-Reach Communities, the Program Administrators can achieve a more equitable distribution of savings and benefits for a large number of environmental justice communities that face high participation barriers and historically low participation rates. Over this and future Three-Year Plan terms, the Department encourages the Program Administrators to continue to explore and implement strategies to better reach underserved populations and hard-to-reach customers, including renters and landlords, low- and moderate income customers, and limited English-proficiency customers.

V. ADMINISTRATIVE COSTS, COMPETITIVE PROCUREMENT, AND LOW-INCOME ALLOCATION

A. Introduction

In reviewing the Three-Year Plans, the Department is charged with ensuring that the Program Administrators have (1) minimized administrative costs to the fullest extent practicable and (2) used competitive procurement processes to the fullest extent practicable. G.L. c. 25, §§ 19(a), (b); Guidelines §§ 3.3.5, 3.3.6. Program Administrators must report program planning and administration PP&A expenditure broken down by: (1) internal costs; (2) external legal services; (3) assessments; (4) vendor services; and (5) sponsorships and subscriptions. D.P.U. 20-150-A at 11; Guidelines §§ 3.3.3(a). In addition, each Program

Administrator must demonstrate that it has allocated at least ten percent of the funds for electric energy efficiency programs and 20 percent of the funds for gas energy efficiency programs to the low-income sector. G.L. c. 25, § 19(c).

B. Program Administrators Proposal

1. Minimization of Administrative Costs

The electric Program Administrators propose to spend an average of 3.4 percent of their total energy efficiency expenditures on PP&A over the three-year term (Statewide Plan, Exh. 1, App. C.1 - Electric, Table IV.C.1 (Rev.)). The gas Program Administrators propose to spend an average of 3.7 percent of their total energy efficiency expenditures on PP&A over the three-year term (Statewide Plan, Exh. 1, App. C.2 - Gas, Table IV.C.1 (Rev.)). Each Program Administrator's PP&A costs as a percentage of total program expenditures for 2022 through 2024 are presented in the Gas and Electric Budget Comparison Tables (see, e.g., Exh. FGE-4, Table IV.C.2.2 (Rev.)).

2. Competitive Procurement

The Program Administrators propose to competitively procure the services of contractors and vendors to perform activities including, but not limited to, assessment delivery, quality control, rebate processing, monitoring and evaluation, potential studies, and marketing (Statewide Plan, Exh. 1, App. A at 23). The Program Administrators state that they will work collaboratively to ensure that these services have been competitively procured in a manner that minimizes costs to ratepayers, while maximizing the associated benefits of those investments (Statewide Plan, Exh. 1, App. A at 23).

3. Low-Income Program Budgets

Each Program Administrator included a table in its Three-Year Plan showing the percentage of its proposed energy efficiency program budget allocated to low-income programs (see, e.g., Exh. FGE (gas)-4, Table V.B (Rev.)). The electric Program Administrators project that they will spend, on average, 12.4 percent of the total energy efficiency program budget on low-income residential demand-side management and education programs over the Three-Year Plan term (Statewide Plan, Exh. 1, App. C.1 – Electric, Table V.B (Rev.)). The gas Program Administrators project that they will spend, on average, 20.6 percent of the total energy efficiency program budget on low-income residential demand-side management and education programs over the Three-Year Plan term (Statewide Plan, Exh. 1, App. C.2 – Gas, Table V.B (Rev.)). In addition, each Program Administrator projects that it will meet or exceed the applicable statutory minimum for low-income spending over the three-year term (see, e.g., Exh. FGE (gas)-4, Table V.B (Rev.)).

C. Positions of the Program Administrators

1. Minimization of Administrative Costs

The Program Administrators argue that they have minimized administrative costs to the fullest extent practicable (Program Administrators Brief at 52-57, citing Statewide Plan, Exh. 1, App. A at 20-23; Exh. DPU-Comm 4-1). In particular, the Program Administrators assert that they continue to participate in the statewide collaborative process that allows them to share costs that would otherwise be borne individually, resulting in economies of scale that

reduce costs for each Program Administrator (Program Administrators Brief at 53, citing Statewide Plan, Exh. 1, App. A at 21; Exh. DPU-Comm 4-1).

In addition, the Program Administrators maintain that, during the 2019-2021 Three-Year Plan term, they engaged the services of a vendor to conduct a Department-mandated study on the best practices for minimizing administrative costs ("PP&A Study Report") (Program Administrators Brief at 54, citing 2016-2018 Three-Year Plans Order, at 42).[101] The Program Administrators argue that they implemented all recommendations contained in the study and will continue to apply them to minimize administrative costs in the current Three-Year Plan term (Program Administrators Brief at 54, citing Statewide Plan, Exh. 1, App. A at 22-23; Exh. DPU-Comm 4-3).

No other party addressed the minimization of administrative costs on brief.

2. Competitive Procurement

The Program Administrators argue that they have used competitive procurement processes to the fullest extent practicable (Program Administrators Brief at 58-59, citing Statewide Plan, Exh. 1, App. A at 23). Specifically, the Program Administrators maintain that they have competitively procured the following services: (1) energy assessment delivery;

[101] The Program Administrators state that the study included recommendations in the following areas: (1) improved consistency in accounting practices; (2) streamlined reporting and data request process; (3) adherence to cost accounting best practices; (4) minimization of regulatory, collaboration, facilitation, reporting, and ad hoc request burden without compromising goal attainment; and (5) implementation of an annual process stress test (Program Administrators Brief at 54, citing Exh. DPU-Comm 2-8, Att. U).

(2) quality control; (3) monitoring and evaluation; (4) potential studies; and (5) marketing (Program Administrators Brief at 58, citing Statewide Plan, Exh. 1, App. A at 23).

Conversely, the Program Administrators assert that there are instances where competitive procurement of services is not appropriate or in the best interest of the Program Administrators or their customers, including, services that require special expertise, knowledge or complexity, unique statutory requirements, or cost of procurement (Program Administrators Brief at 58-59, citing Statewide Plan, Exh. 1, Apps. A at 23, App. C, Table V.D.1 (Rev.)).

No other party addressed competitive procurement on brief.

3. Low-Income Program Budgets

The Program Administrators maintain that they have each proposed a low-income program budget that meets or exceeds applicable statutory minimums over the Three-Year Plan term (Program Administrators Brief at 58, citing, e.g., Exh. BCG-4 (Rev.)). The Program Administrators assert that they have allocated the required percentage of the total Three-Year Plan term budget to the low-income residential sector (Program Administrators Brief at 57-58, citing Statewide Plan, Exh. 1, Apps. C.1 – Electric, Table V.B.1 (Rev.), C.2 – Gas, Table V.B.1 (Rev.)). Finally, the Program Administrators assert that they will continue to work collaboratively with LEAN to capture all available cost-effective energy efficiency in the low-income sector (Program Administrators Brief at 58, citing Statewide Plan, Exh. 1, at 108-115).

No other party addressed low-income program budgets on brief.

D. Analysis and Findings

1. Minimization of Administrative Costs

Consistent with Guidelines §§ 3.3.3, 3.3.5, each Program Administrator has included in its Three-Year Plan a description and supporting documentation of the steps it has taken to minimize administrative costs (Statewide Plan, Exh. 1, App. A at 23). As shown in the data tables (i.e., Budget Comparison Table-Three Year Plan vs. Previous Years, Section IV.C - Program Administrator Budgets), certain Program Administrators' PP&A costs remain relatively flat (i.e., EGMA, National Grid (electric)), with some increasing slightly (i.e., Berkshire Gas, Unitil (gas), National Grid (gas), Unitil (electric)) and others declining slightly (i.e., Liberty, NSTAR Gas, Compact, NSTAR Electric) as a percentage of its total budget in the current Three-Year Plan as compared to prior Three-Year Plans (see, e.g., Exh. FGE (gas)-4, Table IV.C.2.2 (Rev.)).

The Department notes, however, that planned PP&A costs for electric Program Administrators have increased significantly from the 2019-2021 Three-Year Plan to the 2022-2024 Three-Year Plan (Statewide Plan, Exh. 1, App. C.1 - Electric, Table IV.C.2.2 (Rev.)). The electric Program Administrators have proposed an increase of approximately $8.4 million (or 8.6 percent) in planned PP&A costs over the Three-Year Plans term (Statewide Plan, Exh. 1, App. C.1 - Electric, Table IV.C.2.2 (Rev.)). When comparing actual PP&A costs during 2019 (the first year of the 2019-2021 Three-Year Plans term) to planned PP&A costs for 2022 (the first year of the 2022-2024 Three-Year Plans term), the electric Program Administrators have proposed a $7.5 million (or a 30.9 percent) increase in

PP&A costs (c.f., Statewide Plan, Exh. 1, App. C.1 - Electric, Table IV.C.2.2, cells E75 and J75 (Rev.)). NSTAR Electric is the only electric Program Administrator to propose a decrease in planned PP&A costs; nonetheless, NSTAR Electric's planned PP&A costs represent an increase of approximately 32 percent between actual PP&A costs in 2019 and 2020 compared to planned PP&A costs in 2022 and 2023 (Exh. NSTAR-Electric-4 (Rev.), Table IV.C.2.2).

The gas Program Administrators have proposed an increase of approximately $13.2 million (or 40 percent) in planned PP&A costs over the Three-Year Plans term (Statewide Plan, Exh. 1, App. C.2 – Gas (Rev.), Table IV.C.2.2 (Gas)). When comparing actual PP&A costs during 2019 (the first year of the 2019-2021 Three-Year Plans term) to planned PP&A costs for 2022 (the first year of the 2022-2024 Three-Year Plans term) the gas Program Administrators have proposed a $4.5 million (or a 48.8 percent) increase in PP&A costs (c.f., Statewide Plan, Exh. 1, App. C.2 – Gas (Rev.), Table IV.C.2.2, cells E75 and J75). NSTAR Gas is the only gas Program Administrator to propose a decrease in planned PP&A costs; nonetheless, NSTAR Gas' planned PP&A costs still represent an increase of approximately 52 percent between actual PP&A costs in 2019 and 2020 compared to planned PP&A costs in 2022 and 2023 (Exh. NSTAR-Gas-4 (Rev.), Table IV.C.2.2).[102]

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[102] There are several data inconsistencies in the Program Administrators' energy efficiency data tables. For example, the total PP&A budgets included in Statewide Plan, Exh. 1, App. C.2 – Gas (Rev.), Table IV.C.2.2) and Exh. 4, Table IV.C.2.2 (Rev.) do not match the total PP&A budgets identified in Statewide Plan, Exh. 1, App. C.2 – Gas (Rev.), Table IV.C.1 and Exh. 4, Table IV.C.1 (Rev.). In Statewide Plan, Exh. 1, App. C.2 – Gas (Rev.), Table IV.C.2.2, the Program Administrators

The Program Administrators did not provide any explanation for the increase in planned PP&A costs (see Statewide Plan, Exh. 1; Exhs. 2 (each Program Administrator's respective pre-filed testimony)). As discussed throughout this Order, the Program Administrators plan to undertake significant program enhancements and develop new program designs during the 2022-2024 Three-Year Plans term.[103] However, the Program Administrators propose significant enhancements in every Three-Year Plan. D.P.U. 18-110 through D.P.U. 18-119, Statewide Plan, Exh. 1, at 13-15 (proposing energy optimization, program realignments, enhanced customer and ally support, tailored moderate income and renter offerings, new ADR initiatives, new municipal and community partnerships, new passive house and pay for savings offerings, low-income workforce development); D.P.U. 15-160 through D.P.U. 15-169, Statewide Plan, Exh. 1, at 13-15 (proposing a new renter-specific offering, new multi-family initiatives, new moderate income offering, expansion of upstream program, development of segment-specific outreach strategies, comprehensive review of small business initiative, development of online incentive application portal, development of multi-lingual marketing strategies). It is not clear from

report a total statewide PP&A budget of $33,127,325, but in Statewide Plan, Exh. 1, App. C.2 – Gas (Rev.), Table IV.C.1, the Program Administrators indicate the budget is $46,034,325. As addressed in Section III, above, in order for the Department to conduct an efficient review of the Program Administrators' filings within the statutory 90-day review period, it is essential for the Program Administrators to provide accurate information in their filings.

103 As discussed throughout this Order, all program and offering designs that the Program Administrators intend to implement during the Three-Year Plans term should be completely and fully described in the Three-Year Plan filings.

the record how or why these new enhancements proposed for the 2022-2024 Three-Year Plans term may increase PP&A costs more than in prior Three-Year Plans.

The Department acknowledges that the Program Administrators have historically taken steps to minimize administrative costs in the delivery of their energy efficiency programs. In this regard, the Program Administrators have shown that statewide collaboration in program planning, implementation, and evaluation contributes to economies of scale that reduce costs for each Program Administrator (Statewide Plan, Exh. 1, App. A at 23). 2019-2021 Three-Year Plans Order, at 50. The Department fully expects that this collaboration will continue throughout the 2022-2024 Three-Year Plans term.

Further, in 2016-2018 Three-Year Plans Order, at 42, the Department recognized that PP&A costs had substantially increased from the prior term and directed the Program Administrators to study best practices for such costs. The Program Administrators submitted the required PP&A Study Report as part of their 2019-2021 Three-Year Plans filing.[104] In the 2019-2021 Three-Year Plans Order, the Department directed the Program Administrators, as part of their 2019 Annual Reports, to adopt the recommendations of the PP&A Study Report and to provide the Department with an update of how those recommendations were adopted. 2019-2021 Three-Year Plans Order, at 50. The Program Administrators have implemented many of the recommendations in the PP&A Study Report, which has led to

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[104] The Best Practices for Minimizing Program Planning and Administrative Cost for Massachusetts Utilities and Energy Efficiency Service Providers (October 25, 2018) filed in D.P.U. 18-110 through D.P.U. 18-119, Exh. 1, App. P (Statewide Plan, Exh. 1, App. A at 22).

minimization of certain administrative costs. See 2019 Energy Efficiency Plan-Year Reports, D.P.U. 20-50, App. 6, at 1-2. Specifically, the Program Administrators: (1) reviewed and updated accounting systems for consistency; (2) formalized and streamlined certain data reporting requests through the use of specific and limited plan-term Key Performance Indicators; and (3) established a cost review working group to oversee the implementation of best practices for cost allocation, tracking, and control, as well as the review of costs. See 2019 Energy Efficiency Plan-Year Reports, D.P.U. 20-50, App. 6, at 1-2. The Program Administrators state that they intend to continue each of the above efforts and have worked with the Council to establish agreed-upon Key Performance Indicators for the 2022-2024 Three-Year Plan term (Statewide Plan, Exh. 1, App. A at 22-23; Exhs. BGC-2, at 104-105; EGMA-2, at 105-106; FGE (gas)-2, at 105-106; Exh. LU-2, at 103-104; NG-Gas-2, at 110-111; NSTAR Gas-2, at 105-106; Compact-2, at 102-103;FGE (electric)-2, at 100-101; NG-Electric-2, at 108-109; NSTAR-Electric-2, at 100-101).[105] Finally, the Program Administrators state that they will seek to minimize administrative costs by collaborating on reporting templates and using joint vendor services (Statewide Plan, Exh. 1, App. A at 22).

[105] The Key Performance Indicators are referenced in each Program Administrator's testimony and the Term Sheet but are not identified in the Three-Year Plans. Because the establishment of Key Performance Indicators is a key strategy to minimizing administrative costs during the Three-Year Plans term, going forward, the Program Administrators must include the specific proposed Key Performance Indicators in the Three-Year Plans. In their compliance filing, the Program Administrators shall provide the complete list of Key Performance Indicators for the 2022-2024 Three-Year Plans Term.

The Department finds that the proposed steps to minimize administrative costs, described above, are appropriate. The Program Administrators shall continue these efforts to minimize administrative costs over the course of this Three-Year Plans term.

A key recommendation from the PP&A Study Report was for the Program Administrators to formalize and seek to further streamline the reporting and data request process. PP&A Study Report at 18. As directed by the Department, in the 2019 Annual Reports, the Program Administrators provided a detailed explanation of the progress towards implementing each recommendation contained in the PP&A Study Report. See 2019 Energy Efficiency Plan-Year Reports, D.P.U. 20-50, App. 6, at 1-2. The Program Administrators stated that the formalized process for Key Performance Indicators was intended to create regular, known reporting obligations, and reduce ad hoc requests. 2019 Energy Efficiency Plan-Year Reports, D.P.U. 20-50, App. 6, at 1. The Program Administrators explained, however, that they continued to receive regular requests from many parties, including at the management committees and Council meetings. The Program Administrators indicated that they would continue to work with stakeholders on finding the right balance of providing information, using existing information, and understanding the purpose of a data request in order to minimize administrative costs where possible. 2019 Energy Efficiency Plan-Year Reports, D.P.U. 20-50, App. 6, at 1-2.

In our Order adopting revised Guidelines, the Department again directed the Program Administrators to implement the recommendations of the PP&A Study Report. We specifically directed the Program Administrators to work with the Council to develop a

formal process to address Council data requests in a way that balances the reporting of beneficial data/information and the minimization of administrative costs. D.P.U. 20-150-A at 12 n.9. The Department further directed the Program Administrators to include testimony in the Three-Year Plan filings describing a formal, agreed-upon process for how Council data requests will be made and responded to during this Three-Year Plans term. D.P.U. 20-150-A at 12 n.9; D.P.U. 21-120 through D.P.U. 21-129, Hearing Officer Procedural Memorandum at 2-3 (October 5, 2021).

Despite multiple Department directives, the Program Administrators failed to provide the formal, agreed-upon proposal for how Council data requests will be handled. Instead, in response to an information request issued by the Department, the Program Administrators submitted a draft proposal that had not yet been reviewed by the Council (Exh. DPU-Comm 4-1). On January 20, 2022, the Program Administrators finally submitted for Department review, a formal, agreed-upon process for how Council data requests will be addressed during this Three-Year Plans term (Exh. DPU-Comm 10-13 (Rev.) ("Council Data Request Process")).

The Program Administrators submitted the proposed Council Data Request Process more than five weeks after the close of the record in these proceedings and only eleven days before the Department is required by statute to issue this Order. Given the tardiness of the filing and the late stage of the proceeding, the Department is not able to review the adequacy of the Program Administrators' proposal at this time. With the exception of costs related to the six Key Performance Indicators currently reported for the 2019-2021 Three-Year Plans

term and the equity-related Key Performance Indicators referenced in each of the Program Administrator's testimony,[106] the Program Administrators will not be allowed to recover any administrative costs related to Council data requests or other Key Performance Indicators until such time as the Department has reviewed and approved the Council Data Request Process proposal. In the interim, the Program Administrators shall track all costs related to Council data requests and include them in their 2022 Annual Reports.

Based on a review of the Program Administrators' proposals to minimize administrative costs and conditioned on the adequacy of the Council Data Request Process, the Department finds that each Program Administrator's Three-Year Plan is designed to minimize administrative costs to the fullest extent practicable, consistent with the requirements of G.L. c. 25, §§ 19(a), (b). Going forward, in each Three-Year Plan filing and Term Report, the Program Administrators shall file testimony explaining the drivers of administrative costs and specific actions taken to minimize those costs. In the Term Report, the Program Administrators must demonstrate the specific actions they undertook during the 2022-2024 Three-Year Plan term to minimize administrative costs; a demonstration that the

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[106] See Exhs. BGC-2, at 106; EGMA-2, at 107; FGE (gas)-2, at 106-107; LU-2, at 105; NG-Gas-2, at 111; NSTAR Gas-2, at 107; Compact-2, at 103; FGE (electric)-2, at 101; NG-Electric-2, at 109-110; NSTAR Electric-2, at 102.

Program Administrator underspent its PP&A budget will not be sufficient to meet this burden.[107]

2. Competitive Procurement

As noted above, each Program Administrator is required to demonstrate that it has used competitive procurement processes to the fullest extent practicable. G.L. c. 25, §§ 19(a), (b). The Department has consistently found that competitive procurement serves as a means of cost containment and provides an essential, objective benchmark for the reasonableness of the cost of services. 2013-2015 Three-Year Plans Order, at 152. In addition, competitive procurement keeps a consultant or an attorney with an established relationship with a company from taking that relationship for granted. 2013-2015 Three-Year Plans Order, at 152, citing Bay State Gas Company, D.P.U. 12-25, at 186 (2012); Fitchburg Gas and Electric Light Company, D.P.U. 11-01/11-02, at 236 (2011); New England Gas Company, D.P.U. 10-114, at 221 (2011).

For the 2022-2024 Three-Year Plans, each Program Administrator has competitively procured a high percentage of its program activities (ranging from 35 percent to 77 percent) (see, e.g., Exh. FGE-4 (Rev.), Table V.D). Where such procurements were used, the Program Administrators have demonstrated that they were done in a manner designed to

[107] The Department notes that the Program Administrators have collectively underspent their PP&A budgets in 2019 and 2020 (Statewide Plan, Exh. 1, Apps. C.1 – Electric (Rev.), Table IV.C.2.2; C.2 – Gas (Rev.), Table IV.C.2.2).

minimize costs to ratepayers (e.g., through the use of statewide solicitations and collaboration in the procurement of services) (Statewide Plan, Exh. 1, App. A at 23).

There are a limited number of areas where the Program Administrators have decided not to use competitive procurements to engage third-party energy efficiency services, such as special expertise, knowledge or complexity, unique statutory requirements, or cost of procurement (Program Administrators Brief at 58, citing Statewide Plan, Exh. 1, App. C (Rev.), Table V.D.1). The Program Administrators maintain that their decision not to competitively procure such services is appropriate for several reasons, including the complexity of issues and specialized knowledge required to address them (Program Administrators Brief at 59, citing Statewide Plan, Exh. 1, App. C (Rev.), Table V.D.1). The Department will not make any substantive findings on the reasonableness of the Program Administrators' decision not to competitively procure such services in this Order. Instead, at the time final cost recovery is sought, each Program Administrator will be required to present clear evidence showing cost containment and the reasonableness of the costs. See 2019-2021 Three-Year Plans Order, at 52.

The last issue notwithstanding, based on our review of the evidence presented, the Department finds that each Program Administrator's 2022-2024 Three-Year Plan is designed to use competitive procurement processes to the fullest extent practicable, consistent with the requirements of G.L. c. 25, §§ 19(a), (b) (see, e.g., Exh. FGE-4 (Rev.), Table V.D.1).

3. Low-Income Program Budgets

As shown in the Allocation of Funds, Low-Income Minimum Data, Tables V.B.1, each Program Administrator proposes a low-income program budget that meets or exceeds the statutory minimums over the Three-Year Plan term (see, e.g., Exh. FGE-4 (Rev.), Table V.B.1). Accordingly, the Department finds that each Program Administrator has satisfied the low-income budget requirements of G.L. c. 25, § 19(c).

E. Conclusion

Based on our review and subject to the conditions addressed above, the Department concludes that each Program Administrator's 2022-2024 Three-Year Plan is designed to minimize administrative costs and use competitive procurement processes to the fullest extent practicable, in compliance with G.L. c. 25, §§ 19(a), (b) and Guidelines §§ 3.3.5, 3.3.6. In each area where a Program Administrator has not competitively procured outside services, prior to final recovery, it will be required to present clear evidence demonstrating: (1) cost containment; and (2) that the cost of such services is reasonable. Finally, the Department finds that each electric and gas Program Administrator has planned to spend at least ten percent or 20 percent, respectively, of its proposed energy efficiency program budget on low-income demand-side management and education programs over the Three-Year Plans term, in compliance with G.L. c 25, § 19(c).

VI. COST EFFECTIVENESS

A. Introduction

The Department is required to review the Three-Year Plans for cost effectiveness. G.L. c. 25, § 21(b)(3). This review ensures that the Three-Year Plans are designed to capture energy savings and other benefits with values greater than costs. G.L. c. 25, § 21(b)(3). Under the Green Communities Act, as amended by the Energy Act of 2018, for the purpose of cost-effectiveness review, programs are aggregated by sector. G.L. c. 25, § 21(b)(3). The Department also requires the Program Administrators to report cost effectiveness at the program and core initiative level. D.P.U. 20-150-A at 6; 2019-2021 Three-Year Plans Order, at 74; 2013-2015 Three-Year Plans Order, at 105.

The Climate Act amended G.L. c. 25 to include a requirement that the Program Administrators must include the social value of GHG emissions reductions when determining cost effectiveness, and that calculation of program benefits shall include calculation of the social value of GHG emissions reductions, except in the cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling. G.L. c. 25, §§ 19, 21(b)(3); D.P.U. 20-150-A at 7; Guidelines § 3.4.4. The AESC Study must now include an appropriate recommended social value of GHG emissions reductions for the Three-Year Plan benefit cost screening model. G.L. c. 25, §§ 19, 21(b)(3).

B. Program Administrators Proposal

1. Social Value of GHG Emissions Reductions

The Program Administrators propose a social value of GHG emissions reductions of $393 per short ton with a corresponding one percent discount rate based on the recommendation from the October 12, 2021 AESC Supplemental Study ("Supplemental Study") (Statewide Plan, Exh. 1, Apps. A at 16; Q, Study 3, at 5).[108,109] The AESC Study originally recommended a social value of GHG emissions reductions of $128 per short ton (Statewide Plan, Exh. 1, App. Q, Study 1, at 197). The Program Administrators state that, in light of the passage of the Climate Act, they entered into a new contract with the study author to update the recommended social value of GHG emissions reductions and convened a supplemental study group (Statewide Plan, Exh. 1, App. Q, Study 3, at 4; Exh. DPU-Comm 1-1, at 2). The Supplemental Study group recommended changing the discount rate from two percent to one percent, thereby changing the social value of GHG emissions reductions from $128 per short ton to $393 (Statewide Plan, Exh. 1, App. Q, Study 3, at 5).

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108 The Program Administrators use the AESC Study, completed on March 15, 2021 (amended on May 14, 2021), as well as the Supplemental Study to calculate benefits (Statewide Plan, Exh. 1, Apps. A at 15; Q, Studies 1 and 3).

109 The AESC Study is conducted on a three-year cycle and will be updated during the 2022-2024 term, with results applied in the 2025-2027 Three-Year Plan (Statewide Plan, Exh. 1, App. A at 16).

The Supplemental Study group provided the following reasons to support an updated social value of GHG emissions reductions: (1) the desire of the Program Administrators to ensure the proposed measures before the Department are based on the most up-to-date information; (2) the uncertainty surrounding the federally recommended social value of GHG emissions reductions and continuous need to review and update the value; and (3) comments from the federal Interagency Working Group ("IWG") tasked with issuing guidance on the social value of GHG emissions reductions, received in response to a technical support document released in advance of the IWG's comprehensive update expected in January 2022 (Statewide Plan, Exh. 1, App. Q, Study 3, at 4-5).[110] The Supplemental Study subsequently recommended the use of a one percent discount rate and the resulting revised value for the social value of GHG emissions reductions of $393 per short ton (Statewide Plan, Exh. 1, App. Q, Study 3, at 20).

2. Cost-Effectiveness Screening

The Program Administrators screened each sector, program, and core initiative for cost effectiveness using the Total Resource Cost ("TRC") test with a $393 per short ton social value of GHG emissions reductions (Statewide Plan, Exh. 1, App. A at 14-15).[111] The

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110 The current discount rate recommended by the IWG is three percent with a resulting social value of GHG emissions reductions of $49 per short ton (Statewide Plan, Exh. 1, App. Q, Study 3, at 6-7).

111 For the 2022-2024 Three-Year Plan, the Department directed the Program Administrators to calculate the BCR for each measure with and without the societal value of GHG emissions reductions in the BCR screening model. D.P.U. 20-150-A at 7 n.6.

Program Administrators state that the Statewide Plan and the Program Administrator-specific Three-Year Plans include cost-effective sectors and programs for each plan year and over the entirety of the 2022-2024 Three-Year Plans term (Statewide Plan, Exh. 1, App. A at 14-15; see, e.g., Exh. BGC-4 (Rev.), Table IV.D.1). At the Department's request, the Program Administrators also provided a revised cost-effectiveness analysis using the original social value of GHG emissions reductions of $128 per short ton (RR-DPU-3, Att. A, Table IV.D.1). Further, consistent with the Department's directives, the Program Administrators also provided a cost-effectiveness analysis without the social value of GHG emissions reductions (see, e.g., Exh. BGC-5 (Rev.)). D.P.U. 20-150-A at 7 n.6.

C. Positions of the Parties

1. Program Administrators

The Program Administrators argue that the change in social value of GHG emissions reductions from $128 per short ton to $393 per short ton is based on the Commonwealth's codification of GHG emission reductions in the Climate Act and reflects the "specific social climate urgency expressed by Massachusetts legislators" (Program Administrators Brief at 44-45; Exh. DPU-Comm 1-1, at 3). The Program Administrators assert that the Supplemental Study's recommended social value of GHG emissions reductions at $393 per short ton most accurately incorporates the Commonwealth's level of commitment to reducing GHG emissions and signals the importance of emissions reduction efforts to future generations (Program Administrators Brief at 45-46, citing Statewide Plan, Exh. 1, App. Q, Study 3, at 8-20; Exhs. DPU-Comm 1-1(c), (d); DPU-Comm 11-1(e); Tr. 2, at 279-280).

The Program Administrators claim that the AESC Study recognized that a change in the social value of GHG emissions reductions might be warranted as more information became available (Program Administrators Brief at 45, citing Statewide Plan, Exh. 1, App. Q, Study 1, at 198). The Program Administrators argue that the Supplemental Study, published in October 2021, uses the latest available information to conclude that $393 per short ton is the most accurate social value of GHG emissions reductions (Program Administrators Brief at 45, citing Statewide Plan, Exh. 1, App. Q, Study 3, at 5, 8-20).

The Program Administrators assert that employing the original social value of GHG emissions reductions of $128 per short ton in the cost-effectiveness analyses may necessitate broader revisions to the Three-Year Plans to ensure cost-effectiveness and GHG emissions reduction requirements are met (Program Administrators Brief at 46, citing Tr. 2, at 284; G.L. c. 25, §21(d)(4)). In this regard, the Program Administrators argue that using the $128 value will lead to lower benefit levels, which would reduce opportunities for cost-effective projects (including custom projects) (Program Administrators Brief at 46-47, citing Exh. DPU-Comm 8-1; RR-DPU-3). The Program Administrators assert these types of projects are critical to achievement of overarching Three-Year Plan goals and the equity commitments made by the Program Administrators, particularly in regard to small businesses (Program Administrators Brief at 47).

Finally, the Program Administrators claim that they have complied with cost-effectiveness screening requirements in developing the Three-Year Plans (Program Administrators Brief at 42, 48). Specifically, the Program Administrators argue that

consistent with Department precedent and Guidelines: (1) they have appropriately screened their Three-Year Plans for cost-effectiveness using the TRC test; and (2) all proposed programs, core initiatives, and sectors for the 2022-2024 Three-Year Plan term are cost-effective (Program Administrators Brief at 49, citing, e.g., Exh. BGC-5 (Rev.)). See D.P.U. 20-150-A at 4, 6-7; Guidelines §§ 3.4.3., 3.4.3.1.

2. Attorney General

The Attorney General argues that the Program Administrators' proposal, as filed, is supported by the Supplemental Study and, therefore, should be approved (Attorney General Brief at 15). The Attorney General argues that the AESC Study arrived at the initial $128 per short ton value, recognizing that this figure could be updated as more research was available and as study users monitored developments in this rapidly changing area (Attorney General Brief at 15-16). The Attorney General asserts that the requirements of the Climate Act prompted her, DOER, the Council, DEP, and the Program Administrators to reevaluate the $128 per short ton value and assess whether the analysis supporting that value was sufficiently vigorous and timely (Attorney General Brief at 16).

The Attorney General maintains that, should the Department disallow the Program Administrators' proposal to use the $128 per short ton value in their cost-effectiveness analyses, statewide benefits for the Three-Year Plans would decline by 29 percent, or roughly $4.0 billion (Attorney General Brief at 17). The Attorney General argues that this decrease in benefits would increase pressure on the overall cost-effectiveness of the Three-Year Plans, potentially cause the loss of certain measures, and would be inconsistent

with the Term Sheet or the Statewide Plan as approved by the Council (Attorney General Brief at 17).

3. Department of Energy Resources

DOER asserts that the Program Administrators appropriately incorporated the updated avoided costs from the Supplemental Study into their BCR models, including the adoption of a revised social value of GHG emissions reductions (DOER Brief at 22, citing Statewide Plan, Exh. 1, App. Q, Study 3). DOER argues that the Program Administrators properly valued the social value of GHG emissions reductions in the 2022-2024 Three-Year Plans and a social value of GHG emissions reductions of $393 per short ton based on a one percent discount rate meets the requirements of the Climate Act (DOER Brief at 14; DOER Reply Brief at 6-7).

DOER asserts that the AESC Study group initially recommended a $128 per short ton value with the proviso that this figure could change as new information became available (DOER Brief at 16). DOER explains that the recommissioned Supplemental Study group finding of $393 per short ton incorporates the most up-to-date information, reflecting the Commonwealth's commitment to climate goals as well as the urgency exhibited by lawmakers with the passage of the Climate Act (DOER Brief at 17-18).

DOER argues that the one percent discount rate aligns with the requirements of the Climate Act and is a prudent choice for Massachusetts (DOER Brief at 18-19; DOER Reply Brief at 6-7). In this regard, DOER asserts that the Climate Act calls for significant investments in decarbonizing the building sector, and lowering the discount rate to

one percent demonstrates the Commonwealth's commitment to reducing GHG emissions by appropriately valuing climate-mitigation investments (DOER Brief at 18). DOER also maintains that a low discount rate ensures that future environmental damage costs and benefits are appropriately valued (DOER Brief at 18). Lastly, DOER claims that the one percent social value of GHG emissions reductions discount rate is consistent with the 0.81 percent discount rate applied to all other avoided costs calculated by the AESC Study (DOER Brief at 18).

DOER argues that revising the social value of GHG emissions reductions to $128 per short ton would likely require the Program Administrators to revisit the Three-Year Plan structure and it to fall short of the priorities set by the EEA Secretary (DOER Brief at 19). In addition, DOER asserts that the $393 per short ton value is Massachusetts-specific, as opposed to the nationwide average value developed by IWG (DOER Brief at 20-21). DOER claims that, due to the Commonwealth's individual statutory obligations, a Massachusetts-specific figure is necessary (DOER Brief at 20-21). Lastly, DOER argues that the Massachusetts' statutory obligations may or may not align with upcoming federal guidance and, therefore, the Department should not delay the implementation of the $393 per short ton social value of GHG emissions reductions (DOER Brief at 21).

4. Acadia Center

Acadia supports the Program Administrators' proposed social value of GHG emissions reductions (Acadia Brief at 16-17). Acadia argues that using updated recommendation is critical to drive GHG emission reductions and most appropriately reflects the

Commonwealth's policy goals (Acadia Brief at 17). Further, Acadia claims that the AESC Study author noted the original social value of GHG emissions reductions was likely too low (Acadia Brief at 16-17, citing Statewide Plan, Exh. 1, App. Q, Study 3, at 20). Acadia maintains the Department should approve the lower one percent discount rate and the resulting higher social value of GHG emissions reductions in alignment with the expanded mandate of the Climate Act to prioritize equity and GHG emissions reductions (Acadia Brief at 17, citing G.L. c. 25, § 1A).

5. Conservation Law Foundation

CLF argues that the Department should prioritize GHG emissions reductions and analyze cost-effectiveness using the social value of GHG emissions reductions as proposed by the Program Administrators (CLF Brief at 47-48). In this regard, CLF argues that the proposed social value of GHG emissions reductions is "well-founded" (CLF Brief at 48).

CLF maintains that initial two percent discount rate does not appropriately account for the intergenerational nature of climate change (CLF Brief at 48-49). CLF further claims that the Supplemental Study's review of federal guidance and recent literature supports the Massachusetts-specific proposed social value of GHG emissions reductions (CLF Brief at 48-49). Finally, CLF maintains that the Program Administrators should be required to stay up-to-date on the most recent scientific reports on climate change in order to determine whether midterm increases in the scope of their electrification efforts may be appropriate based on changing conditions (CLF Brief at 49).

6. Northeast Clean Energy Council

NECEC supports the Program Administrators' use of a one percent discount rate and argues that the Department should approve the Program Administrators' proposal as the best available representation of the social value of GHG emissions reductions (NECEC Brief at 5). Further, NECEC argues that use of the proposed $393 per short ton social value of GHG emissions reductions is critical to support the Program Administrators' achievement of all cost-effective energy efficiency and GHG emissions reduction mandates (NECEC Brief at 5, 14-15).

D. Analysis and Findings

1. Introduction

The Department is required to review all energy efficiency programs contained in the Three-Year Plans for cost-effectiveness. G.L. c. 25, § 21(b)(3). This review ensures that programs are designed to capture energy savings and other benefits with values greater than costs. G.L. c. 25, § 21(b)(3). Under the Green Communities Act, as amended by the Energy Act of 2018, for the purpose of cost-effectiveness review, programs are aggregated by sector. G.L. c. 25, § 21(b)(3). Any sector with a BCR greater than 1.0 (indicating benefits are greater than costs) is considered cost effective. G.L. c. 25, § 21(b)(3). If a sector fails the cost-effectiveness screening, its component programs shall either be modified so that the sector meets the test or is terminated. G.L. c. 25, § 21(b)(3).

The Guidelines establish the method by which the Department determines cost effectiveness. Guidelines § 3.4. The Department evaluates cost effectiveness using the TRC

test, which includes all benefits and costs associated with the energy system and program participants. Guidelines § 3.4.3. A program or sector is cost effective if the cumulative present value of its benefits is equal to or greater than the cumulative present value of its costs.[112] Guidelines § 3.4.3.1. If a program or core initiative is not projected to be cost effective, the Program Administrator is not barred from implementing the program but is required to provide further documentation and explanation of how the program is a prudent use of ratepayer funds and how the Program Administrator intends to achieve cost-effective programs and core initiatives going forward. D.P.U. 20-150-A at 6.

The Climate Act expanded the benefits that may be included in a cost-effectiveness screening. D.P.U. 20-150-A at 7; G.L. c. 25, §§ 19, 21(b)(3). In calculating the TRC, program benefits shall include calculations of the social value of GHG emission reductions, except in cases of conversions from fossil fuel heating and cooling to fossil fuel heating and cooling. D.P.U. 20-150-A at 7; Guidelines § 3.4.4.

Each Program Administrator incorporated the social value of GHG emissions reductions developed by the AESC Supplemental Study into their BCR screening models (see, e.g., Exh. BGC-4 (Rev.), Table IV.D.3.1.i). The Department will first address the Program Administrators' proposed social value of GHG emissions reductions, and then will address cost-effectiveness screening.

[112] Benefits and costs are addressed in Guidelines §§ 3.4.4 and 3.4.5, respectively.

2. Social Value of GHG Emissions Reductions Valuation and Method

The Department has three concerns with the method the Program Administrators used to develop the proposed social value of GHG emissions reductions. First, the Department finds that there is a lack of record evidence supporting the revised social value of GHG emissions reductions and the embedded discount rate. Second, the Department does not accept the economic validity of the Program Administrators' argument that using the revised social value of GHG emissions reductions (and embedded one percent discount rate) better addresses the urgency of climate change. Finally, the Department has concerns regarding the process and timeline the Program Administrators used to develop the revised social value of GHG emissions reductions. The Department addresses each of these issues below. The Department also will consider whether adopting a different social value of GHG emissions reductions and discount rate would materially impact what measures, core initiatives, and programs would potentially be included or excluded from the Three-Year Plans.

The Program Administrators maintain that, in order to use the most up-to-date information, it was necessary to adopt the Supplemental Study group's findings, resulting in a change to the social value of GHG emissions reductions 13 business days before the Three-Year Plans were filed with the Department (Program Administrators Brief at 45, citing Statewide Plan Exh. 1, App. Q, Study 3, at 4-5, 8-20; Exhs. DPU-Comm 1-1; DPU-Comm 11-1). However, in order for the Department to rely on these benefits when assessing cost-effectiveness, the method of calculating avoided costs must be robust and

properly supported.[113] 2019-2021 Three-Year Plans Order, at 75; D.P.U. 08-50-A at 16; D.P.U. 11-120-A (Phase II) at 18. Here, the sum of the analysis performed in the Supplemental Study to develop the revised social value of GHG emissions reductions was a "literature review" of three documents: (1) public comments received in June 2021 by the federal working group; (2) the Climate Act, signed into law in March 2021; and (3) the EEA Secretary's July 15th letter setting GHG emissions reduction targets (Tr. 2, at 276; Statewide Plan Exh. 1, App. Q, Study 3, at 4-5, 7-20; Exhs. DPU-Comm 1-1(b); DPU-Comm 1-3; DPU-Comm 1-5; DPU-Comm 1-6(a); DPU-Comm 8-1; DPU-Comm 11-3). The Program Administrators admit that the literature review is not peer-reviewed research and did not contain any quantitative analysis (Tr. 2, at 282-283, 290-292; Exh. DPU-Comm 11-3).

In addition, the Department finds that the Supplemental Study group's literature review does not contain sufficient analysis to justify a change in the discount rate from two percent to one percent. The literature review included public comments from an IWG request for comments that explored various discount rates, including zero, one, two, three, five, and declining discount rates (Statewide Plan, Exh. 1, App. Q, Study 3, at 8 n.22, 15-20). Upon review, the Department finds little consensus in the literature outright supporting a one percent discount rate over a two percent discount rate; the two commenters that performed quantitative analysis on the study of discount rates, while noting that a

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[113] The Program Administrators must support the avoided cost value with evidence and must adequately explain how the value was derived. See 2019-2021 Three-Year Plans Order, at 75; D.P.U. 11-120-A (Phase II) at 18, citing Boston Gas Company v. Department of Telecommunications and Energy, 436 Mass. 233, 240-241 (2002).

one percent discount rate could be considered, explicitly recommend a discount rate above one percent (Statewide Plan, Exh. 1, App. Q, Study 3 at 5, 13, 15-20).[114] Further, the IWG currently recommends valuing the social value of GHG emissions reductions at $49 per short ton of CO_2e, with a corresponding discount rate of three percent (Statewide Plan, Exh. 1, App. Q, Study 3, at 6-7).

The AESC study group asserts that assigning more mathematical weight to low-probability, high-impact costs associated with climate change could substantially increase the social value of GHG emissions reductions (Statewide Plan, Exh. 1, App. Q, Study 3, at 7, 12-13). The Program Administrators did not, however, provide any evidence to show that incorporating low-probability, high-impact costs in the social value of GHG emissions reductions was appropriate, despite their assertion that the reason for convening the Supplemental Study group was to find a social value of GHG emissions reductions relevant to Massachusetts (Tr. 2, at 274-275; Statewide Plan Exh. 1, App. Q, Study 3, at 7, 12-13; Exh. DPU-Comm 1-2).

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114 The New York State Department of Environmental Conservation recommends a two percent discount rate based on its study of federal research (Statewide Plan, Exh. 1, App. Q, Study 1 at 35, 191, 195-197; Study 3 at 8, 18). The Office of Management and Budget ("OMB") was the original source for the federal government's three percent discount rate recommendation in 2003, using data from 1973 to 2002 (Statewide Plan, Exh. 1, App. Q, Study 3 at 16). The Department notes that the Supplemental Study recalculated OMB's analysis using more recent data (i.e., 1991 to 2020) to arrive at a two percent discount rate (Statewide Plan, Exh. 1, App. Q, Study 3, at 16).

The Program Administrators and CLF claim that the two percent discount rate supported by the New York Department of Environmental Conservation does not accurately address the intergenerational nature of climate change in Massachusetts and that a one percent discount rate is more accurate for this purpose (Program Administrators Brief at 45-46; CLF Brief at 48-49). While our review of the literature in the record includes several sources that encourage consideration of a one percent discount rate, these sources do not demonstrate outright that a one percent discount rate more accurately reflects the intergenerational nature of climate change in Massachusetts than a two percent discount rate Statewide Plan Exh. 1, App. Q, Study 3, at 15-18; Exhs. DPU-Comm 14(b), (c); DPU-Comm 15(c), Att. B, at 23; DPU-Comm 16; DPU-Comm 11-3).[115] The fact that the AESC Study notes that the social value of GHG emissions reductions may change as more information becomes available, is not reason enough to support the proposed change when the new information does not definitively recommend a one percent discount rate over a two percent discount rate (Statewide Plan, Exh. 1, App. Q, Study 3, at 8, 16, 18).

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[115] The Program Administrators cite to comments made by 14 Attorneys General (including in New York and Massachusetts) regarding the discount rate and its impact on generational valuation (Exh. DPU-Comm 1-5(c), Att. B at 22-23). The Department finds however, that the Program Administrators take these comments out of context. The comments support general "consideration" of a discount rate lower than two percent, but advocate specifically for the federal government (which employs complex statistical modeling that the Program Administrators do not have access to) to update its guidance on the social value of GHG emissions reductions (Tr. 2, at 290-292; Exhs. DPU-Comm 1-5(c), Att. B, at 22-23; DPU-Comm 11-3; DPU-Comm 11-4(b)). In addition, the New York Department of Environmental Conservation concluded that the appropriate discount rate would be closer to two percent (Exh. DPU-Comm 1-5(c), Att. B at 22).

Next, the Department takes issue with the Program Administrators' proffered economic rationale to support the revised social value of GHG emissions reductions. Conceptually, the social value of GHG emissions reductions quantifies the avoided costs society would otherwise bear from CO_2, methane, and other GHG emissions reductions and applies a discount rate to forecast these avoided costs into the future (Statewide Plan, Exh. 1, App. Q, Study 1, at 193).[116] All else being equal, a lower discount rate elicits a higher social value of GHG emissions reductions (Statewide Plan Exh. 1, App. Q, Study 3, at 15). The initial, lower $128 per short ton value reduces the same amount of GHG emissions for the Commonwealth as the higher proposed value because the value does not impact program design or implementation in any structural way, nor does it result in any core initiatives, programs, or sectors becoming non-cost effective (Tr. 2, at 280-281, 283-290; RR-DPU-3, Att. A, Table IV.D.1; Exh. DPU-Comm 8-2). Accordingly, the Department finds that regardless of whether the social value of GHG emissions reductions is $128 per short ton or $393 per short ton, the measures and programs offered by the Program Administrators will not change because the programs remain cost effective.

The Program Administrators claim that a primary reason to change the social value of GHG emissions reductions is to recognize the added priority of GHG emissions reduction as

[116] By incorporating a social value of GHG emissions reductions in the BCR screening model, measures that reduce GHG emissions are valued higher (in dollars) over the course of their useful lives than if the social value of GHG emissions reductions was not included in the model (Statewide Plan Exh. 1, App. A at 8, 15-16).

set forth in the EEA Secretary's July 2021 letter[117] and the Climate Act (Tr. 2, at 278-280; Program Administrators Brief at 44-46; Exhs. DPU-Comm 1-1; DPU-Comm 1-4; DPU-Comm 8-1; DPU-Comm 11-1; DPU-Comm 11-3). While the Program Administrators had a statutory mandate to incorporate a social value of GHG emissions reductions for Three-Year Plan measure benefits, the Climate Act did not require that the Program Administrators adopt a specific social value of GHG emissions reductions or discount rate (Tr. 2, at 277-279). Accordingly, the Program Administrators' proposal is not an interpretation of a statutory mandate. The purpose of social value of GHG emissions reductions as set forth in the Climate Act is to incorporate the avoided costs of carbon into measure benefits, not to reduce marginal GHG emissions (Tr. 2, at 280-281, 283; Statewide Plan, Exh. 1, App. A at 15-16). Guidelines § 3.4.4.

Finally, the Department is concerned about the Program Administrators' apparent disregard for the AESC Study group process, which resulted in a last-minute revision to the Statewide Plan mere weeks before the Three-Year Plans' filing deadline. The Department has previously endorsed the AESC Study group process and this process is key to producing a reliable social value of GHG emissions reductions to include in the Three-Year Plans. See 2019-2021 Three-Year Plans Order, at 68. Following this transparent, stakeholder-centered process, which concludes before April 30th of the year the Three-Year Plans are filed with

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[117] The EEA Secretary set the 2030 GHG emissions reduction goals for gas and electric Three-Year Plan measures at 341,000 and 504,000 metric tons, respectively (Statewide Plan, Exh. 1, App. D at 3).

the Department, is critical to validate the study group's findings (Statewide Plan, Exh. 1, App. A at 16). However, in changing the proposed social value of GHG emissions reductions and discount rate a mere 13 business days before the Three-Year Plans were filed with the Department, the Program Administrators and AESC Study group effectively bypassed the process the Department has previously endorsed as essential to produce accurate assumptions of avoided costs. See 2019-2021 Three-Year Plans Order, at 68. By bypassing this process, the Program Administrators cannot credibly show that the findings in the Supplemental Study were the result of a careful, stakeholder-driven analysis. In fact, the Program Administrators admitted that no quantitative analysis was performed during the course of the Supplemental Study (Tr. 2, at 290-292; Exh. DPU-Comm 11-3).

The Department expects the AESC Study group process will produce appropriate and reliable avoided cost figures based on quantitative analysis, which will provide base assumptions for how to quantify benefits of every Three-Year Plan measure. See 2019-2021 Three-Year Plans Order, at 68. The AESC Study group stakeholder approach, which includes the Attorney General, DOER, several energy agencies in neighboring states, and other interested parties (e.g., consumer and environmental advocacy organizations) should ensure as much consistency and transparency as is feasible. See 2019-2021 Three-Year Plans Order, at 68. But when the Supplemental Study revised the social value of GHG emissions reductions from $128 per short ton to $393 per short ton approximately two weeks before the Program Administrators were required to file the

2022-2024 Three-Year Plans with the Department, we are unable to find that the findings in the Supplemental Study are credible.

The AESC Study is conducted before the draft Statewide Plan is submitted to the Council on April 30th in order to give the Program Administrators enough time to finalize their proposals using the avoided cost assumptions from the study. G.L. c. 25, §§ 21(b)(1), (c). Despite the fact that the Supplemental Study was finalized only 13 business days before the Three-Year Plan filing deadline and after the October 6th draft Statewide Plan was submitted to the Council, the Program Administrators maintain that the cost effectiveness of core initiatives and programs would need to be re-assessed in the event that the social value of GHG emissions reductions was reverted back to $128 per short ton (Tr. 2, at 286-289; Exh. DPU-Comm 8-2). Given the timeline above and the evidence that using the $128 per short ton value does not result in non-cost effective core initiatives, programs, or sectors in the Three-Year Plans filed with the Department, the Department is skeptical about the Program Administrators' suggestion that the implementation changes are required to meet the Green Communities Act's statutory cost-effectiveness requirement, unless the Program Administrators are claiming that their planned benefits and costs are not accurate. The Department notes that the Program Administrators were unable to identify any change that was made to the Three-Year Plans from the October 6th draft Statewide Plan that were added due to the proposed higher social value of GHG emissions reductions and if they were not removed from the programs would result in non-cost effective programs (Tr. 2, at 285-287, 290; Exh. DPU-Comm 8-2). To address this concern, the Department requested that the

Program Administrators provide recalculated BCR screening models using the AESC Study-derived $128 per short ton social value of GHG emissions reductions (Tr. 2, at 288-290). The data the Program Administrators provided here did not render any core initiatives, programs, or sectors non-cost effective (RR-DPU-3, Att. A, Table IV.D.1). Accordingly, contrary to the Program Administrators' assertions, the Department finds that the lower claimable benefits associated with the initial $128 per short ton social value of GHG emissions reductions will not fundamentally alter the Three-Year Plans as filed (Tr. 2, at 284, 286, 289; Program Administrators Brief at 46-47; see also Attorney General Brief at 17; DOER Brief at 19).

The Program Administrators seek to increase planned statewide benefits from approximately $9.2 billion to $12.9 billion with the proposed social value of GHG emissions reductions as filed (Exh. DPU-Comm 8-1). While a marginal $3.7 billion in statewide benefits is significant, the Department can only consider this addition to statewide benefits if it accompanied by contextual and quantitative support in the record. 2019-2021 Three-Year Plans Order, at 75; D.P.U. 08-50-A at 16; D.P.U. 11-120-A (Phase II) at 18. In this regard, the Department finds that the revised social value of GHG emissions reductions was derived only through a non-peer-reviewed literature review, was not the product of any quantitative analysis, will not address climate change any more urgently than the original social value of GHG emissions reductions, and was not developed through the formal AESC Study group process. For these reasons, the Department denies the Program Administrators'

proposal to change the social value of GHG emissions reductions from $128 per short ton as derived by the AESC Study to $393 per short ton from the Supplemental Study.

The Program Administrators shall continue to evaluate the appropriate social value of GHG emissions reductions in all future AESC studies that are overseen by the AESC Study group. Going forward, however, the Department will not consider avoided cost supplemental studies completed after the April 30th deadline for inclusion in the BCR screening model. Accordingly, the Program Administrators shall incorporate the AESC Study findings submitted by April 30th of the filing year in all future three-year plan filings.

3. Cost-Effectiveness Screening

The Department finds that, incorporating a $128 per short ton social value of GHG emissions reductions, the BCR for all core initiatives, programs, and sectors for each Program Administrator's Three-Year Plan remain cost effective and, therefore, no changes to the program designs included in the 2022-2024 Three-Year Plans are required (Tr. 2, at 286-289; RR-DPU-3, Att. A, Table IV.D.1). The cost-effectiveness analyses submitted using the $128 per short ton social value of GHG emissions reductions, however, did not include the December 21, 2021, updates to the Program Administrators' BCR screening model and energy efficiency data tables (Statewide Plan, Exh. 1, App. C (Rev.)). In its compliance filing, each Program Administrator shall refile its BCR screening model and all associated data tables to incorporate the $128 per short ton social value of GHG emissions reductions.

4. Conclusion

As discussed above, the Department finds that the most appropriate social value of GHG emissions reductions to represent the avoided costs of the Commonwealth's reduced GHG emissions is $128 per short ton of CO_2e based on available data and the AESC Study.[118] After review, the Department finds that each Program Administrator demonstrated that its Three-Year Plan includes cost-effective sectors and programs for each plan year and over the entire 2022-2024 Three-Year Plan term.

VII. PERFORMANCE INCENTIVES

A. Introduction

The Green Communities Act provides that the Three-Year Plans shall include a proposed mechanism that provides incentives to the Program Administrators based on their success in meeting or exceeding the plan goals. G.L. c. 25, § 21(b)(2). Section 3.6.2 of the Department's Guidelines outlines principles for the design of a performance incentive mechanism. Pursuant to the Guidelines, an incentive mechanism must achieve the following: (1) be designed to encourage Program Administrators to pursue all available cost-effective energy efficiency; (2) be designed to encourage energy efficiency programs that will best achieve the Commonwealth's energy goals; (3) be based on clearly defined goals and activities that can be sufficiently monitored, quantified, and verified after the fact; (4) be

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[118] As discussed above, the AESC Study is conducted on a three-year cycle and will be updated during the 2022-2024 Three-Year Plan term, with results applied in the 2025-2027 plans (Statewide Plan, Exh. 1, App. A at 16).

available only for activities in which the Program Administrator plays a distinct and clear role in bringing about the desired outcome; (5) be as consistent as possible across all electric and gas Program Administrators; and (6) avoid any perverse incentives. Guidelines § 3.6.2. Further, the Guidelines specify that the amount of funds available for performance incentives should be kept as low as possible to minimize the costs to electricity and gas customers, while still providing appropriate incentives for the Program Administrators. Guidelines §§ 3.6.2, 3.6.3.

B. Program Administrators Proposal

1. Performance Incentive Mechanism

The Program Administrators[119] propose to implement a performance incentive mechanism for each year of the Three-Year Plan term (Statewide Plan, Exh. 1, Apps. A at 25-26; C.1 - Electric (Rev.); C.2 - Gas (Rev.); S.1 - Electric (Rev.); S.2 – Gas (Rev.)). The Program Administrators propose a statewide incentive pool equal to $131.8 million for the electric Program Administrators and $38.2 million for the gas Program Administrators (Statewide Plan, Exh. 1, App. A at 27).

The Program Administrators submit that the proposed incentive mechanism uses a benefits-based construct similar in form to that of the prior performance incentive model approved by the Department for the 2019-2021 Three-Year Plans' term (Statewide Plan,

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[119] The Compact does not receive a performance incentive. D.P.U. 08-50-A at 51. Accordingly, all references to "Program Administrators" in this section do not include the Compact.

Exh. 1, App. A at 25-26). For the 2022-2024 Three-Year Plans term, however, the Program Administrators propose a new performance incentive mechanism structure, comprised of the following: (1) an equity component; (2) an electrification component; and (3) a standard component, which accounts for all residual portfolio benefits (Statewide Plan, Exh. 1, App. A at 26-27). Additionally, the Program Administrators propose to discontinue the value component, stating that including a value component would disincentivize them from targeting the potentially more costly equity and electrification measures (Statewide Plan, Exh 1, App. A at 26).[120]

The Program Administrators propose to collect performance incentive dollars through each component at predetermined common payout rates, subject to thresholds and caps (Statewide Plan, Exh. 1, Apps. A at 26-27; S.1 - Electric (Rev.); S.2 - Gas (Rev.)). The threshold and cap levels are calculated based on design level performance, which is defined as 100 percent of a Program Administrator's projected benefits and net benefits (Statewide Plan, Exh. 1, App. A at 24 n.81). As discussed further below, the proposed payout rates, thresholds, and caps vary for each component, but are the same for each gas Program Administrator and for each electric Program Administrator for each year of the Three-Year Plan term (Statewide Plan, Exh. 1, App. A at 27; S.1 - Electric (Rev.); S.2 - Gas (Rev.)).

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[120] The Program Administrators state that they do not propose to include an ADR savings component, which was approved for the electric Program Administrators in the 2019-2021 Three-Year Plans' term because the market for these offerings is no longer nascent (Statewide Plan, Exh. 1, App. A at 25-26).

The Program Administrators propose a total portfolio cap of 125 percent of design level performance for the total possible performance incentive earned (Statewide Plan, Exh. 1, App. A at 27). The Program Administrators do not propose to set individual incentive caps for either the equity component or the electrification component; instead, the proposed incentive payouts for each component are subject to the total portfolio cap (Statewide Plan, Exh. 1, App. A at 27). Additionally, the Program Administrators propose to cap incentive payouts for the standard component at 125 percent of design level performance until the thresholds for both the equity and the electrification components are met (Statewide Plan, Exh. 1, App. A at 27).

Finally, the Program Administrators submit that in order to align with the 2022-2024 Three-Year Plan goals, along with the Commonwealth's goals under the Climate Act, they propose not to apply the marginal abatement cost benefits to fossil fuel measures for the purposes of calculating performance incentives (Statewide Plan, Exh. 1, App. A at 26). The Program Administrators assert that, while these costs are still included for purpose of assessing cost-effectiveness, removing the marginal abatement cost benefits of fossil fuel measures from performance incentive calculations ensures that electrification measures take priority over fossil fuel measures (Statewide Plan, Exh. 1, App. A at 26; Tr. 3, at 421-422).

2. Equity Component

The Program Administrators propose to allocate approximately $15.0 million for gas and $23.8 million for electric from the statewide incentive pool to a new equity component of

the performance incentive mechanism (Statewide Plan, Exh. 1, Apps. A at 27; S.1 - Electric (Rev.); S.2 - Gas (Rev.)). The Program Administrators state that the proposed payout rate for the equity component was determined by dividing the portion of the performance incentive pool allocated to the equity component by the planned statewide benefits from eligible equity measures (Statewide Plan, Exh. 1, App. A at 28).

The Program Administrators calculated the proposed equity component payout rates for the electric and gas Program Administrators at $0.0173 and $0.0136, respectively (Statewide Plan, Exh. 1, Apps. S.1 - Electric (Rev.); S.2 - Gas (Rev.)). The Program Administrators propose to implement one common payout rate for the electric Program Administrators that is 20 percent higher than the electric standard component payout rate and one common payout rate for the gas Program Administrators that is 55 percent higher than the gas standard component payout rate (Statewide Plan, Exh. 1, App. A at 28).

The proposed threshold for achieving an incentive through the equity component is 85 percent of planned portfolio equity benefits (Statewide Plan, Exh. 1, App. A at 27, 28). The Program Administrators explain that this threshold level will ensure growth in achievement of equity benefits beyond those achieved during the 2017-2019 term, when normalized for measures being offered in the 2022 2024 term (Statewide Plan, Exh. 1, App. A at 28). The Program Administrators propose that, upon meeting the threshold, they will begin to earn a performance incentive (Statewide Plan, Exh. 1, App. A at 28). The Program Administrators propose not to cap performance incentives from the equity and electrification components as long as the total performance incentive for a Program

Administrator does not exceed 125 percent of the total portfolio design level (Statewide Plan, Exh. 1, App. A at 27, 28).

The Program Administrators explain that the purpose of the equity component is to provide an incentive for the Program Administrators to achieve benefits in 38 Targeted Communities,[121] and for moderate-income customers statewide, including benefits achieved from electrification measures[122] (Statewide Plan, Exh. 1, App. A at 28). The Program Administrators state that the 38 Targeted Communities were determined using a method designed to target municipalities that are a priority for investment in energy efficiency based on criteria related to: (1) income; (2) minority or English isolation; and (3) historically low past participation in energy efficiency programs (Statewide Plan, Exh. 1, App. A at 28; Exh. DPU-Comm 3-3).

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121 As discussed further in Section IV.B.2.a.iv. above, the Program Administrators identified 38 communities as "environmental justice" communities that will be prioritized for energy efficiency investment (Statewide Plan, Exh. 1, at 21). The Program Administrators state that they have not defined specific equity measures eligible for incentives under the equity component (Exhs. DPU-Comm 3-1; DPU-Comm 3-3). Instead, the Program Administrators propose that benefits from any installed measure, including moderate-income and electrification measures (but excluding those installed by medium and large commercial customers), in one of the 38 Targeted Communities, will be counted towards the equity component performance incentive (Exh. DPU-Comm 3-1).

122 To avoid the double counting of benefits, the Program Administrators propose to classify electrification measures that also qualify as equity measures as equity measures (Statewide Plan, Exh. 1, App. A at 26; Exh. DPU-Comm 3-3; Tr. 3, at 418-419).

3. Electrification Component

The Program Administrators propose to allocate approximately $2.8 million for gas and $37.6 million for electric from the statewide incentive pool to a new electrification component of the performance incentive mechanism (Statewide Plan, Exh. 1, Apps. A at 27; S.1 - Electric (Rev.); S.2 - Gas (Rev.)). The Program Administrators state that the proposed payout rate for the electrification component was determined by dividing the portion of the performance incentive pool allocated to the electrification component by the planned statewide benefits from eligible electrification measures (Statewide Plan, Exh. 1, App. A at 29).

The proposed payout rate of the electrification component for the electric and gas Program Administrators is $0.0173 and $0.0136, respectively (Statewide Plan, Exh. 1, Apps. S.1 - Electric (Rev.); S.2 - Gas (Rev.)). The Program Administrators propose one common payout rate for the electric Program Administrators that is 20 percent higher than the electric standard component payout rate and one common payout rate for the gas Program Administrators that is 55 percent higher than the gas standard component payout rate (Statewide Plan, Exh. 1, App. A at 29).

The proposed threshold for achieving an incentive through the electrification component is 60 percent of planned portfolio electrification benefits (Statewide Plan, Exh. 1, App. A at 29; S.1 - Electric (Rev.); Tr. 3, at 401-404).[123] The Program Administrators

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[123] The Program Administrators alternately identify the proposed threshold for the electrification component at 50 percent in Statement Plan, Exh. 1, App. A at 27 and

explain that this proposed threshold level ensures that they achieve a minimum level of electrification benefits for customers prior to receiving any performance incentives, and also accounts for the large uncertainty and scale of electrification goals (Statewide Plan, Exh. 1, App. A at 29).

The Program Administrators state that the purpose of the electrification component is to provide an incentive for the Program Administrators to accelerate the adoption of eligible measures and achieve benefits from electrification measures outside of the 38 Targeted Communities or moderate-income customers statewide (Statewide Plan, Exh. 1, App. A at 29).[124]

4. Standard Component

The Program Administrators propose to allocate approximately $20.3 million for gas and $70.4 million for electric from the statewide incentive pool to a new standard component of the performance incentive mechanism (Statewide Plan, Exh. 1, Apps. A at 27; S.1 - Electric (Rev.); S.2 - Gas (Rev.)). The Program Administrators state that the purpose of the standard component is to provide an incentive for the Program Administrators to

60 percent in Statewide Plan, Exh. 1, App. A at 29. During evidentiary hearings, the Program Administrators verified that the proposed threshold is 60 percent (Tr. 3, at 401).

[124] To avoid the double-counting of benefits, the Program Administrators propose to count any electrification measures within the 38 Targeted Communities or for moderate-income customers under the equity component and not the electrification component (Statewide Plan, Exh. 1, App. A at 26; Exh. DPU-Comm 3-3 Tr. 3, at 418-419).

achieve portfolio benefits that do not fall under the equity and electrification components (Statewide Plan, Exh. 1, App. A at 29). The proposed payout rate for the standard component was determined by dividing the portion of the performance incentive pool allocated to the standard component by the planned statewide benefits from eligible standard component measures (Statewide Plan, Exh. 1, App. A at 29). The proposed payout rate for the standard component for the electric and gas Program Administrators is $0.0144 and $0.0087, respectively (Statewide Plan, Exh. 1, Apps. S.1 - Electric (Rev.); S.2 - Gas (Rev.)).

Under the proposal, the threshold for achieving an incentive through the standard component is either 75 percent of planned standard component benefits or the statewide weighted portfolio threshold (Statewide Plan, Exh. 1, App. A at 27, 29; Tr. 3, at 403). The Program Administrators propose to establish the weighted portfolio threshold statewide by first calculating the summed threshold value of benefits for each component and subsequently dividing the total threshold benefits by the total planned benefits (Statewide Plan, Exh. 1, App. A at 29). Using this method, the Program Administrators propose to establish a weighted portfolio threshold of 73 percent for the electric Program Administrators and 77 percent for the gas Program Administrators (Statewide Plan, Exh. 1, App. A at 29-30).

5. Discontinuation of Value Component

The Program Administrators propose to discontinue the value component to (1) help avoid conflicting incentives and (2) promote achievement of electrification measures and equitable access to programs (Statewide Plan, Exh. 1, App. A at 26; Exh. DPU-Comm 3-16,

at 2-3). The Program Administrators state that if the value component is preserved, it could provide a disincentive for them to target equity and electrification measures, given the higher cost of these measures relative to those included under the standard component (Statewide Plan, Exh. 1, App. A at 26; Exh. DPU-Comm 3-16, at 2-3). Upon the Department's request in discovery, the Program Administrators submitted a revised exemplar performance incentive mechanism that included a value component (Exh. DPU-Comm 3-16, Att.).

C. Positions of the Parties

1. Program Administrators

The Program Administrators assert that its proposed performance mechanism is consistent with the Department's standards for the design of performance incentives and, therefore, should be approved (Program Administrators Brief at 68, 79-80). The Program Administrators claim that the proposed incentive structure supports the Commonwealth's energy and climate goals by targeting equity- and electrification-related benefits (Program Administrators Brief at 78).

In addition, the Program Administrators claim that it is necessary to discontinue the value component so that they have an incentive to target the potentially more costly equity and electrification measures (Program Administrators Brief at 68-69, citing Statewide Plan, Exh. 1, App. A at 26; Exh. DPU-Comm 3-16(a), (b)). The Program Administrators assert that the significant increase in the scope and scale of the programs in these Three-Year Plans, including a marked increase of electrification measures, results in greater uncertainty in determining planned costs compared to past plans (Program Administrators Brief at 69, citing

Statewide Plan, Exh. 1, App. A at 26; Exh. DPU-Comm 3-16(a)). Therefore, the Program Administrators contend that a value component may either reward the Program Administrators for initially over-estimating planned costs or unduly penalize them should initial cost estimates for large C&I electrification projects prove insufficient to achieve targeted reductions (Program Administrators Brief at 69, citing Statewide Plan, Exh. 1, App. A at 26; Exh. DPU-Comm 3-16(a)). The Program Administrators maintain that the Council, Attorney General, and DOER support removal of the value component (Program Administrators Brief at 69, citing Statewide Plan, Exh. 1, App. A at 26).

The Program Administrators contend that setting a total portfolio-level cap, rather than individual caps for each of the three components, will allow for flexibility over the Three-Year Plan term and across sectors, while encouraging the Program Administrators to achieve savings where they exist to reach portfolio goals and avoid split incentives (Program Administrators Brief at 78). The Program Administrators also argue that there are no perverse incentives or double counting of benefits with their proposal because each component has a distinct benefit pool and a separate subset of the total portfolio benefits (Program Administrators Brief at 78, citing Statewide Plan, Exh. 1, App. A at 28-29). Finally, the Program Administrators assert that their cost-effectiveness models include sufficient information to enable the Program Administrators to appropriately monitor, quantify, and verify each measure and incentive dollar earned without double counting (Program Administrators Brief at 78-79, citing Guidelines § 3.6.2(c)).

2. Attorney General

The Attorney General submits that the proposed three-component performance incentive approach better encourages achievement of equity and electrification priorities and complies with Department precedent and regulatory principles (Attorney General Brief at 21). Additionally, the Attorney General supports elimination of the value component, maintaining that it would provide a disincentive for the Program Administrators to undertake the increased investment necessary to achieve the electrification and equity priorities (Attorney General Brief at 23, citing Exh. DPU-Comm 3-16; Tr. 3, at 388-390). Further, the Attorney General asserts that the intended purpose of the value component (i.e., minimizing costs to achieve benefits) is realized through other mechanisms, such as reporting and mid-term modification requirements (Attorney General Brief at 23-24, citing Exh. DPU-Comm 3-16(b); Tr. 3, at 290-291; Guidelines § 3.8). The Attorney General, therefore, recommends that the Department approve of the performance incentive mechanism as proposed (Attorney General Brief at 24).

Finally, the Attorney General recommends that if the Department requires inclusion of the value component in the performance incentive mechanism, it consider alternative approaches to the value mechanism design from prior plans (Attorney General Reply Brief at 2). In this regard, the Attorned General maintains that DOER's recommendation that the Department apply the value component individually to each of the three benefit categories, rather than at the total portfolio level, is an appropriate alternative (Attorney General Reply Brief at 2).

3. Department of Energy Resources

DOER argues that the proposed performance incentive mechanism (1) complies with the Climate Act, (2) is needed to ensure the Three-Year Plans deliver all necessary GHG emissions reduction and equitable outcomes, and (3) is consistent with the Department's Guidelines and precedent (DOER Brief at 28, 30). DOER submits that the equity component supports the proposed program implementation approach of using geographically targeted community partnerships to increase awareness, participation, and equitable distribution of benefits (DOER Brief at 31). Further, DOER argues that the three-component mechanism appropriately addresses the new Climate Act requirements and ensures the Three-Year Plans will target the Commonwealth's electrification and equity priorities (DOER Brief at 33).

Additionally, DOER asserts that the removal of the value component is appropriate given the Climate Act requires the Program Administrators to prioritize achieving benefits at the lowest-cost but also to consider the new electrification and equity goals (DOER Brief at 33-34). Specifically, DOER contends that the benefits associated with equity and electrification are expected to come at a higher cost than those associated with the standard component (DOER Brief at 34, citing Statewide Plan, Exh. 1, App. A at 26). Moreover, DOER argues that a value component is not necessary because there are already mechanisms in place to minimize costs, such as regular reporting and the inherent motivation for utilities to minimize energy efficiency related bill impacts for their customers (DOER Brief at 34-35).

DOER argues that if the Department determines a value component is a necessary cost containment mechanism, it should approve distinct value components for each of the three component pools, rather than applying the value component to the portfolio as a whole (DOER Brief at 35; DOER Reply Brief at 5). DOER contends that having three distinct value components will provide an incentive for the Program Administrators to achieve the new Three-Year Plan priorities at the lowest cost and will avoid a performance incentive mechanism that provides an incentive for the pursuit of lower-cost energy efficiency measures in affluent communities over energy efficiency measures in historically underserved communities (DOER Brief at 35-36). Further, if the Department retains the value component, DOER recommends reducing its weight compared to past plans (DOER Brief at 35; DOER Reply Brief at 5). DOER argues that the applied weight should be lower than the 20 percent allocation offered by the Program Administrators in response to the Department's discovery request for an exemplar performance mechanism that included a value component (DOER Brief at 35, citing Exh. DPU-Comm 3-16, Att.).

4. Acadia Center

Acadia argues that the structure of the proposed performance incentive mechanism, including the new components related to equity and electrification, meet statutory criteria and the Department's Guidelines (Acadia Brief at 21-22). Acadia asserts that the three proposed incentive components do not suffer from the same design defects as the renter component rejected by the Department in the 2019-2021 Three-Year Plans (Acadia Brief at 23, citing 2019-2021 Three-Year Plans Order, at 93-95). Specifically, Acadia argues that the Program

Administrators have: (1) designed the incentive mechanism in such a way that the savings and benefits pools do not cross; (2) proposed specific threshold targets that must be met to collect a performance incentive; and (3) proposed an incentive that encourages the Program Administrators to undertake activities they normally would not (Acadia Brief at 23-24).

Additionally, Acadia contends that the equity component is designed to provide an appropriate incentive for the Program Administrators to reach traditionally underserved populations (Acadia Brief at 24). Finally, Acadia argues that the electrification incentive is necessary for gas Program Administrators because electrification runs counter to the gas utility business model (Acadia Brief at 27). Specifically, Acadia maintains that as more consumers electrify, the gas Program Administrators will lose customers and associated revenues, and the opportunity to earn returns on expanded gas infrastructure (Acadia Brief at 27).

5. Conservation Law Foundation

CLF submits that an equity component is necessary to ensure that the Program Administrators appropriately prioritize equity and justice in the implementation of their Three-Year Plans (CLF Brief at 43). Further, CLF asserts that the equity component is a positive development that will help the Program Administrators increase access for environmental justice communities and underserved individuals (CLF Brief at 45).

D. Analysis and Findings

1. Introduction

The Green Communities Act provides that the Three-Year Plans shall include a proposed incentive mechanism. G.L. c. 25, § 21(b)(2). As described above, the Program Administrators propose a performance incentive mechanism that is different than the one approved by the Department for the 2019-2021 Three-Year Plans term (Statewide Plan, Exh. 1, App. A at 25-26). Specifically, the Program Administrators propose a new performance incentive structure comprised of an equity component, an electrification component, and a standard component (Statewide Plan, Exh. 1, App. A at 23-31). The Program Administrators do not propose to include a value component (Statewide Plan, Exh. 1, App. A at 23-31). Additionally, the Program Administrators propose to cap incentives at the total portfolio level rather than setting an individual cap for each component (Statewide Plan, Exh. 1, App. A at 27).

2. Performance Incentive Mechanism

a. Statewide Incentive Pool

The electric Program Administrators propose a statewide performance incentive pool of approximately $131.8 million (Statewide Plan, Exh. 1, App. S.1 - Electric (Rev.)). The gas Program Administrators propose a statewide performance incentive pool of approximately $38.2 million (Statewide Plan, Exh. 1, App. S.2 - Gas (Rev.)).

Performance incentives should provide an appropriate level of shareholder reward for the successful implementation of a Three-Year Plan. Accordingly, the performance incentive

pool should reflect the effort the Program Administrators must undertake to encourage the pursuit of all cost-effective energy efficiency. In addition, the Department finds that, similar to its standard for setting a fair and reasonable return on equity, we may exercise discretion in considering various factors to determine the appropriate level of performance incentives, including qualitative factors such as compliance with the Green Communities Act and Department directives, the reviewability and reliability of filings, customer service, and management performance. See, e.g., NSTAR Gas Company, D.P.U. 21-GREC-06, at 26-27 (2021); Boston Gas Company, D.P.U. 20-120, at 437-438 (2021); NSTAR Gas Company, D.P.U. 19-120, at 406-408 (2020); Boston Gas Company and Colonial Gas Company, D.P.U. 17-170, at 308-309 (2018).

In 2019-2021 Three-Year Plans Order, at 88-89, the Department approved a statewide incentive pool equal to approximately six percent of the electric Program Administrators' budgets for each year (before taxes) and approximately three percent of the gas Program Administrators' budgets for each year (before taxes). In the instant Three-Year Plans, the proposed statewide incentive pool is approximately 4.7 percent of the electric Program Administrators' budgets for each year (before taxes) and approximately 3.1 percent of the gas Program Administrators' budgets for each year (before taxes) (Statewide Plan, Exh. 1, App. A at 28; C.1 - Electric (Rev.); C.2 - Gas (Rev.)).[125]

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[125] The electric and gas Program Administrators' proposed budgets for the Three-Year Plans term are substantially larger in comparison to the budgets approved in the 2019-2021 Three-Year Plans term (Statewide Plan, Exh. 1, Apps. C.1 – Electric (Rev.) at 14; C.2 – Gas (Rev.) at 9). Although the proposed performance incentive

The Department finds that the proposed statewide incentive pool, as a percentage of Program Administrators' budgets, is consistent with the statewide incentive pool in previous three-year plans (Statewide Plan, Exh 1, Apps. C.1 - Electric (Rev.); C.2 - Gas (Rev.)). 2019-2021 Three-Year Plans Order, at 88-89. Nevertheless, the Department must take into account the deficiencies of the Program Administrators' Three-Year Plan filings and other issues discussed in Section III, above, which have impacted the reviewability and reliability of the filings, as well as the Department's ability to conduct an efficient but thorough review of the Three-Year Plan filings within the 90-day statutory review period. Given the deficiencies and compliance issues discussed above in Section III, the Department will reduce the proposed incentive pool for each gas and electric Program Administrator by ten percent. See, e.g., Milford Water Company, D.P.U 12-86, at 274-276 (2013); D.P.U. 08-27, at 71, 137-138 (2009).

After review, subject to the mandated reductions to the proposed gas and electric statewide incentive pools, the Department finds that the funds available for performance incentives have been kept as low as possible, while still providing appropriate incentives for the Program Administrators (see Statewide Plan, Exh. 1, Apps. S.1 - Electric (Rev.); S.2 - Gas (Rev.); Guidelines §§ 3.6.2, 3.6.3).

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pools are consistent with the incentive pools in the 2019-2021 Three-Year Plans as a percentage of total proposed budget, this alone is not per se indicative that the funds available for performance incentives have been kept as low as possible, especially given the substantial increase in proposed budgets between plans.

b. Equity Component

The Program Administrators propose to add a new equity component to the performance incentive mechanism and allocate funds from the statewide incentive pool to this effort (i.e., 23.8 million for electric and 15.0 million for gas) (Statewide Plan, Exh. 1, App. A at 27). The Program Administrators maintain that the purpose of the new equity component is to provide an incentive to achieve benefits in the 38 Targeted Communities identified in Section IV.B.2.a.iv., above (Statewide Plan, Exh. 1, at 21 & App. A at 28). The Program Administrators further argue that, absent a targeted equity component, the Three-Year Plans would fail to adequately support the Commonwealth's energy and climate goals (Program Administrators Brief at 78, citing Guidelines § 3.6.2(b)). The Attorney General and other parties support the adoption of the equity component (Attorney General Brief at 21; DOER Brief at 28, 33; 36-37; Acadia Brief at 21-22; CLF Brief at 43).

The Department finds that the addition of an equity component will encourage the Program Administrators to pursue all cost-effective energy efficiency in an equitable manner. However, the Program Administrators have not defined any specific measures as "equity measures" (Exhs. DPU-Comm 3-1; DPU-Comm 3-3). Pursuant to the Guidelines, a performance incentive mechanism must be based on clearly defined goals and activities that can be sufficiently monitored, quantified, and verified after the fact. Guidelines § 3.6.2. The Program Administrators bear the risk that the Department may reject requested incentive payments if performance cannot be verified easily and objectively. D.P.U. 13-67, at 9-10 &

n.19 (2014). Without distinct equity measures, the Department finds that the specific goals of the equity component are not sufficiently defined and, as a result, the Department cannot adequately monitor, quantify, and verify the Program Administrators' performance as it relates to equity. Accordingly, the Department directs each Program Administrator to provide the following information in its compliance filing: (1) revised Energy Efficiency Data Tables identifying specific equity measures and their associated planned savings, costs, and benefits at the measure level, which must be readily distinguishable from savings, costs (including allocated costs), and benefits for the savings and electrification components; and (2) a detailed description of the method the Program Administrators will use to track the success of each equity measure at the ZIP code level.

Further, pursuant to the Department's directives in Section IV.D.3.a.ii, above, the Department finds that the equity component should provide an incentive for Program Administrators to pursue all cost-effective energy efficiency from customers in municipalities with environmental justice communities that also have historically lower participation rates. Accordingly, the Program Administrators shall apply the benefits achieved from the Targeted Hard-to-Reach Communities that meet the criteria outlined in Section IV.D.3.a.ii, above, towards the equity component of the performance incentive mechanism. The Program Administrators shall also apply the benefits achieved from moderate-income customers statewide as well as benefits achieved from electrification measures in the Targeted Hard-to-Reach Communities discussed above, through the equity component.

The Department accepts that significant effort will be required to develop strategies to address participation barriers that can successfully deliver energy efficiency benefits to historically lower-served customer groups and communities (Statewide Plan, Exh. 1, at 65-70). After review, the Department finds that the equity component, as modified herein, will provide an appropriate incentive for the Program Administrators to overcome participation barriers and undertake activities that they would not otherwise undertake absent a performance incentive. 2019-2021 Three-Year Plans Order, at 96; D.P.U. 13-67, at 10. Additionally, the Department finds that the equity component is designed to encourage the pursuit of all cost-effective energy efficiency opportunities, wherever available. G.L. c. 25, §§ 19(a), 19(b), 21(a), 21(b)(1), 21(b)(2), 21(d)(2); Guidelines § 3.6.2. The threshold for achieving a performance incentive through the equity component shall be 85 percent of planned benefits for this component. Subject to the above directives, the Department approves the modified equity component of the proposed performance incentive mechanism.

c. Electrification Component

The Program Administrators propose to add a new electrification component to the performance incentive mechanism and allocate funds from the statewide incentive pool to this component (i.e., $37.6 million for electric Program Administrators and $2.8 million for gas Program Administrators) (Statewide Plan, Exh. 1, App. A at 27). The Program Administrators maintain that the purpose of the new electrification component is to provide an incentive to the Program Administrators to achieve benefits from strategic electrification measures that are not in the 38 Targeted Communities or for moderate-income customers

statewide (Statewide Plan, Exh. 1, App. A at 29). The Attorney General, DOER, and Acadia support the adoption of the electrification component (Attorney General Brief at 21; DOER Brief at 28; Acadia Brief at 21-22). Specifically, Acadia argues that the electrification component is necessary for gas Program Administrators because strategic electrification runs counter to the gas utility business model (Acadia Brief at 26-27).

The Program Administrators indicate that some unidentified strategic electrification measures are not eligible under the electrification component (Statewide Plan, Exh. 1, App. A at 29).[126] Pursuant to the Guidelines, a performance incentive mechanism must be based on clearly defined goals and activities that can be sufficiently monitored, quantified, and verified after the fact. Guidelines § 3.6.2. As discussed in Performance Metrics, D.P.U. 13-67, at 9-10 n.19 (2014), the Program Administrators bear the risk that the Department may reject requested incentive payments if performance cannot be verified easily and objectively. Without distinct, qualified electrification measures, the Department finds that the specific goals of the electrification component are not sufficiently defined and, as a result, the Department cannot adequately monitor, quantify, and verify the Program Administrators' performance as it relates to electrification as defined under this component. Accordingly, each Program Administrator shall provide the following information in its required compliance filing: (1) revised Energy Efficiency Data Tables identifying specific

[126] As discussed above, the Department has modified the criteria for the equity component and, therefore, electrification measures installed in any of the communities that meet the modified criteria are not eligible for the electrification component.

electrification measures and their associated planned savings, costs (including allocated costs), and benefits at the measure level, which must be readily distinguishable from savings, costs (including allocated costs), and benefits for the savings and equity components; and (2) a detailed description of the method the Program Administrators will use to track the success of each strategic electrification measure at the ZIP code level.

With the required modifications addressed above, the Department finds that the addition of an electrification component to the proposed performance incentive mechanism is consistent with the Commonwealth's energy policies. The Department accepts that significant efforts will be required to develop strategies and train a workforce during this term to deliver strategic electrification measures consistent with G.L. c. 25, § 21(b)(2) (Statewide Plan, Exh. 1, at 14). After review, the Department finds the proposed electrification component, as modified above, is appropriately designed to overcome barriers in the nascent market for fuel conversions (see Tr. 3, at 363-364). 2019-2021 Three-Year Plans Order, at 96. However, as proposed, the Department finds that the electrification component contains insufficient safeguards to ensure that it will not provide a perverse incentive for the Program Administrators to pursue electrification without prior weatherization and the right-sizing of cooling and heating equipment in order to increase claimable benefits with a higher payout rate.[127]

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[127] Weatherization ensures that customers installing heat pumps are well positioned to increase the overall energy efficiency of their heat pump, while mitigating bill impacts. Weatherization also reduces energy demand on the electric grid, thereby improving reliability and reducing the need for infrastructure upgrades. Right-sizing

To address this design flaw, the Department finds that it is necessary to make the payout of performance incentives in the electrification component contingent upon weatherization. Specifically, in order to earn performance incentives in the electrification component, a Program Administrator will be required to verify that the customer has weatherized prior to or within six months after the installation of a heat pump. The Department also expects the Program Administrators to ensure that heat pump installers are properly trained on program requirements, quality installation, and right-sizing prior to these contractors providing strategic electrification service to customers (Statewide Plan, Exh. 1, at 83).

In their required compliance filings, the Program Administrators shall include a detailed description of how they will track customer weatherization and heat pump installation at the ZIP code level. In addition, prior to the end of the 2022-2024 Three-Year Plan term, the Program Administrators shall undertake an evaluation study comparing energy usage, costs, and comfort level for customers that did and did not weatherize prior to or after heat pump installation. The evaluation study must include a discussion of comparative bill impacts for each case. With these required modifications, the Department finds that the proposed electrification component is otherwise consistent with the principles established by

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cooling and heating equipment ensures that a system is properly sized for a customer's needs, which improves efficiency, reduces operating costs, reduces noise, and improves comfort.

the Department for the design of a performance incentive mechanism.
2019-2021 Three-Year Plans Order, at 96; D.P.U. 13-67, at 8-15.

Finally, the Department finds that the electrification component, as modified herein, is constructed in such a way to encourage the pursuit of all cost-effective energy efficiency opportunities, consistent with the Green Communities Act. G.L. c. 25, §§ 19(a), 19(b), 21(a), 21(b)(1), 21(b)(2), 21(d)(2); Guidelines § 3.6.2. The threshold for achieving a performance incentive through the electrification component shall be 85 percent of planned benefits for this component. Subject to the modifications required above, the Department approves the electrification component of the proposed performance incentive mechanism.

d. Standard Component

The Program Administrators propose to include a redesigned standard component in the proposed performance incentive mechanism and allocate funds from the statewide incentive pool to this component (i.e., $70.4 million for the electric Program Administrators and $20.3 million for the gas Program Administrators) (Statewide Plan, Exh. 1, App. A at 27). The Program Administrators state that the standard component is designed to provide them with an incentive to achieve benefits in the areas not covered under the electrification and equity components (Statewide Plan, Exh. 1, App. A at 29).

The Program Administrators propose to exclude marginal abatement cost benefits associated with fossil fuel measures for the purposes of calculating performance incentives in the standard component (Statewide Plan, Exh. 1, App. A at 26). The Program

Administrators claim that the exclusion of these benefits provides an incentive for them to pursue strategic electrification (Statewide Plan, Exh. 1, App. A at 26; Tr. 3, at 421-422).

The Department is not persuaded by the Program Administrators' argument that the inclusion of all benefits in the savings component may disincentivize their pursuit of strategic electrification measures. The electrification component is designed with a higher payout rate and a dedicated performance incentive pool that provides enhanced incentives to pursue strategic electrification. Further, the performance incentive mechanism must be designed to encourage the pursuit of all cost-effective energy efficiency opportunities, consistent with the Green Communities Act. G.L. c. 25, §§ 19(a), 19(b), 21(a), 21(b)(1), 21(b)(2), 21(d)(2); Guidelines § 3.6.2. Accordingly, the Department does not approve the Program Administrators' proposal to exclude marginal abatement cost benefits associated with fossil fuel measures for the purposes of calculating performance incentives in the standard component.

The Department finds that the standard component, as modified herein, is designed to avoid any perverse incentives and is as consistent as possible across all electric and gas Program Administrators. Guidelines § 3.6.2. Further, the Department recognizes that the standard component serves a similar function to the savings component included in prior three-year plans. <u>2019-2021 Three-Year Plans Order</u>, at 77-78; <u>2016-2018 Three-Year Plans Order,</u> at 57-58; <u>2013-2015 Three-Year Plans Order</u>, at 92-93; <u>2010-2012 Gas Three-Year Plans Order</u>, at 82-83; <u>2010-2012 Electric Three-Year Plans Order</u>, at 95-96. The Department finds that a savings component is an essential element of a well-designed

performance incentive mechanism and historically has contributed to successfully administered energy efficiency programs. Accordingly, the Department approves the inclusion of the standard component, as modified herein, in the proposed performance incentive mechanism. The threshold for achieving a performance incentive through the standard component shall be 75 percent of planned benefits for this component or the statewide weighted portfolio threshold described above.

e. Value Component

The Program Administrators do not propose to include the value component in the performance incentive mechanism for the 2022-2024 Three-Year Plan term (Statewide Plan, Exh. 1, App. A at 26). The Program Administrators maintain that removal of the value component is necessary because it could provide a disincentive for the Program Administrators to target the potentially more costly equity and electrification measures (Program Administrators Brief at 68-69). The Attorney General and DOER support removal of the value component from the performance incentive mechanism, arguing that it is redundant to other components of the proposed performance incentive mechanism (Attorney General Brief at 23, citing Tr. 3, at 290-291; DOER Brief at 33). DOER suggests that if the Department directs the Program Administrators to add a value component to the performance incentive mechanism, it should be comprised of distinct value components for equity, electrification, and standard energy efficiency (DOER Brief at 35).

In all previous three-year energy efficiency plans, the value component has been a central element of the performance incentive mechanism. 2019-2021 Three-Year Plans

Order, at 91-92; 2016-2018 Three-Year Plans Order, at 67-68; 2013-2015 Three-Year Plans Order, at 98; 2010-2012 Gas Three-Year Plans Order, at 101-102; 2010-2012 Electric Three-Year Plans Order, at 114. Importantly, the value component provides an incentive for the Program Administrators to pursue energy efficiency programs that maximize net benefits. 2010-2012 Gas Three-Year Plans Order, at 109-110; 2010-2012 Electric Three-Year Plans Order, at 101-102. Further, as a means to ensure that the Program Administrators continue to focus on cost efficiency as well as cost effectiveness, the Department determined that it was appropriate to tie the achievement of performance incentives to the delivery of cost-effective programs. 2019-2021 Three-Year Plans Order, at 97-98.

The Department is not persuaded by the Program Administrators' argument that a value component may disincentivize their pursuit of equity and electrification measures. Rather, the Department has found that a portion of the incentive pool must be tied to the achievement of net benefits to ensure that the Program Administrators are administering energy efficiency programs in a cost-effective manner. 2019-2021 Three-Year Energy Efficiency Plans, D.P.U. 18-110-A through D.P.U. 18-115-A and D.P.U. 18-117-A through 18-119-A, at 16-18 (2021). The Department is not persuaded that the value component is redundant in function to other elements of the proposed performance incentive mechanism, as suggested by the Attorney General and DOER. Instead, the value component ensures that the Program Administrators have an appropriate incentive to implement energy efficiency programs in a cost-effective and cost-efficient manner. D.P.U. 18-110-A through D.P.U. 18-115-A and D.P.U. 18-117-A through 18-119-A, at 16-18. Accordingly, the

Department finds that inclusion of a value component in the proposed performance incentive mechanism is necessary to encourage the Program Administrators to pursue all available cost-effective energy efficiency. Guidelines at § 3.4.7.

Further, the Department is not persuaded by DOER's argument that there should be distinct value components. In this regard, the Department finds that DOER has failed to show the benefits of its proposed structure over one that applies a value component to the net benefits of the total portfolio. In consideration of the additional costs required to achieve equity and electrification benefits, the Department finds that a value component based on portfolio-level benefits most appropriately provides an incentive for the Program Administrators to control administrative costs.

In addition, the Department cannot approve the Program Administrators' proposal to discontinue the value component because of the critical role this component plays in incentivizing the Program Administrators to minimize costs and focus efforts on core initiatives that deliver cost-effective savings. As discussed in Section V.D.1, above, the Program Administrators propose a significant increase in PP&A costs for this Three-Year Plans term. The electric Program Administrators have proposed an increase of approximately $8.4 million (or 8.6 percent) in planned PP&A costs over the Three-Year Plans term (Statewide Plan, Exh. 1, App. C.1 - Electric (Rev.), Table IV.C.2.2). The gas Program Administrators have proposed an increase of approximately $13.2 million (or 40 percent) in planned PP&A costs over the Three-Year Plans term (Statewide Plan, Exh. 1, App. C.2 - Gas (Rev.), Table IV.C.2.2). In light of these significant increases, the

Department finds it necessary to ensure that the Program Administrators possess a clear incentive to minimize administrative costs when implementing the Three-Year Plans. Accordingly, the Program Administrators shall include a value component in this and all future performance incentive mechanisms. The calculation of costs and benefits under the value component must comply with the Department's directives in the 2019-2021 Three-Year Plans Order, at 91-92.

In order to ensure that the Program Administrators have an adequate incentive to pursue net benefits, the Program Administrators shall allocate no less than 30 percent of the total incentive pool for the gas and electric Program Administrators to the value component. The threshold for achieving a performance incentive through the value component shall be 75 percent of planned portfolio net-benefits. The Department finds that this allocation is necessary to ensure that the Program Administrators have an appropriate incentive to minimize costs and focus their efforts on core initiatives that deliver cost-effective savings. Accordingly, the allocations of the total incentive pool as well as the payout rates for the electrification, equity, and standard components must be adjusted to incorporate the addition of the value component for the gas and electric Program Administrators.[128]

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[128] When revising the performance incentive mechanism, consistent with the directives contained herein, the Program Administrators shall ensure that the payout rates for each component are uniform across all Program Administrators. 2016-2018 Three-Year Plans Order, at 68. Further, the Program Administrators shall recalculate the payout rates for each component consistent with the design of the components and directives contained herein, however, the payout rates for the equity and electrification components must be at least ten percent higher than the standard component payout rate.

f. Incentive Caps

The Program Administrators do not propose to cap the incentive levels for the equity and electrification components as long as the total performance incentive does not exceed 125 percent of the total portfolio design level (Statewide Plan, Exh. 1, App A at 27). Alternately, the Program Administrators propose to cap the standard component at 125 percent of the design level until the thresholds for the equity and electrification components are met (Statewide Plan, Exh. 1, App. A at 27). The Program Administrators argue that substituting a portfolio-level cap for component-level caps allows for flexibility over the Three-Year Plans term and across sectors, thereby appropriately encouraging Program Administrators to achieve savings where they exist to reach portfolio goals and avoid split incentives (Program Administrators Brief at 78).

The Department recognizes the value of allowing some flexibility in the design of the performance incentive mechanism; however, without parallel cost containment for each component, there is a risk that equity and electrification measures will not be appropriately prioritized. Accordingly, the Program Administrators shall cap performance incentives at the design level for each of the four components until all component threshold benefit levels are met. Further, if a Program Administrator meets the threshold benefit level for all components, then any additional incentives above the design level shall not be subject to the cap. This will ensure that the design of the performance incentive mechanism encourages the Program Administrators to pursue all available cost-effective energy efficiency in a way that

best achieves the Commonwealth's energy goals as well as the GHG emissions reduction goals set by the EEA Secretary.

E. Conclusion

The Department approves the proposed equity, electrification, and standard components of the proposed performance incentive mechanism, subject to the modifications and directives contained herein. The Department does not approve the Program Administrators' proposal to discontinue the value component and use a total portfolio cap. Instead, the Program Administrators shall include a value component in the performance incentive mechanism consistent with the above directives, including the directives contained in 2019-2021 Three-Year Plans Order, at 91-92. Further, the Program Administrators shall cap performance incentives at the design level for each component until all component thresholds are met, after which point further incentives will not be capped.

Consistent with Department precedent, if a program is not cost effective over the term, the Program Administrators shall remove performance incentives for the associated non-cost-effective core initiatives included in the non-cost-effective program. 2019-2021 Three-Year Plans Orders, at 98-99; D.P.U. 18-110-A through D.P.U. 18-115-A and D.P.U. 18-117-A through D.P.U. 18-119-A at 16. Finally, subject to a ten percent reduction in the statewide incentive pool for the gas and the electric Program Administrators, the Department approves the Program Administrators' proposed statewide incentive pool.

The Department finds that the revised performance incentive mechanism provides an appropriate level of incentive to encourage the Program Administrators to pursue all

cost-effective energy efficiency, while also reflecting the need for the Program Administrators to improve the quality of their filings with the Department and compliance with Department directives. Further, the modifications to the equity and electrification components, combined with the reinstatement of the value component will: (1) provide enhanced incentives for the Program Administrators to pursue strategic electrification in line with the Commonwealth's energy policies, including the goals of the Massachusetts 2050 Decarbonization Roadmap; (2) address participation barriers and improve service to environmental justice communities with historically lower participation; and (3) encourage the Program Administrators to pursue benefits in a cost-efficient manner and minimize administrative costs.

VIII. FUNDING SOURCES

A. Introduction

For electric Program Administrators, the Green Communities Act identifies four funding sources for energy efficiency programs: (1) revenues collected from ratepayers through the SBC; (2) proceeds from the Program Administrators' participation in the FCM; (3) proceeds from cap and trade pollution control programs, including but not limited to RGGI; and (4) other funding as approved by the Department, including revenues to be recovered from ratepayers through a fully reconciling funding mechanism (i.e., EES). G.L. c. 25, §§ 19(a), 21(b)(2)(vii). In approving a funding mechanism for electric Program Administrators, the Department must consider: (1) the availability of other private or public funds; (2) whether past programs have lowered the cost of electricity to consumers; and

(3) the effect of any rate increases on consumers. G.L. c. 25, § 19(a). For gas Program Administrators, the Green Communities Act requires the gas Three-Year Plans to include a fully reconciling funding mechanism (i.e., EES) to collect energy efficiency program costs from ratepayers. G.L. c. 25, § 21(b)(2)(vii); see also G.L. c. 25, § 21(d)(2). In approving a funding mechanism for gas Program Administrators, the Department must consider the effect of any rate increases on consumers. D.P.U. 08-50-A at 56; Guidelines § 3.2.2.2. The Department also considers the affordability of the bill impacts and the equitable distribution of costs amongst customers. G.L. c. 25, § 1A.

B. Program Administrators Proposal

1. Non-Energy Efficiency Surcharge Revenues

Each electric Program Administrator projected revenues from non-EES funding sources for each year of its Three-Year Plan in the following manner: (1) projected SBC revenues calculated as the product of the statutorily mandated SBC of $0.0025 per kWh and projected sales for the applicable year; and (2) projected FCM revenues calculated as the product of the clearing prices of the FCM in the applicable year and the energy efficiency capacity that is designated by ISO-NE as an FCM capacity resource for the year (Statewide Plan, Exh. 1, Apps. A at 38-39; C.1 – Electric (Rev.), Tables IV.B.3.1, IV.B.3.2). The electric Program Administrators propose to allocate SBC and FCM revenues to each customer sector in proportion to each class' kWh consumption (Statewide Plan, Exh. 1, App. A at 38).

In December 2019, as part of the Commonwealth's supplemental budget, the Massachusetts Legislature adjusted how DOER allocates RGGI revenues. An Act Making Appropriations for the Fiscal Year 2019 to Provide for Supplementing Certain Existing Appropriations and for Certain other Activities and Projects, St. 2019, c. 142, § 95 ("2019 Supplemental Budget"). In the 2019 Supplemental Budget, the Legislature prioritized the spending of RGGI revenues on state programs other than energy efficiency (Statewide Plan, Exh. 1, App. A at 40). As a result, the Program Administrators do not expect that any RGGI revenues will be available to offset energy efficiency program costs collected from ratepayers for the 2022-2024 Three-Year Plan term (Statewide Plan, Exh. 1, App. A at 40).

2. Energy Efficiency Surcharge Revenues

The electric Program Administrators propose to collect the difference between (1) the proposed budget for the applicable year and (2) projected revenues from non-EES funding sources for that year through their energy efficiency reconciliation factor ("EERF") tariffs (see, e.g., Statewide Plan, Exh. 1, App. A at 40; Exh. NG-Electric-5, Table IV.B.3.6 (Rev.)). Based on current Department-approved tariffs, the electric Program Administrators calculate separate EERFs for their residential, low-income, and C&I customer classes (see, e.g., Exh. NG-Electric-5, Table IV.B.3.6 (Rev.)).

The gas Program Administrators propose to collect their proposed budgets for each year through their local distribution adjustment factor ("LDAF") as established by their local distribution adjustment clause ("LDAC") tariffs (Statewide Plan, Exh. 1, App. A at 38).

3. Other Funding Sources

The Program Administrators, citing a claimed absence of viable funding sources, do not project any revenues from other funding sources during the upcoming Three-Year Plan term (Statewide Plan, Exh. 1, App. A at 40-41). The Program Administrators state, however, that they will continue to actively pursue other sources of funding during the Three-Year Plan term (Statewide Plan, Exh. 1, App. A at 40-41).

4. Bill Impacts

Each Program Administrator submitted bill impacts for both non-participants and participants for each year of the Three-Year Plan (see, e.g., Statewide Plan, Exh. 1, App. A at 41-43; Exh. NG-Electric-6). To calculate bill impacts for program participants, the Program Administrators developed statewide estimates to approximate savings for each customer class[129] (Statewide Plan, Exh. 1, App. A at 41-42). The participant bill impacts are based on average monthly usage levels (pre-participation) over the term of the Three-Year Plan (see, e.g., Statewide Plan, Exh. 1, App. A at 41-42; Exh. NG-Electric-6).

C. Positions of the Parties

1. Program Administrators

The Program Administrators maintain that they have complied with all statutory and Department requirements with respect to energy efficiency program funding (Program

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[129] For residential and C&I participants, the Program Administrators estimated low, medium, and high levels of savings. For residential gas non-heating, low-income, and street lighting participants, the Program Administrators identified only a single level of savings as these participants typically have all potential measures installed (Statewide Plan, Exh. 1, App. A at 42).

Administrators Brief at 63). In this regard, the Program Administrators assert that they do not expect to receive RGGI funding or other outside funding, given the current absence of material viable funding sources, to offset energy efficiency program costs during the Three-Year Plan term (Program Administrators Brief at 62-63).

The Program Administrators acknowledge that there are significant costs and bill impacts required to achieve the GHG emissions reduction goals identified in the Statewide Plan (Program Administrators Brief at 63). Accordingly, to mitigate the growing energy efficiency program cost burden on ratepayers, the Program Administrators maintain that they are: (1) actively working to identify additional outside funding opportunities; and (2) seeking assistance from government agencies with locating and allocating additional funding for energy efficiency programs (Program Administrators Brief at 63). The Program Administrators assert that both the Attorney General and DOER have committed to assisting the Program Administrators in their efforts to identify outside funding (Program Administrators Brief at 63).

The Program Administrators argue that, although the bill impacts associated with their Three-Year Plans are significant, they are necessary to meet the required GHG emissions reductions under the Climate Act (Program Administrators Brief at 60-61). The Program Administrators maintain that they have reviewed the bill impacts associated with the Three-Year Plans to ensure they are equitable and balance the expected long-term benefits from the Three-Year Plans with the short-term bill impacts (Program Administrators Brief at 60-61, citing Statewide Plan, Exh. 1, App. A at 41-43). To this end, the Program

Administrators argue that the bill impacts reflect a focus on acquiring cost-effective energy efficiency resources with the lowest reasonable customer contribution (Program Administrators Brief at 60). Accordingly, the Program Administrators assert that the Department should find the bill impacts are reasonable and consistent with Department precedent (Program Administrators Brief at 61).

2. Attorney General

The Attorney General states that she is cognizant that there are limits to the overall level of energy efficiency costs that customers can reasonably bear (Attorney General Brief at 12). She further states that these costs must be considered in the context of avoided energy supply cost savings, and the likely alternative costs to the Commonwealth required to comply with the emission reductions mandated by the Climate Act (Attorney General Brief at 12). The Attorney General asserts that the savings goals and projected budgets reflected in the Three-Year Plan filings strike an appropriate balance in accommodating cost-effective energy savings investments, achievement of GHG emissions requirements, and customer rate impacts (Attorney General Brief at 12-13).

3. Department of Energy Resources

DOER argues that the Program Administrators have taken the necessary steps to identify funding from the SBC and FCM proceeds, and other funding sources to minimize customer bill impacts (DOER Brief at 23). In addition, DOER maintains that although the energy efficiency programs in the Three-Year Plans will increase the EES, the program investments will result in significant benefits for both participants and non-participants, can

reduce customers' energy usage and bills, and are required to meet the Commonwealth's GHG emissions limits for 2030 (DOER Brief at 23).

4. Acadia Center

Acadia asserts that, given the benefits expected from the Three-Year Plans, the proposed budgets will result in minimal bill impacts (Acadia Brief at 8, 12). Acadia argues that the energy efficiency program expenditures in the Three-Year Plans will produce direct customer benefits, as well as additional macroeconomic benefits to the Commonwealth, including the creation of energy jobs (Acadia Brief at 12).

D. Analysis and Findings

1. Non-Energy Efficiency Surcharge Revenues

The electric Program Administrators anticipate that they will receive revenues through the following non-EES funding sources during the Three-Year Plans term: (1) the SBC; and (2) participation in the FCM (Statewide Plan, Exh. 1, App. A at 38). The Program Administrators will no longer have access to RGGI funding because the Legislature prioritized spending RGGI revenues on non-energy efficiency activities (Statewide Plan, Exh. 1, App. A at 40, citing St. 2019, c. 142, § 95).

The Department finds that each electric Program Administrator projected its SBC revenues over the Three-Year Plans term in a reasonable manner, using Department-approved methods for projecting sales over the term (Statewide Plan, Exh. 1, Apps. A at 38; C.1 –

Electric (Rev.), Tables IV.B.3.1).[130] The Department also finds that each electric Program Administrator projected its FCM revenues over the Three-Year Plans term in a reasonable manner (Statewide Plan, Exh. 1, Apps. A at 38; C.1 – Electric (Rev.), Tables IV.B.3.2). Finally, the Department finds that the electric Program Administrators have appropriately explained the absence of RGGI funding over the Three-Year Plans term (Statewide Plan, Exh. 1, App. A at 40).

2. Energy Efficiency Surcharge Revenues

Pursuant to the Green Communities Act, each Three-Year Plan must include a fully reconciling funding mechanism (i.e., an EES). G.L. c. 25, § 21(b)(2)(vii); see also G.L. c. 25, § 21(d)(2). The Guidelines specify the manner in which revenue from an EES may be collected from ratepayers. Guidelines §§ 3.2.1.4, 3.2.2.

The Department finds that the electric Program Administrators' proposal to collect their projected budgets through the EES contained in their EERF tariffs is consistent with the Guidelines.[131] Similarly, the Department finds that the gas Program Administrators' proposal

[130] NSTAR Electric incorrectly projected its SBC revenues in its initial filing; however, the company fixed the error in a revised filing (c.f., Exh. NSTAR Electric- 4, Table IV.B.3.1 and Exh. NSTAR Electric - 4 (Rev.), Table IV.B.3.1).

[131] In D.P.U. 20-150, at 14, the Department directed each electric distribution company in its next rate case to submit a revised proposed EERF tariff that is designed to: (1) allocate low-income energy efficiency program costs between a single residential and low-income sector, and the C&I sector using a distribution revenue allocator; and (2) collect the resulting allocation from each rate class in the sector using a volumetric charge. Accordingly, the Department will address each electric distribution company's EERF tariff in its next rate case. See, e.g., NSTAR Electric Company, D.P.U. 22-22.

to collect their projected budgets through the EES contained in their LDAC tariffs is consistent with the Guidelines.

3. Other Funding Sources

In approving an energy efficiency funding mechanism for the electric Program Administrators, the Department must consider the availability of other private or public funds. G.L. c. 25, § 19(a)(3)(ii). Although the Green Communities Act does not contain a similar requirement for gas Program Administrators, the Guidelines require gas three-year plans to include a description of all other sources of funding that were considered to fund the energy efficiency programs. Guidelines § 3.2.2.1.

The Program Administrators maintain that, as of the filing date, other outside funding sources are scarce (Statewide Plan, Exh. 1, App. at 40-41). The Program Administrators represent, however, that the Attorney General and DOER have committed to assisting the Program Administrators in their efforts to identify outside funding sources (Program Administrators Brief at 63). The Program Administrators shall continue to work to aggressively identify and pursue all potential sources of other funding to offset the energy efficiency program costs for ratepayers (Statewide Plan, Exh. 1, App. A. at 40-41). To this end, in each EES filing, Annual Report, and Term Report during the Three-Year Plans term, the Program Administrators must include a detailed description of all efforts they have taken and will take to pursue outside funding to offset energy efficiency program costs for ratepayers, including any activities they have pursued with the assistance of the Attorney General and/or DOER. Subject to the above directive, the Department finds that the

Program Administrators have adequately considered the availability of other private or public funds. G.L. c. 25, § 19(a)(3)(ii).

4. Cost of Electricity to Consumers

In approving an energy efficiency funding mechanism for the electric Program Administrators, the Department must consider whether past programs have lowered the cost of electricity to consumers. G.L. c. 25, § 19(a)(3)(iii). The Department finds that program participants and non-participants have benefited from lower electricity costs from past programs. In particular, the Department finds that program participants have benefitted through lowered levels of usage, and participants and non-participants have benefitted though reduced wholesale electricity prices and avoided investments in transmission and distribution (see Statewide Plan, Exh. 1, App. Q, Study 1, at 23-27; see also Statewide Plan, Exh. 1, App. C.1 – Electric (Rev.), Table IV.D.3.1.i). Accordingly, the Department finds that past energy efficiency programs have lowered electricity costs to consumers, and thus also lowered participating customers' bills.

Importantly, the Department notes that this required finding references past programs only. As discussed below, given the lack of energy savings in the last year of this Three-Year Plans term for residential customers, the Department will not be able to make this finding in the future if the Program Administrators are unable to demonstrate net kWh savings or that they have lowered the cost of electricity (i.e., electric supply cost).

5. Bill Impacts

The Department must consider customer bill impacts when approving the use of ratepayer funds for energy efficiency programs. D.P.U. 08-50-A at 56-58; Guidelines §§ 3.2.1.5, 3.2.1.6, 3.2.2.2; see G.L. c. 25, § 19(a). The Department has determined that a bill impact analysis with a short-term perspective that isolates the effect of a proposed change in the EES is appropriate in this regard as it provides an accurate and understandable assessment of the change that will actually appear on customers' bills.[132] D.P.U. 08-50-D at 11-12. The Department has recognized, however, that when considering the reasonableness of a short-term bill impact, it is also important to look at the long-term benefits that energy efficiency will provide. See D.P.U. 08-50-D at 11-12. In discharging our responsibilities under G.L. c. 25, the Department must prioritize, among other things, affordability and equity. G.L. c. 25, § 1A.

These Three-Year Plans proceedings require the Department to consider for the first time the reasonableness of bill impacts to ratepayers in the context of the significantly increased budgets, driven, in part, by the Program Administrators' proposed strategic electrification programs (Statewide Plan, Exh. 1, at 8). In addition, Program Administrator budgets have increased due to new statutory requirements.[133] The Program Administrators'

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[132] Going forward, in its three-year plan filing, each electric and gas Program Administrator shall provide its respective bill impact analysis in a working spreadsheet, including all formulas and linkages.

[133] For example, pursuant to the Climate Act, the Program Administrators' energy efficiency budgets must include at least $36 million over the Three-Year Plan term for

total proposed 2022-2024 Three-Year Plans budget is $1.2 billion higher (29.3 percent) compared to the 2019-2021 Three-Year Plans budget. As the Program Administrators observe, the bill impacts associated with the Three-Year Plans are "significant" and "material" (Program Administrators Brief at 60-61).

Investments in traditional energy efficiency programs result in savings on a participant's bill through reduced energy usage, which will persist for the lives of the energy efficiency measures installed. D.P.U. 08-50-A at 58; 2010-2012 Electric Three-Year Plans Order, at 88; 2010-2012 Gas Three-Year Plans Order, at 74. This participant effect, however, will soon no longer be a feature of the electric Three-Year Plans. As discussed in Section IV.D.3.b, above, electricity bills for customers who electrify their heating systems and/or add air conditioning will increase. In addition, these customers may experience increased costs to heat their homes with electricity relative to a fossil fuel heat source because the cost of electricity as a heating fuel is currently higher relative to the cost of fossil fuels (Tr. 3, at 483-484; Exh. DPU-Comm 5-10). The Program Administrators estimate that some electrification projects, such as an oil heat to mini-split heat pump conversion, may increase customer lifetime operating costs by $4,000 (see, e.g., Exh. NG-Electric 2, Att. A). Further, while traditional electric energy efficiency programs are expected to deliver overall reductions in energy usage, the strategic electrification programs result in overall negative electric savings in the later years of the Three-Year Plans term. Therefore, in considering

the clean energy workforce and market development program operated by the Massachusetts Clean Energy Center. G.L. c. 25, § 19(d).

electric bill impacts,[134] the Department can no longer rely on the fact that program participants will experience an overall reduction in energy usage (see Section IV.D.3.b., above).[135]

At the same time, in the face of significantly increased energy efficiency budgets, the Department must be cognizant of the reality of the lack of funding previously available to the Program Administrators to offset the cost of energy efficiency programs to ratepayers. As discussed in Section VIII, above, the availability of traditional and other outside funding sources to offset the costs of the energy efficiency programs to ratepayers has eroded to zero in recent years. For example, the Program Administrators historically have assumed that 80 percent of RGGI revenues would be allocated to electric energy efficiency programs. G.L. c. 25, § 19(a). However, during the 2019-2021 Three-Year Plans term, DOER projected that only 55 percent of RGGI revenues would be available to fund electric energy efficiency programs, a significant decrease from the prior three-year plan term.[136]

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[134] The Department can still consider the effect of energy reduction from participants in gas energy efficiency.

[135] The Department notes that in calculating participant bill impacts, the Program Administrators did not take into account the potential impact of strategic electrification on participant bills (Exh. DPU-Comm 11-6). Going forward, the Program Administrators shall develop a participant bill impact showing the range of potential electric bill impacts from strategic electrification.

[136] During the 2016-2018 Three-Year Plans term, RGGI revenues offset approximately nine percent of the electric budget (i.e., $183 million of the $2.1 billion total electric budget). D.P.U. 15-160 through D.P.U. 15-169, Statewide Plan, Exh. 1, App. C – Electric (Rev.), Table IV.B.1. For the 2019-2021 Three-Year Plans term, RGGI revenues offset approximately three percent of the electric budget (i.e.,

2019-2021 Three-Year Plans Order, at 105-106. For the 2022-2024 Three-Year Plans term, the Legislature has reallocated RGGI revenues such that they are no longer available to offset the cost of energy efficiency programs to ratepayers. St. 2019, c. 142, § 95. And, as discussed above, the Program Administrators have yet to identify any other sources of private or public funding to offset costs to ratepayers in the upcoming Three-Year Plans (Statewide Plan, Exh. 1, App. A at 40-41). Unfortunately, at a time when the magnitude of the energy efficiency budgets has increased significantly to achieve the GHG emissions reduction goals set by the EEA Secretary, the availability of funds to offset these costs has all but disappeared. Between 2018 (the last program year before strategic electrification was incorporated into the three-year plans) and 2024, the residential EES for each Program Administrator is projected to increase between 16 and 82 percent[137] (see, e.g., Exh. NG-Gas-6). 2017/2018 Peak Cost of Gas Adjustment Factors and Local Distribution Adjustment Factors, D.P.U. 17-GAF-P1 through D.P.U. 17-GAF-P8 (2017). Currently, energy efficiency costs constitute approximately 20 percent of residential gas distribution rates (excluding the fixed customer charge) and 14 percent of residential electric distribution rates (excluding the fixed customer charge) (see, e.g., Exh. NG-Gas-6, at 12).

$60 million of the $2.1 billion total electric budget). D.P.U. 18-110 through D.P.U. 18-119, Statewide Plan, Exh. 1, App. C – Electric (Rev.), Table IV.B.1 (December 20, 2018).

[137] In its filing, EGMA did not provide bill impacts comparing the current EES to the proposed EES for the third year of the Three-Year Plans, as required by D.P.U. 08-50-D at 12. In addition, EGMA failed to break out the EES charge from the total LDAF charge for any of its bill impacts (Exh. EGMA-6).

Further, the Department also must acknowledge that the Program Administrators are proposing significant budget increases at a time when customers are facing unprecedented challenges due to the ongoing COVID-19 pandemic, as well as experiencing significant energy bill impacts due to rising energy supply costs. Accordingly, in the interest of equity and affordability, the Department must consider the proposed bill impacts in light of the unprecedented challenges facing customers.

When considering the reasonableness of these bill impacts, the Department will also consider the long-term benefits that programs will provide. See D.P.U. 08-50-D at 11-12. On a statewide basis, the Three-Year Plans are expected to provide total benefits of approximately $9.0 billion over the lifetime of the efficiency measures installed (Exh. DPU-Comm 8-1). Significantly, many of these benefits are derived from GHG emissions reductions. In particular, the energy efficiency programs in the Three-Year Plans are expected to reduce statewide CO_2e emissions by more than 845,000 metric tons annually by 2030 (Statewide Plan, Exh. 1, at 43).

After review, in consideration of the significant benefits provided by these Three-Year Plans, the Department's requirement to prioritize affordability and equity in discharging our responsibilities under G.L. c. 25, and mindful of the burdens associated with increased rates associated with these programs, the Department finds that the bill impacts associated with the Three-Year Plans are within the range of what is reasonable under the circumstances (see, e.g., Exh. BGC-6).

In recognition of the significant bill impacts associated with the Three-Year Plans, the Department has taken a number of steps in this Order to mitigate the effect of these bill impacts on ratepayers. The Department has reinstated the value component of the performance incentive mechanism to ensure that the Program Administrators retain an appropriate incentive to implement their programs in a cost-efficient manner. The Department has also reduced the proposed statewide performance incentive pool by ten percent. Further, the Department has directed all Program Administrators to minimize administrative costs and will not allow recovery of certain costs until the Department has reviewed and approved the adequacy of a Council data request proposal that demonstrates affirmative steps towards minimizing administrative costs. Also, to address the declining participant savings and ensure that customers benefit from strategic electrification efforts, as well as ensure safe, reliable, equitable, and affordable service, the Department has directed the Program Administrators to provide all low-income customers with weatherization prior to electrification measures in order to mitigate increases in electric bills.

Further, while the Department determined that the proposed bill impacts of the planned budgets are within the range of what is reasonable under the circumstances we are presented with here, the Department finds that given the scale of the budget increase compared to planned energy savings and the challenges currently experienced by customers, bill impacts under the current threshold for increasing budgets through midterm modifications

are not reasonable.[138] Accordingly, for the 2022-2024 Three-Year Plans term, a Program Administrator may not exceed its planned program budget without approval by the Department. In addition, to qualify for a program budget modification, the Program Administrator must demonstrate that an increase in budget results in an increase in kWh or therm savings.[139] Together, the Department finds that these steps are an important means to ensure that the Program Administrators deliver the full benefits of the Three-Year Plans in a cost-efficient manner at the lowest possible cost to ratepayers.

Finally, as the Department has noted above, the bill impacts associated with these Three-Year Plans are significant and material. Notably, these Three-Year Plans are one of several statutory policy initiatives that the Department has overseen in recent years to further

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[138] Pursuant to Guidelines § 3.8.2(c), a Program Administrator may overspend a sector level budget by ten percent without the need for prior Department approval. If a Program Administrator projects to exceed a sector level budget by more than ten percent, the Program Administrator must submit its proposed budget change at the same time for (1) review by the Council, and (2) review and approval by the Department. Guidelines § 3.8.2(c). For the 2022-2024 Three-Year Plans term, Guidelines § 3.8.2(c) is supplanted by the midterm modification directives contained in this section.

[139] If a Program Administrator projects it will exceed a program-level budget, the Program Administrator shall simultaneously submit any proposed budget change (1) for review by the Council and (2) for review and approval by the Department. Such proposal must clearly demonstrate that the proposed budget change will result in an increase in kWh or therm savings. If the Council opposes the proposed program budget midterm modification, it must submit a resolution to the Department addressing its opposition within 60 days of the filing date. The Program Administrator will then have 30 days to submit further justification to the Department, including supporting testimony and documentation, showing why the proposed program budget modification should be approved.

the Commonwealth's critical energy policy goals. Initiatives such as net metering, the SMART Program, off-shore wind and hydroelectric procurements, and EV initiatives, as well as the Department-initiated grid modernization initiatives, each deliver essential benefits to the citizens of the Commonwealth.[140] And like the Three-Year Plans, these initiatives are also funded through reconciling mechanisms that allow the electric distribution companies to recover the cost of these programs directly from ratepayers. Currently, when combined with energy efficiency, these programs constitute approximately 25 percent of residential electric distribution rates (excluding the fixed customer charge) (see, e.g., Exh. NG-Electric-6, at 7). Accordingly, although the Department recognizes that substantial benefits flow to the citizens of the Commonwealth from these policy initiatives, the Department and policy makers must remain cognizant of the cumulative effect that these programs will have on customer bills now and in the future.

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140 See, e.g., 220 CMR 18.00; Model SMART Provision, D.P.U. 20-145-B (2021); Long-Term Offshore Wind Contracts, D.P.U. 21-40 (2021); Long-Term Hydroelectric Contracts, D.P.U. 18-64/D.P.U. 18-65/D.P.U. 18-66 (2019); Massachusetts Electric Company and Nantucket Electric Company, D.P.U. 21-146 (electric vehicle supplemental budget); NSTAR Electric Company, D.P.U. 21-90 (electric vehicle infrastructure program); Massachusetts Electric Company and Nantucket Electric Company, D.P.U. 21-91 (electric vehicle infrastructure program); Fitchburg Gas and Electric Light Company, D.P.U. 21-92 (electric vehicle infrastructure program); 2022-2025 Grid Modernization Plans, D.P.U. 21-80/D.P.U. 21-81/D.P.U. 21-82.

6. Conclusion

After the consideration of (1) the availability of other private or public funds; (2) the legislative reallocation of RGGI revenues from energy efficiency programs; (3) whether past programs have lowered the cost of electricity to consumers; and (4) the effect of rate increases on consumers, the Department finds that, subject to the conditions above, each Program Administrator may recover the funds to implement its energy efficiency plan through its EES.

IX. FUTURE OF REVENUE DECOUPLING

A. Introduction

In Section IV.D.3.b., above, the Department approved the Program Administrators' expansion of strategic electrification to drive energy and GHG emissions reductions. For the reasons discussed below, the Department finds that the Program Administrators' adopted strategy of strategic electrification in these Three-Year Plans obviates the need for the continued use of revenue decoupling by the electric distribution companies.

B. Revenue Decoupling

The Department has allowed revenue decoupling for each electric and gas distribution company since the passage of the Green Communities Act in 2008.[141] Investigation into Rate

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[141] The Department implemented decoupling in base rate proceedings. Massachusetts Electric Company and Nantucket Electric Company, D.P.U. 09-39, at 61-92 (2009); Fitchburg Gas and Electric Light Company, D.P.U. 11-01/11-02, at 113 (2011); NSTAR Electric Company/Western Massachusetts Electric Company, D.P.U. 17-05-B at 219 (2018).

Structures that will Promote the Efficient Deployment of Demand Resources, D.P.U. 07-50-A at 31-32 (2008). Prior to revenue decoupling, the electric distribution companies were able to retain increased revenue collection from the sale of electricity that could be reinvested into their systems between rate cases. Revenue decoupling removed the disincentive to reduce load. D.P.U. 07-50-A at 27-28, 32-33, 87. Full revenue decoupling separates a distribution company's revenues from all changes in consumption, regardless of the underlying cause of the changes, in order to remove the disincentives distribution companies historically faced regarding deployment of demand reducing resources. D.P.U. 07-50-A at 31. The Department correctly anticipated that, with the passage of the Green Communities Act in 2008, aggressive deployment of demand resources would be an essential component of the Commonwealth's strategy to mitigate the impact of increasing energy costs, through direct benefits to program participants as well as benefits to all customers through a dampening of natural gas and electricity commodity prices. D.P.U. 07-50-A at 33. The Department was concerned that, without full revenue decoupling, distribution companies would not be able to fully embrace the successful implementation of demand-reducing measures and actions. D.P.U. 07-50-A at 33. Since the Department's decision to institute revenue decoupling in 2008, the Green Communities Act was enacted and the Program Administrators have achieved significant levels of electric and gas savings.

C. Impact of Changing Energy Policies

Recent changes in the Commonwealth's energy policies fundamentally obviate the underlying premise supporting the Department's earlier adoption of revenue decoupling for electric distribution companies. The Energy Act of 2018 allows Program Administrators to include strategic electrification measures that reduce energy consumption and cost-effectively reduce GHG emissions, while minimizing costs to ratepayers. St. 2018, c. 227, § 2. This policy shift allows the Program Administrators to increase electricity consumption through the energy efficiency programs. The Climate Act then expanded on the energy policies set forth in the Energy Act of 2018 by requiring the Program Administrators implement their energy efficiency programs in a manner that reduces customer energy usage but also contributes to specific GHG emissions reduction goals. St. 2021, c. 8, §§ 9, 28; G.L. c. 21N, § 3B; G.L. c. 25, § 21(d)(4). Accordingly, the Climate Act now requires the Program Administrators to drive adoption of energy efficiency measures to achieve a minimum level of sustained GHG emissions reductions. Energy efficiency remains the most cost-effective way to reduce energy usage, and the Program Administrators have had years of nation-leading success of lowering consumer and system costs through their implementation of the Mass Save program. However, the evolving strategic electrification of the building sector is one of the primary strategies to achieve the GHG emissions reduction goals set by the EEA Secretary pursuant to the Climate Act (Statewide Plan, Exh. 1, at 11-12). See Massachusetts 2050 Decarbonization Roadmap at 45-46.

During this upcoming Three-Year Plans term, the electric and gas Program Administrators have committed to making a concerted effort to promote electrification, particularly in instances in which customer economics and building characteristics (e.g., the displacement of delivered fuels, building new construction, etc.) favor the use of high-efficiency heat pump technologies, including air source, water source, ground source (geothermal), and variable refrigerant flow heat pumps, which will increase use on the electric distribution system (Statewide Plan, Exh. 1, at 12). In addition, the electric Program Administrators intend to pursue additional opportunities to bolster electrification in other areas, which may include electrifying end uses such as residential and C&I lawn and garden equipment, forklifts, and other small engine-driven equipment, where cost effective (Statewide Plan, Exh. 1, at 15). The Department's approval of the Program Administrators' strategic electrification proposals, including the goals to meet GHG emissions reductions pursuant to G.L. c. 21N, § 3B, marks a fundamental shift in the delivery of energy efficiency in the Commonwealth. The Three-Year Plans are now effectively required by the Climate Act to be designed to net increase kWh consumption; and the Program Administrators currently plan to engage in a level of strategic electrification by 2024 that, despite the energy efficiency measures designed to lower electric use, will result in a net lifetime increase in kWh consumption in the residential sector (Statewide Plan, Exh. 1, App. C.1 - Electric (Rev.), Table IV.D). As discussed above in Section IV.D.3.b., this increased electrification enabled through these Three-Year Plans will help the Commonwealth achieve its net-zero GHG emissions goals (Statewide Plan, Exh. 1, at 12).

The Department notes that the impact of the Climate Act and the Commonwealth's net-zero emission goal is not limited to strategic electrification through energy efficiency. Transportation is the largest source of carbon emissions and, therefore, there also are electrification efforts outside of space heating and water heating (Statewide Plan, Exh. 1, at 15).[142] See Massachusetts 2050 Decarbonization Roadmap at 34-43 (December 2020).

D. Decoupling for Electric Distribution Companies

The Statewide Plan presents a hybrid approach mixing traditional energy efficiency measures and strategic electrification proposals to reduce energy consumption and GHG emissions. However, as discussed above, even with the core energy efficiency and demand response measures contained in this Statewide Plan, the expansion of the Program Administrators' strategic electrification offerings will increase the use of electricity on the regional power grid (Statewide Plan, Exh. 1, App. C.1 - Electric (Rev.), Table IV.D). In order to pursue a clean energy future consistent with the Massachusetts 2050 Decarbonization Roadmap, broad electrification achieved through the Program Administrator's strategic electrification efforts combined with even more significant electrification efforts outside the Three-Year Plans is necessary. However, these efforts will require expanding the use of electric generation and will place more stress on the electric distribution system. These factors lead the Department to conclude that we must discontinue full revenue decoupling for

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[142] The Department notes that the electric distribution companies are pursuing direct transportation interventions in other proceedings. See, e.g., NSTAR Electric Company, D.P.U. 21-90; Massachusetts Electric Company and Nantucket Electric Company, D.P.U. 21-91; Fitchburg Gas and Electric Light Company, D.P.U. 21-92.

electric distribution companies. By discontinuing full revenue decoupling, the Department will ensure that electric distribution companies' business models continue to align with the Commonwealth's policy goals, and thus, the Department seeks to reorient the electric distribution companies to no longer be neutral but, rather, to embrace increasing clean electric load.[143]

The Department does not come to this decision lightly, but there are many reasons that it is appropriate to make this policy change immediately. First, the Department finds that it is in ratepayers' best interests to no longer make the electric distribution companies whole for lost sales if that is no longer in line with the Commonwealth's energy policy. Second, timely implementation of a transition away from revenue decoupling is necessary to align the business interests of the electric distribution companies to embrace strategic electric load growth in a safe, reliable, affordable, and equitable manner, as the Department is considering several policies to advance the clean energy future.[144] Last, implementing this

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143 The discontinuance of revenue decoupling, alone, will not grow clean electric load. It will require many other policies and customer decisions outside the scope of this Order to ensure that load growth from electrification will, in fact, reduce GHG emissions.

144 In addition to strategic electrification within the context of energy efficiency, the Department is assessing long-term system planning to enable the strategic development of renewable energy assets in Distributed Energy Resource Planning and Cost Assignment, D.P.U. 20-75; proposals to advance grid modernization and deploy advanced metering infrastructure in NSTAR Electric Company, D.P.U. 21-80; Massachusetts Electric Company and Nantucket Electric Company, D.P.U. 21-81; Fitchburg Gas and Electric Light Company, D.P.U. 21-82; and proposals to institute electric vehicle charger tariffs and investments in grid infrastructure to enable

policy change now will shift the risk associated with changes in lost revenues from customers to electric distribution company shareholders, while simultaneously increasing the incentive for the electric distribution companies to pursue and enable electrification.

The Department has broad ratemaking authority over gas and electric companies pursuant to G.L. c. 164, § 94, which establishes the Department's statutory obligations to set the rates of gas and electric companies. The courts have consistently stated that the Department's authority to design and set rates pursuant to G.L. c. 164 is broad and substantial. Boston Real Estate Board v. Department of Public Utilities, 334 Mass. 477, 485 (1956). Determining the appropriateness of a base rate revenue adjustment mechanism is within the Department's broad ratemaking authority. See D.P.U. 07-50-A at 81; D.P.U. 07-50-B at 27. The Department must balance this policy change with existing rate structures in place, such as performance-based ratemaking, which involve multi-year stay-outs for distribution companies, as well as approved settlement agreements. The Department acknowledges that changes or adjustments to any ratemaking structure can lead to a significantly different distribution of equity and risks between the company and its customers, between classes of customers, among customers within a given rate class, and across time. Investigation into Rate Structures that will Promote Efficient Deployment of Demand Resources, D.P.U. 07-50 at 10 (2007). Further the Department also recognizes that the removal of the revenue decoupling mechanism comes before any increase in distribution sales

installation of electric vehicle chargers in D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92.

from the strategic electrification efforts under these Three-Year Plans, and the Department will need to take economic forecasts into account while also looking at planned strategic electrification activities (Statewide Plan, Exh. 1, App. C.1 - Electric (Rev.), Table IV.B.3.1). Accordingly, the Department directs each electric distribution company, in its next base rate proceeding, to include a rate proposal that provides for the discontinuance of full revenue decoupling.[145,146] Any electric distribution company with an approved rate plan with a stay-out provision that is the result of a settlement or a performance-based ratemaking term may not seek to terminate its effective rate plan in order to discontinue revenue decoupling.

With the discontinuance of full revenue decoupling, the electric distribution companies will no longer have a disincentive to pursue strategic electrification because they now will be able to retain the sales from increased load. For these Three-Year Plans, performance incentives will continue to play an important role in encouraging distribution companies to pursue all cost-effective energy efficiency, including strategic electrification. Because the

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[145] The Department may also consider implementing a targeted decoupling mechanism that achieves the Commonwealth's electrification goals and GHG emissions reduction goals as part of each company's next base rate proceeding. D.P.U. 07-50-A at 29-30.

[146] The Department notes that Eversource (electric) filed a distribution rate case on January 14, 2022, in NSTAR Electric Company, D.P.U. 22-22. The Department will address the discontinuance of full revenue decoupling for Eversource (electric) in that proceeding. National Grid (electric)'s performance-based ratemaking plan expires on September 30, 2024. Massachusetts Electric Company and Nantucket Electric Company, D.P.U. 18-150, at 54-56 (2019). Finally, Unitil (electric)'s settlement expires on November 1, 2023. Fitchburg Gas and Electric Light Company (Electric Division), D.P.U 19-130, at 8 (2020).

discontinuance of full revenue decoupling will not be immediate, nor are sales expected to immediately increase as a result of the Three-Year Plans, the Department finds that it is appropriate to retain an electrification metric, as modified, for this Three-Year Plans term.[147] See Section VII.D.2.c, above. Once full revenue decoupling is discontinued, an electrification metric will no longer be necessary in future three-year plans.

E. Decoupling for Gas Program Administrators

Unlike the electric Program Administrators, the proposals contained in the Three-Year Plans do not fundamentally change the premise supporting the application of revenue decoupling for the gas distribution companies. The gas Program Administrators' energy efficiency programs, including strategic electrification, are designed to reduce overall customer gas usage and demand (see Statewide Plan, Exh. 1, passim). Unlike electric Program Administrators, the net impact of the gas Program Administrators' Three-Year Plans is a reduction in annual and lifetime therms (Statewide Plan, Exh. 1, App. C.2 - Gas (Rev.), Table IV.D.3.2.i). Therefore, the Department will not mandate the discontinuance of revenue decoupling for gas distribution companies.[148]

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[147] In order to achieve the goal of cost-effective decarbonization, strategic electrification must include weatherization and traditional energy efficiency delivered in conjunction with electrification measures.

[148] The Department has opened an investigation to consider the appropriate role of local gas distribution companies in achieving decarbonization. Investigation into the Role of Gas Local Distribution Companies as the Commonwealth Achieves its Target 2050 Climate Goals, D.P.U. 20-80. The Department may evaluate appropriate rate adjustment mechanisms, such as revenue decoupling, as part of that proceeding.

X. RESIDENTIAL CONSERVATION SERVICES

A. Introduction

The RCS statute, G.L. c. 164 App., §§ 2-1 to 2-10, was promulgated in 1980 and provides a framework for in-home energy conservation services for residential customers. Pursuant to the Energy Act of 2012, the Program Administrators have elected to incorporate the RCS filings for 2022-2024 in their respective Three-Year Plans. St. 2012, c. 209, §§ 32(h), (i). Therefore, the Department is required to review the reasonableness of the proposed RCS budgets in the instant proceedings. G.L. c. 164 App., § 2-7(b); St. 2012, c. 209, § 32(i).[149]

An energy scorecard is a tool used to understand how a home or building's energy consumption compares to similar homes or buildings. The Program Administrators first indicated that they intended to implement home energy scorecards as part of residential in-home energy assessments beginning in 2019.[150] 2019-2021 Three-Year Plans Order, at 169-170. The Program Administrators did not, however, include an energy scorecard proposal or associated budget as part of their RCS filings in the 2019-2021 Three-Year Plans.

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149 On April 17, 2017, DOER promulgated revised RCS regulations, 225 CMR 4.00. On February 20, 2020, DOER released revised final guidelines ("RCS Guidelines") interpreting 225 CMR 4.00. DOER, Guideline Interpreting 225 CMR 4.00 (February 20, 2020), available at https://www.mass.gov/doc/rcs-guideline-revised-2202020/download.

150 DOER's RCS Guidelines require the Program Administrators to offer DOER-approved energy scorecards in conjunction with in-home energy audits. RCS Guidelines § 2.B.1.

2019-2021 Three-Year Plans Order, at 169, 174. Accordingly, the Department did not make any substantive findings regarding energy scorecards or associated RCS budgets. 2019-2021 Three-Year Plans Order, at 174. The Department found, to the extent the Program Administrators could implement energy scorecards within the scope of their approved RCS budgets, they would not be required to obtain further Department approval. 2019-2021 Three-Year Plans Order, at 174. Alternately, the Department directed the Program Administrators to file an amended RCS budget for Department review if implementation of energy scorecards required an increase to an approved RCS budget of greater than 20 percent. 2019-2021 Three-Year Plans Order, at 174-175. No amended RCS budget proposals were filed with the Department.

B. Program Administrators Proposal

Each Program Administrator proposes to include its RCS budget as part of the Residential Existing Buildings program for each year of the Three-Year Plan term (Statewide Plan, Exh. 1, App C.1, at 12). In response to discovery, the Program Administrators provided a breakdown of the proposed RCS budget by: (1) home energy assessment costs for market rate single family and low-rise units; (2) the RCS assessment fee paid to DOER; and (3) home energy scorecard costs (Exh. DPU-Comm 7-5; see, e.g., Exh. NSTAR-Gas-2, at 107). The Program Administrators propose to continue to recover RCS costs through the EES (Statewide Plan, Exh. 1, App A at 40 n.112).

Although they have allocated a portion of the RCS budget to home energy scorecards, the Program Administrators again did not include a home energy scorecard proposal in their

Three-Year Plan (Statewide Plan, Exh. 1, at 91-98). Instead, in response to discovery issued by DOER, the Program Administrators described the work they accomplished during the 2019-2021 Three-Year Plan term on home energy scorecards, as well as a timeline for their plans to deliver home energy scorecards in conjunction with in-home audits in the Three-Year Plan term (Exh. DOER-Comm 1-4). The Program Administrators expect to start using home energy scorecards in the first quarter of 2022 (Exh. DOER-Comm 1-4, at 3).

C. Positions of the Parties

1. Program Administrators

The Program Administrators argue that their proposed RCS program budgets are fully consistent with the Green Communities Act, 220 CMR 7.02, and applicable Department directives (Program Administrators Brief at 59, citing 2013-2015 Three-Year Plans Order, at 128). The Program Administrators further argue that contrary to DOER's assertions, they are fully compliant with DOER's RCS Guidelines (Program Administrators Reply Brief at 4-5, citing DOER Brief at 41). The Program Administrators maintain that these issues, by DOER's own admission, involve implementation of the Three-Year Plans and are of no consequence to the Department's approval of the proposed RCS budgets (Program Administrators Reply Brief at 5, citing DOER Brief at 41).[151] The Program Administrators

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[151] The Program Administrators assert that certain of DOER's arguments regarding RCS compliance relies on extra record evidence or are otherwise without evidentiary support (Program Administrators Reply Brief at 5-6, citing DOER Brief at 40-41 & n.119). The Program Administrators did not, however, move to strike any portion of DOER's Reply Brief.

maintain that, regardless of any disagreements they have with DOER, the proposed RCS budgets should be approved (Program Administrators Reply Brief at 7).

The Program Administrators acknowledge that they missed the original target launch date for home energy scorecards but maintain that the delay was with good reason (Program Administrators Reply Brief at 6-7). The Program Administrators maintain they are ready to launch the home energy scorecard campaign (Program Administrators Reply Brief at 6-7).

Lastly, the Program Administrators argue, contrary to DOER's assertions, G.L. c. 164, App. § 2-3(c) explicitly requires customer consent to disclose the contents of a home energy assessment audit report to parties other than those specified by the statute (Program Administrators Reply Brief at 7, citing DOER Brief at 40-41). In particular, the Program Administrators assert that data from the home energy assessments will be shared with the United States Department of Energy ("DOE") for the development of the energy scorecards, thus invoking the confidentiality provisions in G.L. c. 164, App. § 2-3(c) (Program Administrators Reply Brief at 7).

2. Attorney General

The Attorney General acknowledges that the Program Administrators have not yet implemented energy scorecards (Attorney General Reply Brief at 3). Nonetheless, the Attorney General maintains that the Department should approve the Program Administrators' proposed RCS budgets, including funding for home energy scorecards (Attorney General Reply Brief at 3).

3. Department of Energy Resources

DOER argues that the Department should approve the Program Administrators' RCS budgets, which include the cost of implementing home energy scorecards (DOER Brief at 41). DOER argues that the proposed RCS budget are reasonable, but the Program Administrators are not in full compliance with the RCS statute and its RCS Guidelines as they relate to home energy scorecards (DOER Brief at 39).

According to DOER, in order to comply with the RCS regulations and its RCS Guidelines, the Program Administrators agreed to implement residential home energy scorecards as part of in-home assessments by July 2019 (DOER Brief at 40). DOER asserts that the Program Administrators' roll out of home energy scorecards is over two years behind schedule (DOER Brief at 40-41).

In addition, DOER argues that the benefits of home energy scorecards will be limited by the Program Administrators' proposal to require affirmative customer consent to disclose the contents of an audit report to outside parties (DOER Brief at 40-41). DOER maintains that it intends to address the issue of home energy scorecards, including customer consent, with the Program Administrators (DOER Brief at 40-41).

D. Analysis and Findings

While DOER develops the state plan for RCS programs, the Department is expressly charged with reviewing the reasonableness of the budget and expenditures, and may modify the budget. St. 1980, c. 465 § 7(b). The Program Administrators must include a description of the activities that support the requested budget. See 2019-2021 Three-Year Plans Order,

at 174. The Department has reviewed the Program Administrators' proposed RCS budgets and, with the exception of the portion of the budgets allocated to home energy scorecards, the Department finds that the budgets are reasonable (see, e.g., Exh. FGE (gas)-4 (Rev.), Table IV.C). Accordingly, with the exception of the portion of the budget allocated to home energy scorecards discussed below, the Department approves the Program Administrators' proposed RCS budgets.

While the Program Administrators have allocated a portion of their RCS budgets to home energy scorecards, the Program Administrators did not file an energy scorecard proposal as part of their RCS filings in the instant proceedings (Exhs. NG-Gas-2, at 111-112; BGC-2, at 106-107; EGMA-2, at 107-108; NSTAR-Electric-2, at 102-103; FGE-Gas-2, at 107; LU-2, at 105-106; NSTAR-Gas-2, at 107-108; Compact-2, at 104; FGE-Electric-2, at 102; NG-Electric-2, at 110; DPU-Comm 7-5). In fact, the phrase "home energy scorecard" or the like does not appear anywhere in the text of the Three-Year Plans. During discovery and in response to a record request, the Program Administrators provided some information regarding activities they had taken during the 2019-2021 Three-Year Plans term regarding home energy scorecards, including a contractual agreement with DOE to produce a home energy score (RR-DOER-1; Exh. DOER-Comm 1-4).

In order for the Department to conduct a timely and complete investigation and ensure that stakeholders have the requisite information to understand and evaluate a proposal, the Program Administrators must make a full and complete filing where all relevant and material facts and issues are properly included. Revised Model SMART Provision, D.P.U. 20-145-B

at 31 (2021). Despite the additional information solicited by DOER through discovery, the Department is not in receipt of a comprehensive proposal or itemized budget from the Program Administrators for home energy scorecards. Accordingly, the Department is unable to make any findings regarding the reasonableness of the proposed energy scorecard budgets in the instant proceeding.[152]

To receive authorization to use ratepayer-provided funds to implement home energy scorecards, the Program Administrators must file a formal energy scorecard proposal with the Department.[153] The proposal should take the form of an amendment to their RCS operating budgets pursuant to G.L. c. 164 App., § 2-7(b). Each filing shall include prefiled testimony and exhibits addressing: (1) a detailed home energy scorecard proposal;[154] and

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[152] The Department will address the prudence of any home energy scorecards expenditures during the 2019-2021 Three-Year Plans term as part of our investigation of the Program Administrators' forthcoming 2019-2021 Term Report filings.

[153] The Department distinguishes our treatment of the home energy scorecard issue here from our treatment of the issue in the 2019-2021 Three-Year Plans. In the earlier case, the Program Administrators did not include an energy scorecard proposal, but the Department found, if the Program Administrators could implement scorecards within their approved RCS budgets, they would not be required to obtain further Department approval. 2019-2021 Three-Year Plans Order, at 174. When we made this finding, home energy scorecards were novel, and the Department fully expected the Program Administrators would implement scorecards during the 2019-2021 Three-Year Plans term. Three years have passed, and the Program Administrators have yet to finalize the elements of a plan for home energy scorecards. Here, in the continued absence of an appropriate home energy scorecard proposal, the Department cannot authorize an RCS budget as reasonable for this purpose.

[154] The Program Administrators shall address how they intend to incorporate the impact of electrification measures in any home energy scorecard proposal.

(2) an itemized RCS budget with information specific to home energy scorecards necessary to carry out the proposal. See, e.g., NSTAR Gas Company. D.P.U. 11-RCS-11, Petition (2011). As part of the required compliance filings in the instant proceedings, the Program Administrators shall remove all costs associated with energy scorecards from the RCS budgets.

As a final matter, the Department addresses whether the Program Administrators must obtain customer consent to disclose the contents of an energy audit report to a third party in connection with the development of energy scorecards. The Program Administrators maintain that data collected during a home energy assessment will be used by DOE to develop a customer's energy scorecard and, therefore, pursuant to G.L. c. 164, App. § 2-3(c),[155] the Program Administrators must obtain affirmative consent to disclose the name of a customer or contents of an energy audit report to DOE (Program Administrators Reply Brief at 7). We agree.

The Department treats certain customer-specific information as confidential and the Program Administrators are not permitted to disclose personal information about customers including name, address, and usage data, without the customers' permission. See New

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[155] General Laws c. 164, App. § 2-3(c) provides:

> No person shall disclose the name of a customer or the contents of an energy audit report prepared for such customer to any person other than the customer, a subsequent purchaser of the audited building, the utility serving such customer, the commissioner of energy resources, or their designees, unless the customer or subsequent purchaser waives his right to confidentiality with respect to such information provided[.]

England Gas Company, D.P.U. 10-114, Hearing Officer Ruling at 6-7 (June 6, 2011); Fitchburg Gas and Electric Light Company, D.P.U. 08-ARR-4, Hearing Officer Ruling at 4 (April 7, 2008). Although DOER maintains that a requirement to obtain affirmative consent "significantly limits" the benefits of scorecards, DOE is not specifically exempted by G.L. c. 164, App. § 2-3(c), which requires customers to waive their right to confidentiality of the data contained in an energy audit report before it can be shared with a third party such as DOE. Accordingly, the Department finds that the Program Administrators must obtain affirmative customer consent before sharing any confidential information (e.g., customer name, address, and usage data) contained in an energy audit report with third parties. The Department trusts that the Program Administrators will work collaboratively with DOER to develop an appropriate process to obtain customer consent to disclose such information for the purposes of developing an energy scorecard.

XI. CAPE LIGHT COMPACT

A. Introduction

The Compact is a municipal aggregator that has received Department approval to administer electric energy efficiency to member municipalities. See, e.g., Cape Light Compact, D.P.U. 15-166 (2016). It is the only energy efficiency Program Administrator that is not an investor-owned utility. NSTAR Electric is the electric distribution company and National Grid (gas) is the local gas distribution company serving electric and gas customers, respectively, in the Compact's member municipalities.

Based on our review of the Compact's proposed Three-Year Plan, several issues warrant discussion in the sections below: (1) the Compact's proposed Statewide Plan enhancements; (2) the administration of energy efficiency services to gas customers in the National Grid (gas) service territory; (3) the allocation of costs between the Compact's municipal aggregation plan and its energy efficiency plan; and (4) equity and historical participation rates.

B. Statewide Plan Enhancements

1. Introduction

In its 2022-2024 Three-Year Plan, the Compact proposes to offer the following enhancements: (1) incentives up to 100 percent for low-and moderate-income residential multifamily new construction projects; (2) a strategic electrification offering called the "Cape and Vineyard Electrification Offering ("CVEO")"; and (3) incentives up to 100 percent for municipal customers, small non-profits, small businesses, and micro businesses (Statewide Plan, Exh. 1, App. G.1, at 3).

2. Cape Light Compact Proposal

a. Residential New Buildings and Residential New Homes and Renovations

The Compact proposes to offer enhanced incentives for income-eligible and moderate-income residential multi-family new construction projects (Exh. Compact-2, at 139). Specifically, the Compact proposes to offer: (1) a 100 percent incentive for weatherization measures above code for income-eligible and moderate-income buildings; (2) a 100 percent incentive for heat pumps for projects where 51 percent of the building is

occupied by income-eligible customers; (3) an 80 percent incentive for heat pumps for projects where 51 percent of the building is occupied by moderate-income customers; and (4) a $2,000 per unit incentive, capped at $60,000, for a project engineering study and to fund an operating and maintenance contract for up to three years (Exh. Compact-2, at 139-140).

b. Cape and Vineyard Electrification Offering

The Compact proposes to offer a strategic electrification offering (i.e., the CVEO), which will provide enhanced incentives for the combined installation of: (1) cold-climate air-source heat pumps, (2) solar PV, and (3) behind-the-meter battery energy storage, limited to 250 customers in non-gas heated homes (Statewide Plan, Exh. 1, App. G.1, at 2; Exhs. Compact-2, at 133; Compact-9, at 1-2). The Compact states that CVEO is limited to low-income (i.e., less than or equal to 60 percent of state median income) and moderate-income (i.e., 61-80 percent of the state median income) customers (Statewide Plan, Exh. 1, App. G.1, at 2; Exhs. Compact-2, at 133; Compact-9, at 1-2).

Through the proposed CVEO, customers will: (1) convert oil, propane, or electric resistance heat systems to heat pumps; (2) install solar PV systems to support electrification of their heating systems; and (3) install battery energy storage for demand response and resiliency (Statewide Plan, Exh. 1, App. G.1, at 2; Exh. Compact-2, at 133). The Compact proposes that low-income customers will receive all three technologies at no cost, while moderate-income customers will receive all three technologies at a maximum cost of $5,000 per participant (Exh. Compact-9, at 9). The Compact states that all CVEO participants will

be required to implement recommendations from a recent home energy assessment, including any weatherization recommendations (Exh. Compact-9, at 4).

The Compact proposes to use a third-party ownership model for the solar PV plus battery energy storage systems, which allows the third-party to own the assets and monetize tax credits/depreciation and other incentive programs over a ten-year period (Statewide Plan, Exh. 1, App. G.1, at 2).[156] The Compact proposes that the third-party owner would install the solar PV and battery energy storage systems in a CVEO participant's home (Exh. Compact-9, at 6). The Compact further proposes that the third-party owner would use the existing incentive programs to offset its initial costs and the Compact would use ratepayer-provided energy efficiency program funding to cover the third-party owner's remaining cost (Exh. Compact-9, at 9). Without outside incentives or financing, the Compact estimates that the solar PV and battery system would cost a customer about $52,000 (Exh. Compact-9, at 6).

The Compact proposes to offer both low- and moderate-income customers a 100 percent incentive for the cost of switching from heating with oil, propane, or electric baseboards to heating with heat pumps (Exh. Compact-9, at 4). The proposed CVEO heat

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[156] The tax credits/depreciation and incentives include: (1) funding from the federal Investment Tax Credit ("ITC"); (2) tax depreciation; (3) SMART Program; (4) ConnectedSolutions; (5) Clean Peak Energy Standard incentives; and (6) Alternative Portfolio Standard incentives (Statewide Plan, Exh. 1, App. G.1, at 2). The Compact estimates the cost of CVEO batteries participating in ConnectedSolutions will be about $982,000 in incentives and about $20,000 in sales, technical assistance, and training (Exh. Compact-9, at 13).

pump measure mix assumes heat pump costs range from $13,000 to $25,000 per system (Exh. Compact-9, at 4). The estimated cost of Compact's proposal to offer heat pumps at 100 percent incentive for low-income customers over two years is approximately $2.8 million and the CVEO heat pump incentive cost for moderate-income customers over two years is approximately $2.0 million (Exh. Compact-9, at 4-5). The Compact proposes to fund all heat pump costs using ratepayer-provided energy efficiency program funding (Exh. Compact-9, at 5).

The Compact also filed a CVEO proposal in Cape Light Compact, JPE, D.P.U. 20-40.[157] The Compact has identified the following differences between its CVEO proposal in D.P.U. 20-40 and its CVEO proposal in the instant proceeding:[158] (1) an increase in assumed battery costs from $10,000 per battery to $12,000 per battery, based on more recent experience; (2) a reduction in battery output estimates based on updated data; (3) reductions in projected SMART revenues due to a later expected implementation date;

[157] As discussed further below, the Department declined to approve the Compact's proposed CVEO proposal finding that, in addition to other deficiencies, the manner of funding for the proposed CVEO was contrary to the laws of the Commonwealth and, therefore, could not be approved as an enhancement to the Statewide Plan under G.L. c. 164, § 134. Cape Light Compact, JPE, D.P.U. 20-40-A at 20-32 (2021). On November 24, 2021, the Compact appealed the Department's Order in D.P.U. 20-40 to the Supreme Judicial Court.

[158] The Compact's cost estimates in its earlier CVEO proposal in D.P.U. 20-40 were based on its proposal to operate the program over two years (i.e., 2020 and 2021). D.P.U. 20-40, Petition, Exh. ATB at 7 (May 15, 2020). Here, the Compact proposes to operate the proposed CVEO over the entire Three-Year Plan term (see, generally, Exh. Compact-9).

(4) an increase in the projected ConnectedSolutions incentives consistent with Program Administrators' planning assumptions; and (5) a shift of participant enrollments from the end of the 2019-2021 Three-Year Plan term (i.e., "backloaded") to the beginning of the 2022-2024 Three-Year Plan term (i.e., "front-loaded") in order to maximize the availability of a higher solar federal tax credit (Exh. Compact-2, at 135).

c. Commercial and Industrial Program Enhancements

The Compact proposes to offer up to 100 percent incentives for municipal customers, small non-profits, small businesses, and micro businesses for weatherization, lighting, and electrification measures (Statewide Plan, Exh. 1, App. G.1, at 3; Exh. Compact-5 (4th Rev.)).[159] The Compact proposes these enhancements after the C&I Small Business Nonparticipant Customer Profile Study identified several of these customer classes as having historically lower participation rates in the energy efficiency programs (Exh. Compact-2, at 142).

3. Positions of the Parties

a. Cape Light Compact

The Compact argues that its proposed enhanced incentives are within the scope of its statutory authority to design programming to serve the interests of customers in its member municipalities (Program Administrators Brief at 105, 106, citing G.L. c. 164, § 134(b)). The Compact maintains that these enhanced incentives are consistent with the Green

[159] The Statewide Plan offers up to 70 percent incentives for the same measures (Exh. Compact-2, at 132).

Communities Act and were reviewed and approved by the Council (Program Administrators Brief at 105, 106). The Compact further contends that all applicable programs remain cost-effective with the enhanced incentives (Program Administrators Brief at 105, 106, citing Exhs. Compact-2, at 142-143; Compact-4, Table IV.D.1).

The Compact states that the iteration of the proposed CVEO presented in this Three-Year Plan maintains as many program design elements and input assumptions as possible from the CVEO proposal set forth in D.P.U. 20-40, given the significant stakeholder engagement and feedback that went into that proposal (Program Administrators Brief at 98, citing Exh. Compact-2, at 135-137). The Compact argues that the Legislature amended the Green Communities Act to allow Program Administrators to offer additional programs, including strategic electrification measures designed to result in cost-effective reductions in GHG emissions and programs that result in customers switching to renewable energy sources or other clean energy technologies (Program Administrators Brief at 99, citing G.L. c. 25, § 21(b)(2)). The Compact submits that the Department should approve the proposed CVEO for the 2022-2024 Three-Year Plan term because: (1) it is consistent with the Green Communities Act and the Department's desire for innovation in programming; (2) it does not conflict with the Legislative intent in establishing the SMART Program; (3) it is aligned with the Council's priorities; and (4) it is aligned with the intent of the Climate Act (Program Administrators Brief at 99-104).

The Compact acknowledges that the installation of heat pumps and battery energy storage are already incentivized by the Program Administrators but the proposed installation

of solar PV through energy efficiency programs is new (Program Administrators Brief at 99, citing Exh. Compact-1, generally and at 105, 115; Tr. 4, at 635-636). However, the Compact argues that its proposal to incentivize solar PV falls squarely within the ambit of programming now authorized by the Green Communities Act because the proposed CVEO is a program that results in "customers switching to renewable energy sources or other clean energy technologies" (Program Administrators Brief at 99, citing G.L. c. 25, § 21(b)(2)).

The Compact characterizes the CVEO as a complement to the SMART Program and argues nowhere has the Legislature evinced a desire to terminate or eliminate the use of incentives for solar PV across the Commonwealth (Program Administrators Brief at 102, citing An Act Relative to Solar Energy, St. 2016, c. 75, § 11(b)). Further, the Compact argues that the proposed CVEO is a limited and targeted offering with a maximum of 250 customers participating over the Three-Year Plan term (Program Administrators Brief at 102, citing Exh. Compact-9, at 2; Tr. 4, at 638-639).

In sum, the Compact asserts that: (1) the proposed CVEO budget is reasonable and designed to maximize use of federal and state outside funding to minimize costs to participants and costs collected from ratepayers through the EES; (2) the CVEO will provide annual electric savings for participants and reduce the subsidy non-income-eligible customers absorb to support income-eligible customers' electric rates; and (3) the technologies are consistent with the strategic electrification programming the Legislature directly authorized Program Administrators to pursue (Program Administrators Brief at 103, citing Exh. Compact-9, at 17-19, 22; 2019-2021 Three-Year Plans Order, at 154).

b. Attorney General

The Attorney General argues that the Compact's proposed Statewide Plan enhancements are consistent with the Green Communities Act and are designed to better serve customer groups that have been identified as high priorities during the 2022-2024 Three-Year Plan term (Attorney General Brief at 25). In addition, The Attorney General argues that the Department should approve the proposed CVEO and budget as part of the Compact's 2022-2024 Three-Year Plan (Attorney General Brief at 30).

The Attorney General maintains that the proposed CVEO is designed to address several significant environmental and economic concerns (Attorney General Brief at 27). The Attorney General contends that the Department's Order in D.P.U. 20-40 denying the CVEO as a matter of law construes the energy efficiency funding statute too narrowly (Attorney General Brief at 28). The Attorney General further asserts that the Department's Order in D.P.U. 20-40 does not fully capture the breadth of changes the Energy Act of 2018 made to the Green Communities Act (Attorney General Brief at 29, citing St. 2018, c. 227). The Attorney General maintains that the proposed CVEO does not support stand-alone solar PV, but only solar PV when it is paired with battery energy storage and heat pumps (Attorney General Brief at 29). The Attorney General argues that all three components of the proposed CVEO are required to deliver a cost-effective, affordable, clean heating alternative that is designed to address the substantial financial barriers faced by low- and moderate-income households and takes maximum advantage of "renewable energy [and] other clean energy

technologies" as permitted by law (Attorney General Brief at 29-30, citing G.L. c. 25, § 21(b)(2), as amended by the Energy Act of 2018).

c. Department of Energy Resources

DOER states that it takes no position on the proposed CVEO component of the Compact's Three-Year Plan (DOER Reply Brief at 7, n.34). DOER does, however, support the Compact's other enhancements to the Statewide Plan (DOER Reply Brief at 7, citing Statewide Plan, Exh. 1, App. N at 8-9).

d. Acadia Center

Acadia argues that the Department should approve the Compact's Three-Year Plan, including the proposed CVEO, as consistent with the Green Communities Act (Acadia Brief at 18, 21). Acadia asserts that the proposed CVEO is an integral part of delivering all cost-effective energy efficiency and demand resources (Acadia Brief at 20). Finally, Acadia maintains that the Compact's proposed enhanced incentives for battery energy storage and the other bundled CVEO technologies, together with the rest of the residential sector, meet the statutory threshold as cost-effective (Acadia Brief at 20).

e. Conservation Law Foundation

CLF argues that it supports the proposed CVEO generally as part of the Program Administrators' efforts to electrify fossil fuel appliances (CLF Brief at 51). CLF expresses its support for the Program Administrators' plans to work with manufacturers and installation contractors, and concludes that implementing and using heat pumps and increasing overall

electrification will help the Commonwealth achieve its net-zero goals and reduce expenses for customers (CLF Brief at 52).

f. Northeast Clean Energy Council

NECEC supports the proposed CVEO and argues that strategic electrification and customer-sited renewable energy generation are energy efficiency or demand reduction resources within the meaning G.L. c. 25, § 21 (NECEC Brief at 23). NECEC further argues that the proposed CVEO and, in particular, the proposed inclusion of solar PV as an energy efficiency program funded through the Compact's Three-Year Plan, is supported by the plain language, holistic view, and legislative history of the Commonwealth's various energy statutes (NECEC Brief at 22, 32, citing G.L. c. 25, § 21; St. 2021, c. 8; St. 2018, c. 227; St. 2016, c. 75).

NECEC argues that there is no statutory bar to including solar PV in the proposed CVEO or the Three-Year Plans, generally (NECEC Brief at 26). In this regard, NECEC asserts that the 2016 Act Relative to Solar Energy, St. 2016, c. 75, does not preclude the Compact from including customer-sited solar PV in the proposed CVEO and the Legislature intended to include solar PV and other renewable energy generation resources as eligible measures within the Three-Year Plans (NECEC Brief at 26).

NECEC maintains that the proposed CVEO will help to transition low- and moderate-income residential customers to a renewable energy resource, strategically electrify, and reduce GHG emissions (NECEC Brief at 32). Finally, NECEC argues that because the proposed CVEO is limited to 250 customers, it will provide an opportunity for the Program

Administrators to develop best practices for transitioning all customers to electrification and, in particular, low- and moderate-income customers who have historically under-participated in many energy efficiency programs (NECEC Brief at 32).

4. Analysis and Findings

a. Introduction

As part of its 2022-2024 Three-Year Plan, the Compact proposes to offer several enhancements to the Statewide Plan pursuant to G.L. c. 164, § 134(b). The Compact's proposed enhancements to the Statewide Plan generally take the form of enhanced incentives at levels that are materially different from the Statewide Plan (see, e.g., Statewide Plan, Exh. 1, App. G.1).

The Department must consider the proposed Statewide Plan enhancements in the context of the comprehensive statutory scheme for energy efficiency provided by the Green Communities Act.[160] The Department's review must ensure, among other things, that the

[160] There is no question that the Compact's Three-Year Plan, though authorized by G.L. c. 164, § 134, is subject to the standards set forth in G.L. c. 25, §§ 19, 21-22 for the development and evaluation of energy efficiency plans. Chapter 25, § 21 explicitly applies to certified energy plans by municipal aggregators under G.L. c. 164, § 134. Even without an express connection between the statutes, the Legislature is presumed to be aware of existing legislation when enacting subsequent legislation and, therefore, statutes are interpreted to form a consistent body of law. See Parris v. Sheriff of Suffolk County, 93 Mass. App. Ct. 864, 868 (2018) (citations omitted). In 2008, the Green Communities Act amended G.L. c. 25 to add Sections 19, 21-22, which created the Council and established a comprehensive—and extremely effective—statewide statutory scheme aimed at maximizing energy efficiency in the Commonwealth. See G.L. c. 25, § 19, 21-22. As we have previously found, the purpose of the Green Communities Act was to "provide forthwith for renewable and alternative energy and energy efficiency in the

Compact's proposed enhancements to the Statewide Plan comply with all ratepayer protections in the Green Communities Act regarding cost effectiveness, funding, and bill impacts. G.L. c. 25, § 21(a), (b)(1), (b)(2)(iv). Customers within the Compact's member municipalities may opt out of participation in the Compact's municipal aggregation program, but they may not opt out of having the Compact as their energy efficiency Program Administrator. The Compact relies on the funds authorized by G.L. c. 25, § 19 to support its energy efficiency programs. In addition to the other requirements of the Green Communities Act, the Department must ensure that the Compact spends its energy efficiency funds in a reasonable and prudent manner when implementing its three-year plans, just as we do for the other Program Administrators.[161] Accordingly, our review of the Compact's

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[C]ommonwealth . . . ." Paragon Holdings, LLC, D.P.U. 14-119, at 4 (2014), citing Green Communities Act at Preamble. The Department must construe statutes that address the same subject matter harmoniously, "so that effect is given to every provision in all of them," Green v. Wyman-Gordon Company, 422 Mass. 551, 554 (1996), and the statutes do not "undercut each other." Burbank Apartments Tenant Association v. Kargman, 474 Mass. 107, 124-125 (2016). The Preamble to the Electric Restructuring Act of 1997, St. 1997, c. 164 ("Restructuring Act"), which created G.L. c. 164, § 134, states, in part, that one of "the primary elements of a more competitive electricity market will be . . . enhanced environmental protection goals." Restructuring Act at Preamble. Read together, these statutes evince the Legislature's intent to unify energy efficiency strategies and goals in the Commonwealth, which has resulted in Massachusetts leading the country in energy efficiency.

[161] The Compact is not eligible to collect performance incentives, which provide an incentive for the other Program Administrators to maximize benefits while minimizing ratepayer costs. See, e.g., 2019-2021 Three-Year Plans Order, at 76.

proposed enhancements to the Statewide Plan requires the Department to protect ratepayer interests.

b. Cape and Vineyard Electrification Offering

The Department received comments from several intervenors and a limited participant regarding the Compact's CVEO proposal. The Department has rejected an almost identical CVEO proposal in its Order in D.P.U. 20-40-A because, in addition to other deficiencies, the manner of funding for the proposed CVEO is contrary to the laws of the Commonwealth and, therefore, cannot be approved as an enhancement to the Statewide Plan under G.L. c. 164, § 134, which findings the Compact has appealed to the Supreme Judicial Court.[162] For the reasons set forth in D.P.U. 20-40-A and below, the Department finds the proposed CVEO in the Compact's 2022-2024 Three-Year Plan is inconsistent with the requirements of G.L. c. 25, §§ 19, 21, and therefore, cannot be approved as an enhancement to the Statewide Plan or funded pursuant to G.L. c. 25, § 19.

Each Three-Year Plan "shall provide for the acquisition of all available energy efficiency and demand reduction resources." G.L. c. 25, § 21(b)(1). Investments in energy efficiency through the Green Communities Act result in long-term benefits of reduced energy consumption and reduced costs for the lives of the energy efficiency measures installed. See, e.g., 2019-2021 Three-Year Plans Order, at 109, citing D.P.U. 08-50-A at 58; 2010-2012 Electric Three-Year Plans Order, at 88; 2010-2012 Gas Three-Year Energy Plans

[162] The appeal has been docketed as SJ-2021-0443.

Order, at 74. The passage of the Energy Act of 2018 and the Climate Act did not change the focus of the Green Communities Act in that regard. The Compact and other commenters rely on the Energy Act of 2018's addition of clause (J) to G.L. c. 25, § 21(b)(2)(iv) in arguing that the solar PV component of the proposed CVEO is authorized by the Green Communities Act (Program Administrators Brief at 99; see, e.g., Acadia Brief at 19; NECEC Brief at 24). That section and clause provide: A[n efficiency investment] plan shall include: . . . (iv) a description of programs, which may include, but which shall not be limited to: . . . (J) programs that result in customers switching to renewable energy sources or other clean energy technologies[.] G.L. c. 25, § 21(b)(2)(iv)(J). The Compact and others claim that solar PV is a "renewable energy source" that customers can "switch to" as part of the proposed CVEO within the Compact's Three-Year Plan (Program Administrators Brief at 99-100; see, e.g., Acadia Brief at 19; NECEC Brief at 24).

Such a reading of the Green Communities Act ignores the plain meaning of the statute and purpose of the programs to be included in a three-year energy efficiency plan, which is to be part of the acquisition of all available energy efficiency and demand reduction resources. G.L. c. 25, § 21(b)(1).[163] When interpreting a statute, the "statutory language

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[163] The Program Administrators acknowledge this in testimony when asked about low-carbon fuels. The Program Administrators testified that "because [low-carbon fuels] on their own do not lead to a reduction in customer energy consumption or demand, they would not qualify as an energy efficiency measure" (Tr. 1, at 77). Although supportive of the proposed CVEO, Acadia also argues that "[b]y statute, the energy efficiency measures included in the Three-Year Plan must focus on a reduction of electric or natural gas demand or consumption in the Commonwealth" (Acadia Reply Brief at 2, citing Tr. 1, at 77; G.L. c. 25, § 21(a)). CLF also acknowledges

should be given effect consistent with its plain meaning and in light of the aim of the Legislature unless to do so would achieve an illogical result." Welch v. Sudbury Youth Soccer Assoc., Inc., 453 Mass. 352, 354-355 (2009), quoting Sullivan v. Brookline, 435 Mass. 353, 360 (2001). General Laws c. 25, § 21(b)(2)(iv)(J) allows Program Administrators to offer customers incentives to switch from a technology that uses one fuel source to a technology that uses renewable energy or clean energy in order to achieve energy savings under the energy efficiency investment plan.

General Laws c. 25, § 21(b)(2) provides a list of the types of energy efficiency or demand reduction programs that may be included in an energy efficiency plan, rather than authorization to include different types of programs. Said another way, the Green Communities Act states that the Program Administrators may offer an energy efficiency program that results in customers switching to a renewable energy technology, but the law does not authorize deployment of a renewable generation source simply because it is a renewable energy technology. Not all adoptions of renewable energy constitute energy efficiency because not all uses of renewable energy will reduce consumption for energy efficiency savings. As the Department has previously found, solar PV is an energy generating electrical system that does not seek to lower a customer's consumption, but rather

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this required component of the Three-Year Plans when it urges approval because, in part, the Three-Year Plans reduce energy consumption and demand (CLF Reply Brief at 4).

it is an alternative means of satisfying a customer's electrical consumption levels with renewable energy.[164] D.P.U. 20-40-A at 21.

As discussed above, in the context of the Green Communities Act, as amended by the Climate Act, energy efficiency measures reduce a customer's behind-the-meter consumption, lowering energy demand and GHG emissions. Accordingly, there is both an energy efficient and directional component to the switches authorized by the Green Communities Act. The Act authorizes switching from a non-renewable energy technology to a renewable energy technology that lowers overall energy use. However, the Act does not allow programs that incentivize, for example, switching from an air source heat pump to a fossil fuel heating system, even if the switch would result in energy savings.

Further, the solar PV component of the proposed CVEO does not constitute a "switch" where a customer changes the one fuel source of an end use to another fuel. A customer installing solar PV is changing the source of their electricity, not switching to a completely different fuel source like a customer switching from an oil heating system to an air source heat pump, solar hot water heater, or wood pellet stove. Accordingly, the

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164 Even though the Attorney General supports CVEO, her argument implies that the statute should not be construed to allow blanket switching to renewable energy generation (like stand-alone solar PV) funded with energy efficiency funds (see Attorney General Brief at 29). The Attorney General argues that the statute should allow solar PV as a program "that result[s] in customers switching to renewable energy sources" under G.L. c. 25, § 21(b)(2)(iv)(J), if it is co-delivered with a different program that lowers energy use under G.L. c. 25, § 21(b)(2)(iv)(A) (Attorney General Brief at 29-30). This argument attempts to rewrite the statute to create contingencies between separate programs in order to justify a measure that does not meet the requirements of the law.

Department finds that solar PV is not an energy efficiency resource, and any use of solar PV as an alternative means of electricity is not a "switch to renewable energy" for purposes of the Green Communities Act.[165] If energy efficiency funds were allowed to incentivize renewable energy generation, such as a solar PV installation, as advanced by the Compact, then a Program Administrator would also be able to use energy efficiency funds to incentivize a customer's on-site wind generation, biomass plant, or nuclear power, which would be an absurd use of energy efficiency funds.[166] After all, the Green Communities Act does not call for all cost-effective renewable energy resources.

The Legislature has established specific solar incentive and renewable energy programs to foster the development of renewable energy in the Commonwealth. Pursuant to Section 11(b) of an Act Relative to Solar Energy, St. 2016, c. 75, as amended by the Climate Act, DOER is charged with developing the SMART Program, which is the solar PV

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165 The Department notes that this conclusion is consistent with the Department's determination, in Section IV.D.3.f. above, that customers switching to biofuels may constitute a switch to a low GHG emission renewable energy source but the measure does not lead to a reduction in energy consumption within the context of the Green Communities Act.

166 The Legislature's intent must be ascertained from all of the Green Communities Act's words, as amended, "construed by the ordinary and approved usage of the language" and "considered in connection with the cause of its enactment, the mischief or imperfection to be remedied and the main object to be accomplished." Harvard Crimson, Inc. v. President & Fellows of Harvard College, 445 Mass. 745, 749 (2006). Plain and unambiguous statutory language is "conclusive as to legislative intent," but we will not adopt a literal construction where the consequences would be "absurd or unreasonable" and could not be what the Legislature intended. Sharris v. Commonwealth, 480 Mass. 586, 594 (2018), quoting Attorney General v. School Committee of Essex, 387 Mass. 326, 336 (1982).

incentive program for the Commonwealth funded by electric ratepayers through a tariff approved by the Department. The Compact seeks to establish an additional solar PV incentive program to provide incentives in addition to the SMART Program under the guise of the energy efficiency programs. Interpreting the Green Communities Act to allow Program Administrators to create additional solar PV incentives undercuts the Legislature's clear intent to have DOER design a ratepayer solar incentive program (i.e., SMART) that "promotes the orderly transition to a stable and self-sustaining solar PV market at a reasonable cost to ratepayers." St. 2016, c. 75, §§ 11(a)-(b). The SMART Program, consistent with Section 94 of the Climate Act, also provides for a carve out for low-income customers and low-income communities, upon which the proposed CVEO impedes in also offering incentives to income-eligible participants. Interpreting G.L. c. 25, § 21(b)(2)(iv)(J) as an expansion of the energy efficiency programs to allow a new solar incentive program, as an alternate to the SMART Program or other clearly defined solar programs, is contrary to the Commonwealth's statutory framework.

Additionally, not every GHG emissions reduction goal under the Climate Act fits within the energy efficiency programs under G.L. c. 25, § 21. If they did, the Program Administrators could use energy efficiency funds to pay for offshore wind (as a renewable energy source), electric vehicles (as a strategic electrification measure), carbon capture (as a clean energy technology), or any other program that reduces GHG emissions. The Climate Act establishes that a portion of the Commonwealth's GHG emissions reduction goals should be achieved through energy efficiency and that goal has been set by the EEA Secretary

(Statewide Plan, Exh. 1, App. D). Use of non-energy efficiency measures to reach energy efficiency goals would create an imbalance among the other goals set by the EEA Secretary. Therefore, the claim that the proposed CVEO should be approved simply because it helps achieve climate goals is a red herring (see, e.g., NECEC Brief at 30-32).

The Attorney General and NECEC support the limited nature of the proposed CVEO applauding its focus on 250 income-eligible and moderate income customers, but it is the focus on this small group of customers that causes additional concerns. The proposed CVEO is inconsistent with the Green Communities Act because it is a limited offering to 250 income-eligible and moderate income participants. Nothing in the Green Communities Act permits pursuit of all available cost-effective energy efficiency for a select, limited number of customers. Any cost-effective measure pursued must be available to all similarly situated customers of the Program Administrator. Further, even if the CVEO proposal were consistent with applicable law, the Department still has strong concerns regarding the resulting bill impacts, which are significant though there are only 250 participants out of more than 200,000 customers served (Exh. Compact-6 (4th Rev.), Bill Impact Summary). See Cape Light Compact, D.P.U. 14-69, Petition, Exh. A at 3. For the foregoing reasons and those set forth in D.P.U. 20-40-A, the Department denies implementation of the CVEO in the Compact's 2022-2024 Three-Year Energy Efficiency Plan.

Nevertheless, as the Department has previously stated in D.P.U. 20-40-A at 23-24, there is great value in marketing the co-delivery of existing solar incentives to reduce energy bills, which delivers on the intent and goals of the Green Communities Act. As discussed

above in Section IV.D.3.b, the Department is concerned about the potential bill impacts of strategic electrification, particularly for low- and moderate income customers. As the Attorney General suggests, co-delivering strategic electrification offerings under the Green Communities Act with solar incentive programs, such as the SMART Program, is a strategy the Program Administrators should explore as a means of minimizing ratepayer costs under their strategic electrification offerings. A co-delivery model would be consistent with the Climate Act and the Commonwealth's energy and environmental goals, by encouraging the simultaneous electrification and decarbonization of the electric grid.

Accordingly, the Department directs the Program Administrators to explore the development of a co-delivery strategy that markets energy efficiency and solar PV for potential inclusion in their 2025-2027 Three-Year Plans. The strategy must comport with the open, competitive solar PV market, as well as the Green Communities Act, and Department rules and regulations. Any SMART Program incentive provided for the solar PV market should be compliant with any applicable DOER regulations or guidelines governing the solar program and St. 2016, c. 75. The Program Administrators shall file an update on the research and development of this strategy in their Plan-Year Reports.

c. Other Statewide Plan Enhancements

The Department has reviewed the Compact's remaining enhanced incentive proposals: (1) incentives up to 100 percent for income-eligible and moderate income residential multifamily new construction projects installing weatherization measures above code and installing and maintaining heat pumps (Exh. Compact-2, at 139-140); and (2) incentives up to

100 percent for C&I customers, including municipal customers, small non-profits, small businesses, and microbusinesses, installing weatherization, lighting, and electrification measures (Statewide Plan, Exh. 1, App. G.1, at 3). The residential proposed enhanced incentives are new and the C&I proposed enhancements are consistent with past program design implemented by the Compact (Statewide Plan, Exh. 1, App. G.1 – Cape Light Compact). 2019-2022 Three-Year Plans Order, D.P.U. 18-110 through D.P.U. 18-119, Petition, Statewide Plan, Exh. 1, App. K (October 31, 2018). The Compact has not obtained any outside funding for these Statewide Plan enhancements. The Compact proposes to collect all costs related to these Plan enhancements from electric ratepayers through its EES (Exhs. Compact-2, at 115, 144; Compact-4 (Rev.) at 3). After review, the Department approves the Compact's proposed residential multifamily new construction and C&I existing buildings[167] enhancements to the Statewide Plan pursuant to G.L. c. 164, § 134(b).

However, the Department questions the continued reasonableness of the increased incentive levels offered by the Compact without a study demonstrating the prudence of, and need for, such increased incentives. Program experience alone is insufficient to warrant consistently greater incentives compared to statewide levels, as high as 100 percent of the total cost (Exh. DPU-Compact 1-14). Prior to the filing of this Three-Year Plan, the Department directed the Compact to conduct an analysis of its enhanced incentives approved in the 2019-2021 Three-Year Plans Order "through the statewide evaluation protocols to

[167] The Department directs the Compact, in its annual report, to identify with specificity who qualifies for the C&I existing buildings incentives.

determine if these enhanced incentives (including incentive levels) continue to be warranted." 2019-2021 Three-Year Plans Order, at 126. The Compact did not complete the required study prior to filing its Three-Year Plan as directed and, instead, indicated a completion date of the study well beyond the closing of the record in this matter (Exh. Compact-2, at 130).

In this Three-Year Plan filing, the Department directed the Compact to set forth the incremental budget of its enhancements relative to the Statewide Plan. 2019-2021 Three-Year Plans Order, at 132-133. The Compact testified that the incremental incentives budget of its residential multifamily new construction enhancement is $8.7 million and that of its C&I existing buildings enhancement is $4.7 million (Exh. Compact-2, at 141, 144). The Compact's total budget for residential new construction is $13.6 million and for C&I existing buildings is $38.7 million (Exh. Compact-4 (4th Rev.), at 12). Therefore, the Compact's residential new construction enhancement incentives constitute 64 percent of the Compact's budget for that program. It is unclear that this substantially increased incentive translates to substantially increased participation without the study the Department previously ordered. Though much less of a difference between the Compact's total budget for C&I existing buildings ($38.7 million) and its total budget without enhancements ($34 million), it remains unclear whether this additional incentive is necessary to ensure C&I participation without study. The Department is concerned about the budget impacts of the Compact's enhancements and the lack of evidence demonstrating the reasonableness and prudence of the enhancements.

As stated above, the Department allows the Compact to move forward with its residential new construction and C&I existing buildings enhancements, but makes no substantive findings on the prudence of these incentive levels at this time. The Department again directs the Compact to complete prior to the filing of its 2025-2027 Three-Year Plan, and file with its 2025-2027 Three-Year Plan, an analysis of its enhanced incentives approved herein through the statewide evaluation protocols to determine if these enhanced incentives, including incentive levels, are warranted and necessary to drive participation levels. One aspect of the evaluation should consider the participation rates of comparable customer groups receiving similar services with lower incentive levels. If the Compact is unable to justify its greater incentive levels, the Department will consider this when assessing the certification of the Compact's energy efficiency plan in the future. See Section XI.E., below.

The Department reiterates that in all future Three-Year Plan filings the Compact must fully support any enhanced incentive proposals with testimony and exhibits (1) describing each proposed Statewide Plan enhancement; (2) explaining and supporting why each proposed enhancement is necessary and consistent with all requirements of the Green Communities Act; (3) describing Council and stakeholder review of each proposal; and (4) clearly identifying the incremental budget and projected savings, broken down by rate class and category, relative to the Statewide Plan. 2019-2021 Three-Year Plans Order, at 132-133. The Department further directs the Compact in future Three-Year Plan filings to provide a listing of each measure in the BCR model that is receiving an incentive higher than the

Statewide Plan. In such listing, the Compact should retain the attendant column data (e.g., sector, program, core initiative, BCR measure ID, incentive, etc.).

C. Provision of Energy Efficiency Services to Mutual Customers

1. Introduction

National Grid (gas) provides gas distribution service to all customers in its service territory across Cape Cod.[168] Additionally, National Grid (gas) administers gas energy efficiency programs for its customers pursuant to its Department-approved three-year energy efficiency plan. G.L. c. 25, §§ 19(b), 21(b)-(d). As we have noted above, the Compact is an authorized municipal aggregator for 21 towns on Cape Cod and Dukes County. See G.L. c. 164, § 134(a); Cape Light Compact, D.T.E. 00-47 (2000) (approving the Compact's initial municipal aggregation plan). As a municipal aggregator, the Compact purchases electricity supply on behalf of eligible customers in its member municipalities who have not opted out of the Compact's municipal aggregation program. The Compact also has received Department approval to act as an energy efficiency Program Administrator for all electric customers in its member municipalities, including those electric customers who have opted out of the Compact's municipal aggregation program. G.L. c. 25, §§ 19(a), 21(b)-(d); G.L. c. 164, § 134(b); Cape Light Compact, D.T.E. 00-47-C (2001).

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[168] National Grid (gas) provides gas distribution service to the following towns on Cape Cod: Barnstable, Bourne, Brewster, Chatham, Dennis, Eastham, Falmouth, Harwich, Mashpee, Orleans, Sandwich, Wareham, and Yarmouth.

Because National Grid (gas) and the Compact have overlapping service areas on Cape Cod, certain customers may be eligible for energy efficiency services as a gas customer of National Grid (gas) and as an electric customer in the communities the Compact is authorized to provide energy efficiency services to pursuant to D.T.E. 00-47-C ("Mutual Customers").[169] Since the 2016-2018 Three-Year Plans proceeding, the Compact and National Grid (gas) have proffered differing solutions to the question of how best to serve Mutual Customers in a manner consistent with applicable law and have engaged in unsuccessful negotiations to reach an agreement amenable to both (Exhs. DPU-National Grid (gas)-1, DPU-Compact 2-13(a)). 2016-2018 Three-Year Plans Order, at 116-118; 2019-2021 Three-Year Plans Order, at 143-146. When National Grid (gas) and the Compact were unable to negotiate a final resolution of these issues, National Grid (gas) petitioned the Department to resolve the dispute, which the Department docketed as D.P.U. 16-169. That docket remains open and a final resolution of these issues will occur there. Below, the Department addresses the service of Mutual Customers by National Grid (gas) and the Compact during the interim period.

2. Background

In its 2016-2018 Three-Year Plan filing, the Compact stated that it had been administering its residential energy efficiency programs in a fuel-neutral manner since the

[169] The Department notes that this circumstance is not unique to the Compact's service area. There are numerous instances where a gas Program Administrator and an electric Program Administrator each offer energy efficiency programs in the same municipality.

Department approved its initial energy efficiency plan in 2001, which included serving National Grid (gas) customers who heat their homes with natural gas but, nonetheless, chose to participate in the Compact's energy efficiency programs. 2016-2018 Three-Year Plans Order, at 116. National Grid (gas) asserted that the Compact's practice of serving Mutual Customers could result in the Compact using its electric energy efficiency funds to subsidize the gas energy efficiency services that would otherwise be provided by National Grid (gas). 2016-2018 Three-Year Plans Order, at 116-117. On December 2, 2015, the Compact and National Grid (gas) filed an interim agreement that addressed the joint administration of energy efficiency services to residential Mutual Customers. The Compact and National Grid (gas) represented that they would continue to negotiate a final agreement that would resolve the Mutual Customer issue (Exh. DPU-National Grid (Gas)-1, at 1).[170]
2016-2018 Three-Year Plans Order, at 117-118. At the Compact's request, while negotiations for a final agreement were ongoing, National Grid (gas) entered into a contract with the Compact's home energy services lead vendor to provide gas energy efficiency services on Cape Cod effective February 1, 2016 (Exh. DPU-National Grid (Gas)-1, at 1).

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170 The interim agreement provided that the Compact and National Grid (gas) would contract with a joint lead vendor to provide energy efficiency services to Mutual Customers. The joint lead vendor would bill National Grid (gas) or the Compact, as applicable, for energy efficiency services provided to gas customers; National Grid (gas) would claim gas savings and the Compact would claim savings from electricity and other fuels. National Grid (gas) would provide gas customers incentives consistent with its approved programs. The agreement further provided that the Compact and National Grid (gas) would negotiate a more detailed final agreement by January 31, 2016. 2016-2018 Three-Year Plans Order, at 117-118.

Despite some nine months of further negotiations, National Grid (gas) and the Compact were unable to reach a final agreement and on October 5, 2016, National Grid (gas) filed its petition in D.P.U. 16-169 with the Department (Exh. DPU-National Grid (Gas)-1, at 1). D.P.U. 16-169, Petition at 3 (October 5, 2016).[171]

Pending final resolution of these issues, National Grid (gas) and the Compact have continued to use the same lead vendor for energy assessments and implementing weatherization installations for Mutual Customers (Exh. DPU-National Grid (Gas)-1, at 1). Currently, when customers who heat their homes with natural gas enter the Residential Coordinated Delivery initiative from the National Grid (gas) pathway (i.e., directly contacting National Grid (gas) or Mass Save[172]) those customers are served through the shared lead vendor (Exhs. DPU-National Grid (Gas)-1, at 1; DPU-Compact 2-13, at 2). In this circumstance, National Grid (gas) claims all gas savings (and pays all associated costs) and refers any secondary electric savings (and associated costs) to be claimed by the Compact (Exhs. DPU-National Grid (Gas)-1, at 1-2; DPU-Compact 2-13, at 2). Conversely, when a customer who heats with natural gas enters the program through the Compact's pathway

[171] In its review of the 2019-2021 Three-Year Plans, the Department found that certain issues raised by National Grid (gas) shared common questions of law and fact with issues pending in D.P.U. 16-169. Given the complex nature of those questions, the Department determined it would address these issues comprehensively in D.P.U. 16-169. 2019-2021 Three-Year Plans Order, at 146.

[172] Mass Save is a registered word service mark the Program Administrators use to jointly market their energy efficiency programs statewide (Statewide Plan, Exh. 1, at 184). The Program Administrators jointly operate a website and central telephone number under the brand "Mass Save" (Statewide Plan, Exh. 1, at 183).

(i.e., directly contacting the Compact), that customer is served as a Compact customer and the Compact does not send any gas savings derived from natural gas measures to National Grid (gas) (Exhs. DPU-National Grid (Gas)-1 at 2; DPU-Compact 2-13, at 2). In this circumstance, gas savings and program costs are claimed and paid for by the Compact through its EES (Exh. DPU-National Grid (Gas)-1, at 2).

National Grid (gas) proposes to serve Mutual Customers with the Compact for the 2022-2024 Three-Year Plan term in the same manner as it does with other Program Administrators when there are mutual customers (Exh. DPU-National Grid (Gas)-1, at 2). More specifically, National Grid (gas) proposes that if the Mutual Customer is a gas heating customer, National Grid (gas) would take the lead on providing the energy efficiency measures, claim and pay for any gas savings through its EES, and send any secondary electric savings to the Compact to be claimed and paid for through the Compact's EES (Exh. DPU-National Grid (Gas)-1, at 2). Conversely, the Compact proposes to continue to serve Mutual Customers with National Grid (gas) for the 2022-2024 Three-Year Plan term in the manner described above (Exh. DPU-Compact 2-13; Tr. 4, at 577-579).

3. Positions of the Parties

a. National Grid (gas)

National Grid (gas) argues that the continued practice of the Compact providing home energy assessments and weatherization measures to Mutual Customers who heat their homes with natural gas is inconsistent with the statewide coordination protocol that all other

Program Administrators follow[173] (National Grid (gas) Supplemental Brief at 1). National Grid (gas) contends that the savings claimed by the Compact in these instances are inconsistent with the savings claimed by other Program Administrators (National Grid (gas) Supplemental Brief at 1). National Grid (gas) argues that this practice inappropriately allows the Compact, an electric Program Administrator: (1) to pay for gas savings through its customers' electric bills (as opposed to the bills of the gas customers that realize system benefits from overall reductions in gas consumption and winter demand); and (2) to claim those gas savings and associated benefits through an electric energy efficiency plan (National Grid (gas) Supplemental Brief at 2).

National Grid (gas) asserts that the fact that the Compact is a municipal aggregator is not reason to support the implementation of energy efficiency services in a manner that is inconsistent with the coordinated statewide practice followed by all other Program Administrators (National Grid (gas) Supplemental Reply Brief at 1). In this regard, National Grid (gas) contends that it is the Department and the Council who have the responsibility of making energy efficiency policy decisions and not the Compact's Governing Board (National Grid (gas) Supplemental Reply Brief at 1, citing G.L. c. 25, §21 (b)(1)).

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173 National Grid (gas) maintains that, with the exception of the Compact, the gas and electric Program Administrators coordinate to serve mutual customers based on the customer's primary heating fuel. For customers that heat with a fuel other than natural gas, the electric Program Administrator provides the in-home energy assessment. For customers that heat with natural gas, the gas Program Administrator provides the in-home energy assessment (National Grid (gas) Supplemental Brief at 1, citing Exh. AG-Comm 1-3).

National Grid (gas) disagrees with the Compact's classification of its weatherization measures as electric measures because, while the measures to be implemented under the Residential Coordinated Delivery program for the 2022-2024 Three-Year Plan term will be offered by both electric and gas Program Administrators, when these measures are done in a home heated by natural gas, the savings achieved are primarily related to the heating source (National Grid (gas) Supplemental Reply Brief at 2). National Grid (gas) maintains that these measures are appropriately provided by the gas Program Administrators and the long-held common understanding of these measures as "gas measures" in this scenario is consistent with how these measures are coordinated in all other service areas in Massachusetts where there are overlapping electric and gas customers (National Grid (gas) Supplemental Reply Brief at 2). National Grid (gas) contends that the Compact's current and proposed approach is inconsistent with how the measures are offered and savings are claimed among all other Program Administrators (National Grid (gas) Supplemental Reply Brief at 2). National Grid (gas) maintains that with the Compact's administration of these measures, gas heating customers are paying for measures through the EES of both the Compact and National Grid (gas) (National Grid (gas) Supplemental Reply Brief at 2).

National Grid (gas) disagrees with the Compact's assertion that Mutual Customers should have the opportunity to choose the Program Administrator from which they would obtain energy efficiency services (National Grid (gas) Supplemental Reply Brief at 2). National Grid (gas) argues that the Green Communities Act does not contemplate customers choosing their energy efficiency provider and, in this regard, the Compact is conflating a

customer's ability to choose their electric supplier, whether it be through a competitive supplier or a municipal aggregator, with the provision of energy efficiency services (National Grid (gas) Supplemental Reply Brief at 2). National Grid (gas) asserts the customer's entry point to receiving energy efficiency measures should not determine how the associated savings are allocated (National Grid (gas) Supplemental Reply Brief at 3). Because the Compact has indicated that it does not intend to change how it plans to serve Mutual Customers in its 2022-2024 Three-Year Plan, National Grid (gas) requests that the Department direct the Compact to follow the statewide coordination protocols in the administration of their 2022-2024 Three-Year Plan (National Grid (gas) Supplemental Brief at 2; National Grid (gas) Supplemental Reply Brief at 3).

b. Cape Light Compact

The Compact argues that its fuel-neutral program design means that where the service areas overlap, Mutual Customers can be served by the Compact if they so choose (Compact Supplemental Brief at 2). The Compact claims that Mutual Customers should be considered electric customers of the Compact (regardless of whether they participate in the Compact's municipal aggregation program) and the Compact is authorized to administer electric measures to all electric customers in its member municipalities pursuant to its Department-approved energy efficiency plan (Compact Supplemental Brief at 2). Nonetheless, the Compact maintains that if a Mutual Customer calls the Mass Save hotline, the customer will be served by National Grid (gas) (Compact Supplemental Brief at 2). According to the Compact, if a Mutual Customer desires to be served by the Compact, the

Compact should be able to serve that mutual customer under its approved energy efficiency plan (Compact Supplemental Brief at 2-3).

In response to National Grid (gas)'s request that the Department direct the Compact to follow the statewide coordination protocols, the Compact disagrees and argues that it has always served and continues to serve Mutual Customers who contact the Compact for service, consistent with the Department's original certification of the Compact's energy efficiency plan (Compact Supplemental Reply Brief at 2). The Compact maintains that continuing this practice, as proposed by the Compact for the 2022-2024 Three-Year Plan term, will result in customer choice and not confusion (Compact Supplemental Reply Brief at 2).

4. Analysis and Findings

As the Department has previously recognized, the provision of energy efficiency services to Mutual Customers under National Grid (gas)'s and the Compact's respective Three-Year Plans is complex and involves certain issues of law and fact common to those raised by National Grid (gas) in D.P.U. 16-169. 2019-2021 Three-Year Plans Order, at 146. In addressing this topic in the 2019-2021 Three-Year Plans Order, however, the Department acknowledged the importance of consistency in the delivery of energy efficiency services in areas where electric and gas Program Administrators have overlapping service territories, and specifically commended the efforts of Program Administrators to align incentive levels and caps so that all customers can benefit from the same experience statewide. 2019-2021 Three-Year Plans Order, at 146. The Department notes that we did not then, and

never have, approved the Compact's treatment of Mutual Customers or authorized an alternative approach to the statewide coordination protocol; rather, the Department has repeatedly emphasized the importance of consistency in the delivery of energy services in service areas where electric and gas Program Administrators have overlapping service territories. 2019-2021 Three-Year Plans Order, at 146, citing 2016-2018 Three-Year Plans Order, at 118. Given the lack of a more specific directive, however, the Compact continued its practice of providing energy efficiency services to Mutual Customers who heat their homes with gas, while all savings associated with such customers are paid for and claimed by the Compact (Exh. DPU-National Grid (Gas)-1; DPU-Compact 2-13, at 1-2).

In the instant proceeding, the Compact proposes to continue to provide energy efficiency services to Mutual Customers that heat with natural gas during the 2022-2024 Three-Year Plan term (Tr. 4, at 577). If the Compact wishes to continue to serve Mutual Customers who heat with natural gas, the Department finds that the Compact must adhere to the established statewide coordination protocols for shared costs and savings. This will ensure that all Program Administrators implement their 2022-2024 Three-Year Plans in a consistent manner with respect to how measures are installed, and savings are claimed among all other Program Administrators (Exh. DPU-National Grid (Gas)-1, at 2). This also will obviate any concern about the improper subsidization of energy efficiency programs for gas heating customers by electric ratepayers. This is an interim directive that will remain in place subject to the Department's final resolution of issues related to Mutual Customers in D.P.U. 16-169.

As noted above, National Grid (gas) and the Compact use the same lead vendor to perform home energy assessments and manage weatherization installations for Mutual Customers (Exh. DPU-National Grid (Gas)-1; Tr. 4, at 579-581). When National Grid (gas) provides weatherization measures to Mutual Customers that heat with natural gas, the weatherization work shall continue to be paid for and the savings claimed by National Grid (gas), and any related electric savings (and associated costs) shall continue to be sent to the Compact (Exh. DPU-National Grid (Gas)-1). If the Compact provides weatherization measures to Mutual Customers that heat with natural gas, it must follow the statewide coordination protocols for shared costs and savings. Gas savings from any weatherization measure must be sent to National Grid (gas) and paid for by National Grid (gas) customers. The Compact may keep any secondary electric and other fuel savings associated with these measures. Pending final adjudication of these issues in D.P.U. 16-169, National Grid (gas) will not be able to collect performance incentives for savings assigned to it from Compact-administered measures.

Finally, the Department finds that Mutual Customers should receive the same information when choosing to pursue weatherization measures, no matter which Program Administrator provides the information. Accordingly, National Grid (gas) and the Compact shall develop common education materials regarding weatherization, including a script for use by the lead vendor. The Compact and National Grid (gas) must submit a proposed timeline for developing these materials as part of their required compliance filings in these dockets.

D. Allocation of Shared Costs

1. Introduction

The Compact has two core functions: (1) administering approved energy efficiency programs; and (2) administering a municipal aggregation power supply program. 2019-2021 Three-Year Plans Order, at 142. Accordingly, there are a number of shared costs that the Compact must allocate between its energy efficiency and municipal aggregation programs. 2019-2021 Three-Year Plans Order, at 141. The Compact maintains separate budgets and accounts for its energy efficiency and municipal aggregation operations. D.P.U. 18-116, Exh. DPU-Compact 1-1 (November 19, 2018). Energy efficiency-related expenditures are funded through an EES collected from all electric customers in the Compact's service area, while municipal aggregation-related expenses are primarily funded through an operational adder collected from municipal aggregation program participants (Exh. Compact-2, at 144).[174] 2019-2021 Three-Year Plans Order, at 140. The Compact is required to maintain a series of internal controls to ensure that only energy efficiency-related costs (and no municipal aggregation-related or other costs) are recovered through the EES. 2019-2021 Three-Year Plans Order, at 140.

Certain costs that are indirect or shared between the Compact's municipal aggregation and energy efficiency functions must be allocated between the two functions based on

[174] The Compact also may apply for funding from the Massachusetts Renewable Energy Trust Fund established pursuant to G.L. c. 23J, § 9, to support renewable energy programs under a certified energy plan pursuant to G.L. c. 164, § 134(b).

appropriate allocation factors. 2019-2021 Three-Year Plans Order, at 141-142. Examples of such shared costs include staff salaries, office space, and insurance. 2019-2021 Three-Year Plans Order, at 141 n.70.

2. Background

The Department addressed the allocation of shared costs in the 2019-2021 Three-Year Plans Order, where, with one exception, we approved these cost allocations for use in the 2019-2021 Three-Year Plans term. 2019-2021 Three-Year Plans Order, at 142, citing D.P.U. 18-116, Exh. DPU-Compact 3-1. In order to increase transparency and facilitate review of future EES and three-year plan filings, the Department directed the Compact to identify the proposed allocation methods and resulting allocation factors used to assign shared costs to its energy efficiency and municipal aggregation programs. 2019-2021 Three-Year Plans Order, at 142. We specifically directed that the Compact include in its Annual Reports and Term Reports a comparison of planned allocations versus actual spent dollars and an explanation of any significant variance (i.e., a variance of greater than ten percent). 2019-2021 Three-Year Plans Order, at 142. The Department also found that as to consumer advocacy costs, where the Compact classified any such costs as related to energy efficiency, it must be prepared to demonstrate that such activities have direct energy efficiency-related benefits. 2019-2021 Three-Year Plans Order, at 143. We further made clear that the Department expected that the "vast majority" of consumer advocacy costs should be allocated to and recovered through the municipal aggregation budget. 2019-2021 Three-Year Plans Order, at 143.

Subsequent to the issuance of the 2019-2021 Three-Year Plans Order, the Compact submitted to the Department its proposed 2020 EES filing, docketed as D.P.U. 19-136, in which the Compact incorporated proposed revised allocation factors adopted by its Governing Board in April 2019 (Exh. DPU-Compact 1-22).[175] Cape Light Compact JPE, D.P.U. 19-136, at 4 (2019). The Department determined that it did not have a sufficient basis in the record to evaluate the reasonableness of the Compact's proposed allocation factors. D.P.U. 19-136, at 5. The Department approved EES for 2020 (subject to reconciliation after investigation) using the allocation factors identified in the 2019-2021 Three-Year Plans. D.P.U. 19-136, at 5. The Department approved 2021 and 2022 EES using the same factors. Cape Light Compact JPE, D.P.U. 20-122, at 4-5 (2020); Cape Light Compact JPE, D.P.U. 21-119, at 7 (2021). In the 2022 EES proceeding, the Department noted that the Compact's shared cost allocation proposal for 2022-2024 was under review in this proceeding but declined to apply those proposed allocation factors to customer bills prior to full investigation in the instant docket. D.P.U. 21-119, at 7.

[175] The Compact states that its Governing Board adopted new allocation factors within three months of the issuance of the 2019-2021 Three-Year Plans Order, which broadly shifted a greater proportion of shared costs to the energy efficiency budget. (Exh. DPU-Compact 1-22). This included the proposed allocation of 70 percent of shared legal costs for consumer advocacy to its energy efficiency budget after the Department explicitly stated its expectation that the "vast majority" of such expenditures would not be allocated as such. In D.P.U. 19-136, at 5, the Department found it did not have a sufficient basis to approve the allocation of 70 percent of shared legal/consumer advocacy costs to the energy efficiency budget.

3. Compact Proposal

The Compact proposes that its Governing Board, as part of its role in setting the policies and procedures for the Compact's operations, should be permitted to determine how costs are shared between its municipal aggregation and energy efficiency functions (Exh. Compact-2, at 145). In this regard, the Compact states that its staff makes recommendations to the Governing Board regarding the annual allocation of shared costs, and the Governing Board deliberates and determines appropriate allocation factors (Exh. Compact-2, at 145). The Compact states that in an effort to maintain "transparency," it elected to propose a fixed percentage cost allocation for the vast majority of its shared costs over the entire 2022-2024 Three-Year Plans term based on the breakdown of staff salaries between its operating and energy efficiency budgets in 2021 (Tr. 4 at 556-558; Exh. DPU-Compact 1-22). Specifically, the Compact proposes to allocate 95 percent of its shared costs to its energy efficiency activities and five percent of its shared costs to its municipal aggregation operations in 2022-2024 (Exh. Compact-2, at 147).

The only shared costs for the 2022-2024 Three-Year Plan term that do not have a proposed fixed allocation factor based solely on the breakdown of staff salaries in 2021 are legal costs for consumer advocacy ("legal/consumer advocacy") and other shared legal costs (Exh. Compact-2, at 146). The Compact proposes to allocate these shared costs based on: (1) the subject matter of the legal service provided; or (2) the same fixed percentage breakdown tied to staff salaries as described above where the legal matter is employee-related (Exh. Compact-2, at 146). The Compact proposes to determine what allocation method to

use for these costs based on its Governing Board approvals of "consumer advocacy worksheets" detailing the nature of the consumer advocacy matters (Exh. Compact-2, at 146).

4. Positions of the Parties

a. Attorney General

The Attorney General argues that the Compact's proposed allocation methods are consistent with the Department's directives to transparently allocate shared costs between the Compact's municipal aggregation operating and energy efficiency budgets, while ensuring only energy efficiency-related costs are paid through the energy efficiency budget (Attorney General Brief at 26). The Attorney General maintains that there appears to be sufficient oversight of the Compact's actual cost allocations through the Governing Board review process and the Department's review of annual EES filings (Attorney General Brief at 26). Accordingly, the Attorney General supports the Compact's proposed allocation of shared costs as presented in its 2022-2024 Three-Year Plan filing (Attorney General Brief at 26).

b. Cape Light Compact

The Compact argues that it is appropriate for its Governing Board to determine the process for allocating expenses that are shared between the Compact's municipal aggregation and energy efficiency programs and report the allocation factors to the Department in its annual EES filing (Program Administrators Brief at 95). The Compact contends, in addition to the routine reporting of its energy efficiency expenditures to the Department, it appropriately identifies the allocation factors used to assign shared costs to its energy

efficiency and municipal aggregation programs (Program Administrators Brief at 96). Therefore, the Compact argues that the Department should approve its proposed shared cost allocation factors for 2022-2024 (Program Administrators Brief at 96).

5. Analysis and Findings

a. Introduction

The Compact is the only municipal aggregator and only non-investor-owned utility to function as an energy efficiency Program Administrator under the Green Communities Act. 2019-2021 Three-Year Plans Order, at 112. Customers in the Compact's member municipalities may opt out of participation in the Compact's municipal aggregation program, but they may not opt out of having the Compact as their energy efficiency Program Administrator. The Compact relies on funds collected from all electric ratepayers in the Compact's service area to support its energy efficiency programs. 2019-2021 Three-Year Plans Order, at 140. While the Governing Board may work with the Compact to develop a cost-allocation proposal, the Department must ensure that the Compact spends its ratepayer-provided energy efficiency funds in a reasonable and prudent manner, just as we do for all

other Program Administrators when implementing their energy efficiency plans.[176,177] 2019-2021 Three-Year Plans Order, at 125.

As a municipal aggregator also acting as a Program Administrator, the Compact essentially steps into the shoes of an investor-owned utility with regard to ratemaking; it must make the same energy efficiency-related rate recovery filings and is subject to the same standards of Department review.[178] The EES through which the Compact collects ratepayer funds is a mechanism of the Green Communities Act and subject to the Department's authority to regulate rates. See G.L. c. 25, §§ 19(a), 21(d)(2); D.P.U. 08-50-B at 35-36, 43 (2009); NSTAR Electric Company, D.P.U. 21-49, at 3-4 (2021). An EES is not a funding mechanism otherwise available to municipal aggregators pursuant to a municipal aggregation plan or G.L. c. 164, § 134(b).[179] It is a fully funded reconciling mechanism available to

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176 As we have stated previously, while the Compact is authorized to act as an energy efficiency Program Administrator pursuant to G.L. c. 164, § 134 and G.L. 25, § 19, there is no question that the Compact's three-year plans and related filings are subject to the standards set forth in G.L. c. 25, §§ 19-22 for the development and evaluation of energy efficiency plans. 2019-2021 Three-Year Plans Order, at 124-125 n.55.

177 The Compact's obligation to spend ratepayer funds in a reasonable and prudent manner is addressed further in Section XI.E., below.

178 As discussed in Section XI.E., below, one area where the Compact is unique among Program Administrators as a municipal entity is that it does not collect performance incentives, which provide other Program Administrators with an incentive to maximize benefits while minimizing ratepayer costs. 2019-2021 Three-Year Plans Order, at 125 n.56.

179 If such an energy plan is certified by the Department:

Program Administrators that allows for dollar-for-dollar recovery of approved energy efficiency costs from ratepayers, subject to Department oversight.[180] G.L. c. 25, § 21(d)(2). The Department ensures that all Program Administrators properly allocate costs to their energy efficiency programs. See, e.g., 2016-2018 Three-Year Plans Order, at 51; Grid Modernization, D.P.U. 20-69-A at 48-49 (2021).

The proper treatment of the allocation of shared costs between the Compact's energy efficiency and municipal aggregation operational budgets has been a consistent issue in numerous filings.[181] In addressing this issue for the 2022-2024 Three-Year Plan term, the

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> [T]he municipality or group of municipalities may apply to the Massachusetts clean energy technology center for monies from the Massachusetts Renewable Energy Trust Fund, established pursuant to section 9 of chapter 23J, and receive and, if approved, expend moneys from the demand side management system benefit charges or line charges in an amount not to exceed that contributed by retail customers within said municipality or group [of] municipalities. This will not prevent said municipality or municipalities from applying to the Massachusetts clean energy technology center for additional funds.

G.L. c. 164, § 134(b).

[180] Pursuant to the Green Communities Act, each Three-Year Plan must include a fully reconciling funding mechanism (i.e., an EES). G.L. c. 25, § 21(b)(2)(vii); see also G.L. c. 25, § 21(d)(2). The Guidelines specify the manner in which revenue from the EES may be collected from ratepayers. Guidelines § 3.2.

[181] Our Order today addresses the Compact's proposed allocation methods and factors for the 2022-2024 Three-Year Plan term, including issues related to the Compact's 2022 EES, which have been approved subject to reconciliation after further investigation in D.P.U. 21-119. The Department will address all issues related to the Compact's previous cost allocation proposals and EES in the applicable dockets (see D.P.U. 19-136 (Compact's 2020 EES); Cape Light Compact, D.P.U. 16-127 (2013-2015 Term Report); Cape Light Compact, D.P.U. 19-96 (2016-2018 Term Report)).

Department must finally resolve any continuing tension that exists between the Compact's view of its Governing Board's discretion operating pursuant to an approved municipal aggregation plan, and the Department's application of ratemaking principles and precedent to energy efficiency filings under its purview.[182] The Compact's assertion of complete discretion is not a "method," let alone an acceptable method under established ratemaking principles and precedent.[183] The Compact and its Governing Board, like a utility company and its directors, may recommend an allocation of costs; the Department determines whether the proposed costs allocation is appropriately recoverable in rates.[184] American Hoechest

[182] We note that previously the Compact has reiterated its erroneous belief that it has complied with the Department's directive that it identify its allocation methods and factors and that the "method it identified to allocate shared costs is that the Compact's [Governing] Board decides the allocation factors." D.P.U. 20-122, Initial Filing at Exh. 1, at 11-12 (October 30, 2020).

[183] See e.g., 2016-2018 Three-Year Plans Order, at 125 (approving methods to allocate joint energy efficiency costs between NSTAR Electric and WMECo); D.P.U. 12-25, at 221-242 (discussing allocation of costs among affiliates); D.P.U. 08-27, at 78-91 (analyzing allocation of costs among affiliates under Department standards); Cambridge Electric Light Company, D.P.U. 92-250, at 89 (1993) (directing company to allocate costs based on actual time sheet totals and not historical estimates of time spent by employees on different operations); American Water Company, D.P.U. 88-172, at 31-33 (1989) (allowing rent allocation based on the number of customers served by each company).

[184] The Compact cites Cape Light Compact, D.P.U. 16-177, at 10 n.10 (2016), for the premise that "the Department does not investigate the appropriateness of the Governing Board's authorization of funds for collection through the EES" (Exh. Compact-2, at 145). This is simply not true. As we have made clear above, the Department must, does, and will investigate the appropriateness of all funds collected through the EES and is not bound by any Governing Board "authorization of funds." Further, the cite in question in no way addresses the Department's authority to oversee the EES as alleged by the Compact. Instead, it addresses issues raised by

Corporation v. Department of Public Utilities, 379 Mass. 408, 413 (1980) ("[W]e repeat again the principle that when alternative methods are available, the [D]epartment is free to select or reject a particular method as long as its choice does not have a confiscatory effect or is not otherwise illegal"). Where the Compact seeks to recover funds through an EES subject to Department review, we must apply appropriate oversight on behalf of the Compact's ratepayers as we do on behalf of all others in the Commonwealth for other Program Administrators.

The Compact has endeavored to be more transparent in its decision making and responsive to the directives of the Department and for the 2022-2024 Three-Year Plan term it has identified fixed allocation factors to be set for most categories of shared costs. We must emphasize, however, that this is not a matter of the discretion of the Compact's Governing Board. As a Program Administrator, the Compact is subject to the Department's regulatory oversight applying our established ratemaking principles and precedent, which includes the appropriate allocation of shared costs. In no context is an exercise of discretion an acceptable, reviewable, or supportable allocation method.

The Department's precedent regarding costs shared between or among related entities often involves the same costs at issue in the Compact's filings: apportioning rent and insurance when operating out of a single facility, employees billing time to separate entities and tasks, and dividing shared overhead such as internet and computer costs. See

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a commenter related to the Governing Board's authority vis-à-vis the Compact's member municipalities.

D.P.U. 12-25, at 221-242; D.P.U. 08-27, at 78-91; Cambridge Electric Light Company, D.P.U. 92-250, at 89 (1993); Massachusetts American Water Company, D.P.U. 88-172, at 31-33 (1989). In this context our cases allocating costs among affiliated entities are instructive, specifically the directive that costs should be allocated to the utility by a method that is both cost effective in application and nondiscriminatory. See Aquarion Water Company of Massachusetts, D.P.U. 17-90, at 203-204 (2018) (customer service and information technology costs allocated on the basis of customer counts; shared office costs allocated by deriving a building overhead rate per facility then applying the rate to labor charged from each facility to the company); Oxford Water Company, D.P.U. 86-172, at 16-17 (1987) (allocation of lease costs for company vehicles based on actual use).

We note that the Department has applied these principles in the three-year plan context previously in approving the allocation of certain shared costs between NSTAR Electric and Western Massachusetts Electric Company ("WMECo.") 2016-2018 Three-Year Plans Order, at 125 n.59. In that instance, the Department applied the reasonableness standard and approved the allocation of shared costs based on several methods as appropriate to the underlying costs, including direct allocation based on benefits (e.g., costs incurred in a company's service territory would be charged directly to that company), planned energy efficiency budgets, and a weighting of program budgets and number of customers in each service territory. 2016-2018 Three-Year Plans Order, at 125 n.59.

Below, the Department will review the Compact's proposed allocation methods and resulting factors under the established rubric for the evaluation of the allocation of shared

costs among related entities, including the reasonableness of the proffered method and the representative accuracy of the data underlying the calculation (e.g., test year or other basis). See 2016-2018 Three-Year Plans Order, at 125 (applying reasonableness standard to allocation methods).

b. Shared Cost Allocation Method

The Compact proposes to allocate the majority of its shared costs for the 2022-2024 Three-Year Plan term based on the percentage of staff time spent on energy efficiency versus municipal aggregation activities in 2021. This proposed method results in an allocation of 95 percent of these shared costs to the energy efficiency budget and five percent to the municipal aggregation operational budget (Exh. Compact-2, at 147).

Above, the Department rejected the Compact's argument that its Governing Board decides the allocation factors. The Department must, therefore, review the reasonableness of the Compact's proposed allocation method and resulting factors. In particular, the Department will evaluate whether the proposed method of allocating costs using employee hours is appropriate for the identified cost categories and whether the use of 2021 employee hours provides an accurate basis to calculate the allocation factor.

In considering the reasonableness of a proposed allocation method, the Department must ensure that the resulting cost allocation does not result in an improper subsidization of the Compact's municipal aggregation program by its ratepayer-funded energy efficiency program. All else equal, we presume that the Compact would prefer to assign a greater percentage of its shared costs to energy efficiency where those costs are recovered dollar-for-

dollar through a fully funded reconciling mechanism (as opposed to its aggregation budget, which is essentially fixed).

The first step in determining whether an allocation method is reasonable is identifying the cost driver of the shared costs. Here, for those shared costs directly related to the number of employees and their hours worked (e.g., salary, payroll services) the Department finds that it is reasonable to allocate those shared costs based on employee time spent on energy efficiency versus municipal aggregation.

It is less clear, however, that employee time spent on energy efficiency versus municipal aggregation is the appropriate cost driver for the remaining categories of the Compact's shared costs (i.e., software licenses, internet, rent, custodial, other utilities, auditor, treasury services, financial software, and insurance).[185] The choice of allocation method can have a significant impact on the percentage of costs allocated to the Compact's energy efficiency budget. In the 2019-2021 Three-Year Plan term, for example, the Compact proposed to allocate 75 percent of its office space costs (including rent and utilities) to the energy efficiency budget based on the approximate use of the office space for each. D.P.U. 18-116, Exh. DPU-Compact 3-1 (December 4, 2018). The current proposal based on employee time would allocate 95 percent of rent and other office costs to the energy

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185 The Compact acknowledged that there are certain costs it would incur and functions it would perform if it ceased to operate as an energy efficiency Program Administrator and continued only as a municipal aggregator (Tr. 4, at 563-572).

efficiency program (Exh. Compact-2, at 147).[186] Similarly, the Compact proposed to allocate 75 percent of shared insurance costs in the 2019-2021 Three-Year Plan term based on the decision of the Governing Board. D.P.U. 18-116, Exh. DPU-Compact 3-1. Again, the current proposal would allocate 95 percent of insurance costs to energy efficiency based on the 2021 employee hours breakdown (Exh. Compact-2, at 147).

Despite these concerns, the Department does not currently have a record on cost drivers for these shared costs sufficient to consider the reasonableness of an alternative allocation method. Over the next three years, the Program Administrators including the Compact must work hard to motivate customers to optimize their energy use in a manner that lowers costs and reduces GHG emissions. The Compact, in particular, must work to improve equitable access to its energy efficiency programs by reducing barriers to participation for customers that historically have yet to participate in these programs. For this reason, the Department exercises its judgment and finds that it is reasonable over the 2022-2024 Three-Year Plan term for the Compact to allocate its shared costs based on employee time spent on energy efficiency versus municipal aggregation.

Having determined that employee hours are a reasonable basis to apportion shared costs under these circumstances, the Department must now consider whether 2021 is an appropriately representative period upon which to set allocation factors for the

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[186] In its 2022 EES filing, the Compact stated that the allocation method for salary is a "[p]ercentage based on 2021 staff's actual time spent on energy efficiency or municipal aggregation," and the other listed categories use the same allocations as used for salary. D.P.U. 21-119, Exh. 3, at 3 (November 1, 2021).

2022-2024 Three-Year Plan term. Essentially the Compact has proposed 2021 as its test year for cost allocation purposes. The Compact did not, however, consider any other years in its analysis or the effect of measuring employee hours over a longer term (Tr. 4, at 555).

For the reasons discussed below, the Department finds it is not reasonable to base the Compact's allocation factors for the 2022-2024 Three-Year Plan term on employee hours from 2021 alone. As described elsewhere in this Order, the process of preparing a Three-Year Plan filing and seeing it through Department review is uniquely rigorous and, therefore, the Department expects the number of employee hours spent on energy efficiency to be higher in a three-year plan development year like 2021 (Tr. 4, at 548-550). Similarly, we expect the hours spent on municipal aggregation functions to be higher in years when the Compact must procure a new contract for its municipal aggregation electricity supply.[187] Accordingly, the Department finds that it is necessary, for allocation purposes, to measure the Compact's employee time spent on energy efficiency versus municipal aggregation over a longer period of years.

For the 2022-2024 Three Year Plan term the Department finds that it is appropriate to measure the Compact's employee time spent on energy efficiency versus municipal aggregation over a period of six years (i.e., 2016 through 2021) for cost allocation purposes.

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[187] The Compact entered into its current electric supply contract in 2018 and, therefore, it was in place during 2021. The Compact states that its current municipal aggregation supply contract ends in 2023 (Tr. 4, at 564). D.P.U. 21-MA, 2020 Municipal Aggregation Annual Reports, Cape Light Compact JPE 2020 Municipal Aggregation Annual Report at 2 (April 30, 2021).

A period of six years will ensure that the data capture at least one municipal aggregation contract year and two three-year plan development years. In its required compliance filing in this proceeding, the Compact shall calculate a revised proposed shared cost allocation factor based on employee time spent on energy efficiency versus municipal aggregation from 2016 through 2021. The Compact shall fully describe its calculation and provide all necessary documents and exhibits to support its filing (e.g., spreadsheet showing calculation with all formulas intact, table showing full-time equivalent hours broken down by employee, and total for each year).

c. Shared Legal Consumer Advocacy Costs

The Compact proposes to allocate certain shared legal costs to its energy efficiency or municipal aggregation functions each year based on: (1) the subject matter of the legal service provided; or (2) the same fixed percentage breakdown tied to staff salaries as described above where the legal matter is employee-related (Exh. Compact-2, at 146). The Department finds that this proposal is reasonable; however, consistent with our directives above regarding the role of the Governing Board as advisory only on cost recovery matters, the Department will review the final allocation proposal at the time it is made in an applicable EES filing and the final recovery of costs in the applicable EES, Annual Report, and Term Report proceedings.

In addition, the Compact proposes to allocate certain shared legal/consumer advocacy costs each year based on its Governing Board's approvals of "consumer advocacy worksheets" detailing the nature of the consumer advocacy matters (Exh. Compact-2,

at 146). Again, we find that any proposal based on the Governing Board's approval alone cannot stand and the Department must review the reasonableness of the proposed allocations as well as the prudence of the expenditure of the actual costs.

In order for any shared consumer advocacy costs to be allocated to the energy efficiency budget and ultimately recovered through the EES, the Department has determined that the Program Administrator must demonstrate a clear and direct energy efficiency-related benefit to Massachusetts ratepayers and the Department as a threshold matter must be able to determine that the costs at issue are in fact incurred for energy efficiency purposes. See G.L. c. 25, § 21. Costs arising from the Compact's general advocacy activities and its intervention and participation in non-energy efficiency-related matters before the Department, for example, should not be allocated to its energy efficiency function. Any apportionment of costs arising from participation in Department matters that may interest the Compact as both a Program Administrator and a municipal aggregator should be carefully scrutinized to prevent energy efficiency customers from inadvertently subsidizing other functions. See, e.g., Massachusetts Electric Company and Nantucket Electric Company, D.P.U. 15-120, Petition for Leave to Intervene of the Cape Light Compact (March 30, 2016).[188]

[188] In D.P.U. 16-127, Exh. DPU-Common 1-5, the Compact explained that in addition to administering the energy efficiency program, it serves as a "consumer advocate in various regulatory and legislative matters that may impact Cape and Vineyard ratepayers or the Compact's overall operations ('General Legal Services')." The Compact stated that legal costs not directly related to energy efficiency or power supply are "apportioned between Energy Efficiency and Power Supply for those matters that have a general impact on the Compact as a municipal aggregator." D.P.U. 16-127, Exh. DPU-Common 1-5 (December 2, 2016).

The 2019-2021 Three-Year Plans Order was clear that the Department anticipated that the Compact would classify the "large majority" of consumer advocacy/legal costs as non-energy efficiency-related to be recovered through its municipal aggregation budget. 2019-2021 Three-Year Plans Order, at 143. In its next EES filing with the Department, however, the Compact stated its 2019 and projected 2020 legal costs for D.P.U. 15-122 were allocated 70 percent to the energy efficiency budget and only 30 percent to the municipal aggregation operating budget. D.P.U. 19-136, Compact Brief at 12 (January 13, 2021).

In its 2022 EES filing, the Compact proposes an allocation of shared legal/consumer advocacy costs of 13 percent to the energy efficiency budget and 88 percent to the municipal aggregation budget. D.P.U. 21-119, Exh. 3, at 4 (November 1, 2021). This is better aligned with what the Department indicated was its expectation in the 2019-2021 Three-Year Plans Order. The Department approved the Compact's 2022 EES (including the proposed allocation of shared legal/consumer advocacy costs) subject to reconciliation after further investigation and the Department will make a final determination of reasonableness of this proposed allocation in phase two of its investigation.

Based on the above considerations, the Department finds that the Compact's proposal to establish an allocation factor for shared legal/consumer advocacy costs each year is reasonable; however, consistent with our directives above regarding the role of the Governing Board as advisory only for cost recovery matters, the Department will review the final allocation proposal at the time it is made in an applicable EES filing and the final recovery of costs in the applicable EES, Annual Report, and Term Report proceedings.

6. Conclusion

The Department intends to apply the allocation methods approved herein and, where applicable, resulting allocation factor for the 2022-2024 Three-Year Plan term. As we noted above, the Department is currently investigating the Compact's proposed allocations in several dockets and we expect our findings there will be helpful in establishing appropriate shared cost allocation methods for the Compact in future Three-Year Plan terms. To that end, in its next Three-Year Plan filing, the Compact shall present a detailed cost allocation proposal including a detailed study of the cost driver(s) for each category of shared costs.

The Compact must carefully track and maintain all cost allocation documentation. After review of the Compact's Annual Reports, the Department will determine whether an outside review of the Compact's allocation policy and process is required before the next three-year plan term. The Department takes this opportunity to remind the Compact that approval of an allocation factor and method is not the same as approval of final recovery of any allocated costs. Instead, in the appropriate Term Report or other proceeding, the Compact will be required to demonstrate that all such expenditures were reasonable and prudently incurred, including that they provided a direct energy efficiency-related benefit to customers in its member municipalities. Failure to make such showing will result in disallowance of the costs.

E. Equity and Participation Rates

Based on the Department's review of the Compact's proposed 2022-2024 Three-Year Plan, the 2013-2017 Residential Non-Participant Customer Profile Study, and certain

information provided in discovery, the Department has identified particular concerns regarding the historical participation record of customers in the Compact's service area.[189] The Program Administrators, including the Compact, have committed to "establishing more equal access to and participation in energy efficiency, particularly among those groups who have historically participated at lower rates, including renters/landlords, moderate-income customers, English-isolated families, and microbusinesses" (Statewide Plan, Exh. 1, at 17). The 2013-2017 Residential Non-Participant Customer Profile Study is one of the foundational analyses the Program Administrators use to determine whether a group of customers or a community has had historically lower participation rates (Statewide Plan, Exh. 1, at 18-21). The Program Administrators, with the support of the Council, have prioritized increasing investments and participation rates in historically underserved populations (Statewide Plan, Exh. 1, at 18, 21).

According to information provided by the Compact in discovery, 15 out of the 21 Compact member municipalities have a consumption-weighted location participation rate for electric combined that is at or below the statewide average (Exh. DPU-Comm 2-14, Att. A). Of those 15 towns, eleven have a participation rate for electric combined at or below 30 percent and seven are at or below 25 percent (Exh. DPU-Comm 2-14, Att. A). In

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[189] As discussed in Section XI.C., above, National Grid (gas) and the Compact have overlapping service areas on Cape Cod and, therefore, National Grid (gas) also provides energy efficiency services to certain customers in towns within the Compact's member municipalities. The performance of National Grid (gas) in serving these Mutual Customers will be addressed through the performance incentive mechanism (see Section VII, above).

addition, 19 out of the 21 Compact member municipalities are below 30 percent for the participation rate for ranking purposes (Exh. DPU-Comm 2-14, Att. A).[190] Further, all of the Compact's member municipalities are at or below 40 percent for the participation rate for ranking purposes (Exh. DPU-Comm 2-14, Att. A). The Department finds these historically low energy efficiency participation rates in most of the Compact's service area are of significant concern. Based on these data alone, the Compact is failing to deliver energy efficiency services at a rate that is average or above average compared to the rest of the Commonwealth (Exh. DPU-Comm 2-14, Att. A).

At the same time, the Compact historically has offered higher customer incentives than other Program Administrators (Statewide Plan, Exh. 1, App. G.1 – Cape Light Compact). See, e.g., 2019-2021 Three-Year Energy Efficiency Plans, Statewide Plan, Exh. 1, App. K – Cape Light Compact; 2016-2018 Three-Year Energy Efficiency Plans, Statewide Plan, Exh. 1, App. L – Cape Light Compact. The Department must carefully consider the prudence of implementing a program that provides higher incentives to participating customers (thereby increasing the bill impact burden on Compact customers)

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190 The participation rate for ranking purposes is the gas and electric combined consumption-weighted location participation rate, if available; otherwise, it is the electric or gas consumption-weighted location participation rate (Exh. DPU-Comm 2-14, Att. A). For gas and electric combined, the statewide average is 32 percent (Exh. DPU-Comm 2-14).

while simultaneously delivering among the lowest participation rates for any electric Program Administrator in Massachusetts.[191]

Additionally, as revealed in its most recent Term Reports, the Compact did not meet the requirement of G.L. c. 25, § 19(c) to spend at least ten percent of its budget on low-income programs.[192] Rather, the Compact spent only nine percent of its budget on low-income programs in 2013-2015 and 8.2 percent of its budget on low-income programs in 2016-2018. Cape Light Compact, D.P.U. 16-127, 2013-2015 Energy Efficiency Term Report, Part One at 18 (2013-2015 Customer Sector Cost Allocation) (August 1, 2016); Cape Light Compact, D.P.U. 19-96, 2016-2018 Energy Efficiency Term Report, Part One at 30 (2016-2018 Customer Sector Cost Allocation) (August 1, 2019). Further, the Compact reports that it achieved 47 percent less benefits in its low-income programs during the 2016-2018 Three-Year Plan term. Cape Light Compact, D.P.U. 19-96, 2016-2018 Energy Efficiency Term Report, Part One at 24 (2016-2018 Planned v. Evaluated Benefits (%))

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[191] The Compact recovers the costs of implementing its energy efficiency programs from all electric ratepayers in its member municipalities through a fully funded reconciling mechanism (i.e., EES). Although customers can opt out of the Compact's municipal aggregation program, customers cannot opt out of having the Compact as their energy efficiency provider and paying the Compact's EES, regardless of whether they participate in the Compact's energy efficiency programs. See D.T.E. 00-47-C at 23.

[192] The Department will not receive the 2019-2021 Term Report until August 1, 2022, and, therefore, we cannot yet speak to the Compact's low-income spending across the 2019-2021 Three-Year Plan term. See Guidelines § 4.1. However, based on the Compact's 2019 Plan-Year Report, the Compact spent only 8.8 percent of its budget on low-income programs in 2019. 2019 Energy Efficiency Plan-Year Report, D.P.U. 20-50, Cape Light Compact, JPE, Section II, 2019 Evaluated Budget Table (May 29, 2020).

(August 1, 2019). The goal of the low-income programs is to deliver energy efficiency in an equitable manner to low-income and hard-to-reach customers. Based on the foregoing, the Department questions the Compact's ability to deliver equitable services to all of its customers and, therefore, we will carefully examine the Compact's low-income program spending in its 2019-2021 Term Report.

In addition, the Department expects the Compact will use the results of the 2013-2017 Residential Non-Participant Customer Profile Study to enhance the way it equitably serves the customers in its member municipalities and to make improvements to the delivery of energy efficiency to increase participation among historically lower-participating communities in its service area. The Compact shall continue to conduct the Residential Non-Participant Customer Profile Study, present the study results to its Governing Board, and track the Compact's progress in these areas compared to other Program Administrators.

The Compact's Governing Board is comprised of municipal officials and the Department knows the Governing Board and the Compact's staff are dedicated to their constituents — we do not question this dedication. However, as a joint powers entity and not an investor-owned utility, there is no strong cost-containment or performance incentive mechanism easily applicable to the Compact. As investor-owned utilities, all other Program Administrators are subject to performance incentives and penalties, and poor performance will be the responsibility of the utility's shareholders, not its customers. Conversely, shareholder incentives and penalties are not available to the Department for incenting the Compact to expend ratepayer funds in a prudent and cost-efficient manner or to correct the

Compact's historical poor performance (Exh. Compact-2, at 114). Therefore, the Department finds that additional scrutiny of the Compact's performance is needed.

The authority of a municipal aggregator to implement an energy efficiency investment plan relies on a certification by the Department, inter alia, that the plan meets or exceeds state energy efficiency goals. See Cape Light Compact, D.T.E. 00-47-C at 21 (2001); G.L. c. 164, § 134(b). In order to certify a municipal aggregator to implement energy efficiency programs, the Department must be convinced that the municipality (or group of municipalities) has the ability to deliver energy efficiency as required by law. Enforcing an accountability standard for municipal aggregators with certified energy efficiency plans is necessary to ensure that the entity is delivering energy efficiency in a safe, reliable, secure, affordable, and equitable manner. G.L. c. 25, § 1A.

If the Compact fails to improve on its record of underspending on low-income customers, historically low participation rates among all residential customers relative to the statewide average, and overall cost-effective and cost-efficient delivery of its programs, the Department will not be in the position to continue to certify the Compact's energy efficiency investment plan. Failing to achieve the low-income budget requirements and deliver energy efficiency in an equitable manner means that the energy efficiency plan will no longer be consistent with the state's energy efficiency goals.

Potential decertification of the Compact's energy efficiency investment plan is the strongest recourse available to the Department to address the Compact's performance concerns relative to its customers and the statewide goals. Accordingly, in the Compact's

Annual Report and Term Report dockets, the Department will consider whether it is appropriate to maintain certification of the Compact's energy efficiency plan based on performance and its ability to achieve its goals in a cost-effective and cost-efficient manner, including participation goals and equitable service goals.

XII. OTHER ISSUES

A. EGMA/NSTAR Gas Three-Year Plan Consolidation

1. Introduction

After the acquisition of Bay State Gas Company, the parent company of Columbia Gas of Massachusetts, by Eversource Energy, EGMA and NSTAR Gas each share the same corporate parent.[193] However, NSTAR Gas and EGMA remain separate operating companies with individual gas distribution service territories and rates.

NSTAR Gas and EGMA seek approval to implement a consolidated Three-Year Plan with two exceptions (Exhs. NSTAR Gas-2, at 137; EGMA-2, at 137).[194] Specifically, NSTAR Gas and EGMA request approval to implement: (1) common program design and implementation activities; (2) an aggregated program budget for the purposes of mid-term modification triggers; (3) an aggregated common savings goal; and (4) a single performance

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[193] On October 7, 2020, the Department approved a settlement agreement authorizing the acquisition of Bay State Gas Company, the parent company of Columbia Gas of Massachusetts, by Eversource Energy, the parent company of EGMA. Joint Petition of Eversource Energy, NiSource Inc., Eversource Gas Company of Massachusetts, and Bay State Gas Company d/b/a Columbia Gas of Massachusetts for the sale of Bay State Gas Company to Eversource Energy, D.P.U. 20-59, at 69-71 (2020).

[194] NSTAR Gas and EGMA filed data tables and all other exhibits both jointly and separately (Exhs. NSTAR Gas-4; EGMA-4; NSTAR Gas-EGMA-4).

incentive pool and earnings thresholds (Exhs. NSTAR Gas-2, at 137-145; EGMA-2, at 137-145; DPU-EGMA 1-1; DPU-NSTAR Gas 1-1). NSTAR Gas and EGMA propose to continue to perform cost-effectiveness screenings on an individual-company basis (Exhs. DPU-NSTAR Gas 1-1; DPU-EGMA 1-1). Finally, NSTAR Gas and EGMA propose to continue to track spending on an individual-company basis for the purpose determining whether each company has allocated at least 20 percent of its budget for low-income gas energy efficiency programs pursuant to G.L. c. 25, §§ 19(b), (c), 21(b)(3) (Exhs. DPU-NSTAR Gas 1-1; DPU-EGMA 1-1).

2. EGMA/NSTAR Gas Proposal

a. Program Design and Implementation

NSTAR Gas and EGMA propose to employ a common program design and jointly implement their energy efficiency programs to fulfill each company's statutory energy efficiency obligations (Exhs. NSTAR Gas-2, at 137, 139-141; EGMA-2, at 137, 139-141). NSTAR Gas and EGMA propose to offer the same core programs and employ the same delivery mechanisms across both service territories; however, NSTAR Gas and EGMA will each retain a separate lead vendor for income-eligible programs in order to leverage the vendor's existing relationships in each service territory (Exhs. NSTAR Gas-2, at 139-141; EGMA-2, at 139-141). NSTAR Gas and EGMA propose to continue to apply company-specific cost-effectiveness screenings to ensure programs and core initiatives are delivered to all customers in a cost-effective manner (Exhs. NSTAR Gas-2, at 144; EGMA-2, at 144; DPU-NSTAR Gas 1-1; DPU-EGMA 1-1).

b. Program Budget

EGMA and NSTAR Gas requests approval of an aggregated program budget (Exhs. NSTAR Gas-2, at 141; EGMA-2, at 141). NSTAR Gas and EGMA will maintain separate EES for each company (Exhs. NSTAR Gas-2, at 143; EGMA-2, at 143).

For the 2022-2024 Three-Year Plan term, NSTAR Gas and EGMA propose to track energy efficiency costs separately in each company's respective accounting system and allocate common resource costs based on planned net benefits (Exhs. NSTAR Gas-2, at 141; EGMA-2, at 141). EGMA and NSTAR Gas propose to allocate joint salary, legal, and regulatory costs based on planned energy efficiency budgets (Exhs. NSTAR Gas-2, at 142-143; EGMA-2, at 142-143). EGMA and NSTAR Gas propose to allocate other common PP&A costs based on an even weighting of planned energy efficiency budgets and number of customers in each service territory (Exhs. NSTAR Gas-2, at 143; EGMA-2, at 143). Costs that each company incurs in its individual service territory will be charged directly to that company (Exhs. NSTAR Gas-2, at 142; EGMA-2, at 142).

EGMA and NSTAR Gas propose to track spending separately for the purpose of assessing whether each company has allocated at least 20 percent of its budget for low-income gas energy efficiency programs pursuant to G.L. c. 25, §§ 19(b), (c), 21(b)(3) (Exhs. DPU-NSTAR Gas 1-1; DPU-EGMA 1-1). Finally, EGMA and NSTAR Gas propose to employ an aggregated program budget for the purposes of assessing mid-term modification triggers (Exhs. NSTAR Gas-2, at 145; EGMA-2, at 145).

c. Savings Goal

NSTAR Gas and EGMA propose to adopt an aggregated savings goal (Exhs. NSTAR Gas-2, at 139; EGMA-2, at 139). NSTAR Gas and EGMA maintain that the aggregate goal will not change the total savings goal each company is responsible for meeting (Exhs. NSTAR Gas-2, at 139; EGMA-2, at 139).

d. Performance Incentive Mechanism

NSTAR Gas and EGMA propose to adopt a common performance incentive mechanism with respect to pool amounts and earnings thresholds (Exhs. NSTAR Gas-2, at 143-144; EGMA-2, at 143-144; DPU-NSTAR Gas 1-1; DPU-EGMA 1-1). NSTAR Gas and EGMA state that total available incentive dollars will not be affected by their adoption of a consolidated Three-Year Plan (Exhs. NSTAR Gas-2, at 144; EGMA-2, at 144). NSTAR Gas and EGMA propose to allocate performance incentive payments to each company based on the service territory where the benefits were achieved (Exhs. NSTAR Gas-2, at 144; EGMA-2, at 144).

3. Positions of EGMA/NSTAR Gas

EGMA and NSTAR Gas argue that their proposal to implement a consolidated Three-Year Plan will fulfill each company's statutory energy efficiency obligations while also providing the potential for regulatory efficacies and other savings (Program Administrators Brief at 81). Further, EGMA and NSTAR Gas maintain that Department approval of their proposal will result in no adverse impacts to customers of either company (Program Administrators Brief at 81).

EGMA and NSTAR Gas maintain that each company's energy efficiency budget is structurally identical and, therefore, maintaining separate budgets would impose unnecessary administrative and regulatory burdens on both companies (Program Administrators Brief at 85, citing Exhs. NSTAR Gas-2, at 141; EGMA-2, at 141). In addition, EGMA and NSTAR Gas assert that they expect to achieve short-term cost savings from a consolidated Three-Year Plan from two main areas: (1) planning, analysis, and regulatory reporting due to a potential reduced need for mid-term modifications; and (2) reduced implementation costs to the extent that the most cost-effective and available opportunities can be pursued within each service territory (Program Administrators Brief at 81, citing Exhs. DPU-EGMA 1-2; DPU-NSTAR Gas 1-2).

NSTAR Gas and EGMA argue that their proposal to calculate performance incentives based on combined performance is reasonable because incentive costs will be allocated to each company based on the service territory where the benefits accrue (Program Administrators Brief at 87). NSTAR Gas and EGMA further argue that having a single set of performance incentive thresholds will allow greater flexibility in pursuing cost-effective efficiency, specifically for strategic electrification (Program Administrators Brief at 82). NSTAR Gas and EGMA also argue that treatment as a combined plan will allow the companies to pursue the most cost-effective electrification opportunities regardless of geography (Program Administrators Brief at 83, citing Exhs. DPU-NSTAR Gas 1-1; DPU-EGMA 1-1).

In support of their proposal, EGMA and NSTAR Gas cite what they characterize as the successful integration of the Three-Year Plans of NSTAR Electric and WMECo (Program Administrators Brief at 81, citing 2013-2015 Three-Year Plans Order, at 136-137). In particular, EGMA and NSTAR Gas maintain that the integration in NSTAR Electric and WMECo as part of the 2013-2015 Three-Year Plans significantly reduced time spent planning and reporting for each company and resulted in cost savings (Program Administrators Brief at 81, citing Exh. DPU-EGMA 1-2). Finally, EGMA and NSTAR Gas assert that a consolidated Three-Year Plan would allow for a consistent customer experience in each service territory (Program Administrators Brief at 81-82).

No other party addressed this issue on brief.

4. Analysis and Findings

a. Program Design and Implementation

NSTAR Gas and EGMA propose to adopt a common energy efficiency program design and to jointly implement their programs, asserting that such treatment has the potential to reduce implementation costs (Exhs. NSTAR Gas-2, at 137-138; EGMA-2, at 137-138; Program Administrators Brief at 81). In addition, NSTAR Gas and EGMA maintain that implementing common programs through an integrated Three-Year Plan would provide a consistent approach to customer engagement and a unified customer experience (Program Administrators Brief at 83-84, citing Exhs. NSTAR Gas-2, at 138; EGMA-2, at 138). No party objected to the joint implementation of common programs by NSTAR Gas and EGMA.

Common energy efficiency program design and joint program implementation has potential to achieve efficiencies. Consistent with the requirements of the Green Communities Act, the Department encourages efforts that maximize the acquisition of all available cost-effective energy efficiency resources while minimizing implementation costs. G.L. c. 25, § 19. The Department is persuaded that, in these circumstances, joint implementation of common programs may create opportunities for additional savings (Exhs. DPU-NSTAR 1-2; DPU-EGMA 1-2). Accordingly, the Department approves the request of NSTAR Gas and EGMA to adopt a common program design and to jointly implement their programs.

b. Program Budget

The Department has found that a joint system for energy efficiency budgeting has the potential to achieve efficiencies. D.P.U. 12-110/D.P.U. 12-111, at 137. Although NSTAR Gas and EGMA will adopt an aggregated program budget, each company will track spending separately for the Three-Year Plan term and allocate costs for common resources according to planned net benefits, planned energy efficiency budgets, and/or number of customers in each service territory consistent with the allocation methods approved by the Department in 2016-2018 Three-Year Plans Order, at 125 & n.59 (Exhs. NSTAR Gas-2, at 141-143; EGMA-2, at 141-143). As a result, the Department finds that NSTAR Gas and EGMA will

continue to be able to compare expenditures by company and year (Exhs. DPU-EGMA 1-3; DPU-NSTAR Gas 1-3; Program Administrators Brief at 85).[195]

The Department finds that NSTAR Gas's and EGMA's proposed method for allocating shared energy efficiency costs will provide the Department with sufficient transparency to properly review such costs. Additionally, the Department finds that, with an aggregated budget, NSTAR Gas and EGMA still plan to spend at least 20 percent of their individual energy efficiency budgets to the low-income sector as required by G.L. c. 25, §§ 19(b), 19(c), 21(b)(3) (Exhs. NSTAR Gas-2, at 142; EGMA-2, at 142). Accordingly, the Department approves the request of NSTAR Gas and EGMA to adopt an aggregated budget.

c. Savings Goals

Although NSTAR Gas and EGMA propose to adopt an aggregated savings goal, the companies plan to maintain separate total savings goals (Exhs. NSTAR Gas-2, at 139; EGMA-2, at 139).[196] In order to monitor individual performance, NSTAR Gas and EGMA shall file individual and combined energy efficiency Annual Reports and Term Reports for this Three-Year Plan term. See 2013-2015 Three-Year Plans Order, at 137-138.

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[195] EGMA and NSTAR Gas will each maintain work orders and take other steps to appropriately track cost categories by core initiative (Program Administrators Brief at 85).

[196] The EGMA lifetime savings goal is 23,976,009 MMBtus and the NSTAR Gas lifetime savings goal is 23,116,686 MMBtus (Exhs. NSTAR Gas-4 (Rev.); EGMA-4 (Rev.), at 26).

d. Cost Effectiveness

As discussed in Section VI.D., above, the individual energy efficiency programs of NSTAR Gas and EGMA are cost effective, as planned (Exhs. NSTAR Gas-2, at 142; EGMA-2, at 142). In addition, NSTAR Gas and EGMA have demonstrated that their programs are projected to be cost effective if pursued through an integrated Three-Year Plan (Exhs. DPU-NSTAR 1-2; DPU-EGMA 1-2).

In order to ensure that programs and core initiatives are delivered to all customers in a cost-effective manner, NSTAR Gas and EGMA shall screen for cost effectiveness separately (Exhs. DPU-EGMA 1-1; DPU-NSTAR Gas 1-1). NSTAR Gas and EGMA shall submit separate BCR models and data tables in all filings for the 2022-2024 Three-Year Plans term. The Department will review the performance of NSTAR Gas and EGMA to assess whether the energy efficiency programs, as implemented, were cost effective both on an individual basis and a combined basis.

e. Performance Incentive Mechanism

NSTAR Gas and EGMA propose to implement a joint performance incentive mechanism and collect performance incentives based on the combined performance of the two companies (Exhs. NSTAR Gas-2, at 143-144; EGMA-2, at 143-144). NSTAR Gas and EGMA further propose to allocate performance incentives to each company based on the service territory where the benefits accrue (Exhs. NSTAR Gas-2, at 144; EGMA-2, at 144).

The Department seeks to ensure that both NSTAR Gas and EGMA meet their performance commitments on an individual, company-specific basis for this Three-Year Plans

term for each component of the performance incentive mechanism. In addition, the Department is concerned that for the electrification component of the performance incentive mechanism, a joint performance incentive could result in underperformance in one service territory compared to the other (Exhs. DPU-NSTAR Gas 1-1; DPU-EGMA 1-1).[197] Accordingly, the Department directs NSTAR Gas and EGMA to calculate and report performance incentives on an individual-company basis.[198] 2013-2015 Three-Year Plans Order, at 141.

f. Conclusion

With the exception of the proposed joint performance incentive mechanism, the Department approves the proposal of NSTAR Gas and EGMA to implement a consolidated Three-Year Plan (Exhs. NSTAR Gas-2, at 137; EGMA-2, at 137). NSTAR Gas and EGMA shall continue to perform internal planning, budgeting, and implementation activities in a way that maximizes the acquisition of all available cost-effective energy efficiency and minimizes costs. G.L. c. 25, § 19.

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[197] Specifically, NSTAR Gas and EGMA state that they may have over-estimated how many buildings would be undergoing renovations in one (unspecified) service territory relative to the other (Exhs. DPU-NSTAR Gas 1-1; DPU-EGMA 1-1).

[198] NSTAR Gas and EGMA may propose a joint performance incentive mechanism for the 2025-2027 Three-Year Plans term if they can demonstrate: (1) a joint mechanism will have no adverse effect on customers of either company; and (2) actual cost savings from the implementation of the joint 2022-2024 Three-Year Plans over the term.

Consistent with G.L. c. 25, §§ 19(b), 19(c), 21(b)(3), NSTAR Gas and EGMA shall spend at least 20 percent of their individual energy efficiency budgets on the low-income sector. In addition, NSTAR Gas and EGMA shall file all Annual Reports and Term Reports (and related documents) for this Three-Year Plans term, both on an individual and an aggregate basis. The Department will review the performance of NSTAR Gas and EGMA with respect to savings goals and cost effectiveness on an individual basis. Finally, as noted above, NSTAR Gas and EGMA shall calculate and report performance incentives on an individual company basis. NSTAR Gas and EGMA shall update the BCR screening models and data tables on an individual and aggregate level, as part of their compliance filings, in order to enable the Department to evaluate performance within each service territory.

B. Codes and Standards

1. Program Administrators Proposal

The Program Administrators propose to include savings in their Three-Year Plans associated with the Codes and Standards Compliance and Technical Support ("CSCS") initiative (Statewide Plan, Exh. 1, at 39). The proposed CSCS initiative provides technical support for the development of energy efficiency policies that subsequently drive energy savings (Statewide Plan, Exh. 1, at 37). Under the proposed CSCS initiative, the Program Administrators intend to pursue energy savings through two efforts: (1) codes and standards compliance support, which reduces energy savings lost due to noncompliance; and (2) codes and standards advancement support, which pursues the adoption of more stringent energy efficiency requirements (Statewide Plan, Exh. 1, at 38).

The Program Administrators introduced codes and standards compliance support as a measure in their 2019-2021 Three-Year Plans (Statewide Plan, Exh. 1, at 37). Although they had previously performed some of these activities, the Program Administrators propose to significantly increase their focus on codes and standards advancement support through lobbying efforts in the 2022-2024 Three-Year Plan term (Statewide Plan, Exh. 1, at 37-38).[199]

The Program Administrators propose to claim CSCS-related savings[200] starting in 2023 attributable to their support[201] for the appliance standards provisions of the Climate

[199] In their 2019-2021 Three-Year Plans, the Program Administrators indicated that they intended to expand their codes and standards efforts to "advance the adoption of progressively more efficient energy codes," including appliance standards. D.P.U. 18-110 through D.P.U. 18-119, Statewide Plan, Exh. 1, at 45. More specifically, the Program Administrators indicated that they intended to provide technical assistance and research in order to: (1) support improvement of the efficiency of the statewide energy code during the Commonwealth's building code update process; and (2) support the adoption of product efficiency standards during the Commonwealth's then-forthcoming legislative session. D.P.U. 18-110 through D.P.U. 18-119, Statewide Plan, Exh. 1, at 45. The Program Administrators anticipated claiming savings for these initiatives in 2021, based on efforts then underway. D.P.U. 18-110 through D.P.U. 18-119, Statewide Plan, Exh. 1, at 45.

[200] The Program Administrators have included CSCS-related savings in the following initiatives: (1) Residential New Homes & Renovations; (2) C&I New Buildings and Major Renovations; (3) Residential Retail Initiative; and (4) C&I New and Replacement Equipment (Statewide Plan, Exh. 1, at 38).

[201] In response to discovery, the Program Administrators described their support for the appliance standards as: (1) testimony in support at public hearings; (2) submission of letters of support; (3) participation in stakeholder meetings; and (4) dedicated staff resources (Exh. DOER-Comm 1-1). The Program Administrators provided a log documenting these activities from 2017 through 2021, along with letters from state

Act, with a proposed attribution rate of ten percent (Statewide Plan, Exh. 1, at 39).[202] The Program Administrators arrived at the proposed ten percent attribution rate based on their collective judgment in the absence of a more appropriate way to determine an attribution factor (Exh. DOER-Comm 1-1). The Program Administrators propose to conduct an evaluation to better inform their savings claims in 2023 and 2024 (Statewide Plan, Exh. 1, at 39). The Program Administrators propose to conduct this study in 2022, to be completed in time to revise the proposed attribution factor to calculate actual savings in 2023 and 2024 (Statewide Plan, Exh. 1, at 39; Exh. DOER-Comm 1-1). Finally, the Program Administrators indicate that they did not conduct this study earlier because, at the direction of DOER, the proposed study was not approved by the Council (Exh. DOER-Comm 1-1).

2. Positions of the Parties

a. Program Administrators

The Program Administrators argue that their CSCS activities during the 2019-2021 Three-Year Plan term generated savings that will be realized in the upcoming term and, therefore, they should be permitted to the claim these and future savings from their efforts (Program Administrators Brief at 38-39). The Program Administrators maintain that the CSCS initiative supports the achievement of cost-effective energy efficiency because it

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representatives, press articles referencing their involvement, and comments from other supporting organizations (Exh. DOER-Comm 1-1(a) through (e)).

[202] The Program Administrators expect the savings from their efforts to be less than one percent of electric portfolio savings and approximately two percent of gas portfolio savings, after accounting for attribution (Statewide Plan, Exh. 1, at 39).

reaches historical non-participants and hard-to-reach customer segments (Program Administrators Brief at 38).

The Program Administrators argue that their support and public engagement made them the "headline sponsor" of the appliance standards in the Climate Act (Program Administrators Brief at 38-39). In this regard, the Program Administrators maintain their support was integral to passage of the appliance standards and, therefore, they should be permitted to claim savings from these efforts and future codes and standards advancement-support activities (Program Administrators Brief at 38-39; Program Administrators Reply Brief at 3-4).

The Program Administrators dispute DOER's assertion that they have provided insufficient evidence to demonstrate that their lobbying efforts lead to incremental savings (Program Administrators Reply Brief at 3). In response to DOER, the Program Administrators reiterate that their efforts were instrumental in the inclusion of appliance standards in the Climate Act, as evidenced by letters of support, testimony at public hearings, participation in stakeholder meetings, and other actions (Program Administrators Reply Brief at 3, citing Exh. DOER-Comm 1-1, Att. 1-1(b) through (e)).

The Program Administrators argue that they should be permitted to claim a ten percent savings attribution as a placeholder until they can conduct a study to develop an alternate attribution (Program Administrators Reply Brief at 4). The Program Administrators contend that a ten percent savings attribution is conservative and will ensure the effect of their efforts is quantified and captured, but not overstated (Program Administrators Reply

Brief at 4). The Program Administrators assert that DOER prevented them from conducting an earlier study to determine a more exact savings attribution (Program Administrators Reply Brief at 4, citing Exh. DOER-Comm 1-1).

Finally, the Program Administrators maintain that the scope of DOER's alternative proposal to allow them to claim savings from standards compliance is too narrow (Program Administrators Reply Brief at 4, citing DOER Brief at 37-38). In addition, the Program Administrators argue that this proposal is not part of the record and, therefore, the Department cannot not consider it (Program Administrator Reply Brief at 4).

b. Attorney General

The Attorney General argues that the Department should reject the Program Administrators' proposal to claim savings associated with their lobbying efforts related to the appliance standards legislation (Attorney General Reply Brief at 2). The Attorney General maintains that the Department allows Program Administrators to claim savings only where changes in customer consumption patterns can be directly attributed to Program Administrator action and/or activities (Attorney General Reply Brief at 2-3, citing D.P.U. 07-50-A at 29 (disallowing the recovery of lost base revenues associated with the energy efficiency activities)). Here, the Attorney General argues that the Program Administrators have presented insufficient evidence to show that the savings associated with the appliance standards are directly attributable to the Program Administrators' lobbying efforts (Attorney General Reply Brief at 3). In this regard, the Attorney General asserts that

the efforts of the Program Administrators were not the sole reason for the adoption of the appliance standards in the Climate Act (Attorney General Reply Brief at 2).

Finally, the Attorney General agrees with DOER's position that the Department should distinguish appliance standards compliance from appliance standards adoption (Attorney General Reply Brief at 2, citing DOER Brief at 39). The Attorney General maintains while appliance standards compliance activities may be appropriate activities to base a claim of savings, appliance standards adoption does not fall within the Program Administrators' energy efficiency mandate (Attorney General Reply Brief at 2, citing DOER Brief at 39).

c. Department of Energy Resources

DOER argues that the Department should reject the Program Administrators' attempt to claim "unsubstantiated" GHG savings associated with the CSCS initiative and, instead, require Program Administrators to achieve those savings through approved program initiatives (DOER Brief at 37). DOER contends that the Program Administrators' proposal to attribute ten percent of savings from appliance standards legislation lacks a reasonable evidentiary basis (e.g., estimates from other jurisdictions or evaluated savings data) (DOER Brief at 37-38, citing Exh. DOER-Comm 1-1). Moreover, DOER argues that the Department should direct the Program Administrators not to spend additional ratepayer funds to conduct an evaluation of their lobbying efforts (DOER Reply Brief at 13).

Additionally, DOER maintains the Program Administrators have failed to demonstrate the appliance standards legislation would not have been enacted without their support (DOER

Brief at 38, citing Exh. DOER-Comm 1-1, Att. 1-1(b) through (e)). Instead, DOER argues that the adoption of appliance standards is attributed to broad coalitions of supporters and not solely the result of the Program Administrators' intervention (DOER Brief at 37-38). Therefore, DOER argues that the Department should deny the Program Administrators' request to claim savings for their lobbying efforts (DOER Brief at 38; DOER Reply Brief at 12-13).

DOER further contends that lobbying efforts are not an appropriate use of ratepayer funds (DOER Reply Brief at 12). In this regard, DOER argues that lobbying expenses cannot be recovered through rates without evidence of direct benefits to ratepayers (DOER Reply Brief at 12, citing 2016-2018 Three-Year Plans Order, at 48-52, New England Telephone and Telegraph Company, D.P.U. 86-33-G at 101 (1989), Boston Edison Company, D.P.U. 1720, at 70-78 (1984)). DOER argues that the Program Administrators have not shown that their advocacy efforts have directly benefitted ratepayers (DOER Reply Brief at 12-13, citing Program Administrators Brief at 37-40).

Finally, in lieu of the Program Administrators' proposal to claim savings for the adoption of appliance standards, DOER proposes to establish a dedicated role for the Program Administrators in appliance standards compliance (DOER Brief at 39). DOER maintains that its proposal would use the Council's evaluation framework to more accurately attribute savings (DOER Brief at 39). DOER further asserts that appliance standards compliance is a valid source of potential cost-effective savings, is an appropriate activity for

the Program Administrators to undertake, and is an appropriate use of ratepayer-provided energy efficiency funds (DOER Brief at 39).

3. Analysis and Findings

As described above, the Program Administrators propose to continue the codes and standards compliance support and advancement efforts begun in the 2019-2021 Three-Year Plans term (Statewide Plan, Exh. 1, at 39). D.P.U. 18-110 through D.P.U. 18-119, Statewide Plan, Exh. 1, at 45. In particular, the Program Administrators propose to continue their dedicated efforts to provide support for codes and standards compliance through the CSCS initiative as a way to reduce energy savings lost due to noncompliance (Statewide Plan, Exh. 1, at 38-39). No party objected to this aspect of the Program Administrators' proposal and the Department approves the continuation of the Program Administrators' codes and standards compliance activities in the Three-Year Plans.

Through the CSCS initiative, the Program Administrators also propose to increase their lobbying efforts to support the advancement of more stringent energy efficiency codes and standards (Statewide Plan, Exh. 1, at 39). The Program Administrators indicated in their 2019-2021 Three-Year Plans that they intended to undertake a multi-year effort to enact more stringent state appliance standards. D.P.U. 18-110 through D.P.U. 18-119, Statewide Plan, Exh. 1, at 45. Now that they have undertaken these efforts and the appliance standards are in place, the Program Administrators have submitted a proposal addressing how they intend

to claim savings associated with these (and future) lobbying efforts (Statewide Plan, Exh. 1, at 39).[203]

The Attorney General and DOER object to the codes and standards advancement aspect of the Program Administrators' CSCS proposal, arguing that lobbying efforts do not fall within scope of the Program Administrators' energy efficiency mandate (Attorney General Reply Brief at 2; DOER Brief at 39). DOER further argues that the Program Administrators' proposal to attribute ten percent savings from appliance standards legislation lacks evidentiary support (DOER Brief at 37-38).

The Department is generally supportive of the Program Administrators' efforts to enact more stringent energy efficiency codes and standards. The Department agrees with DOER, however, that the Program Administrators' proposal to adopt a ten percent attribution rate for savings associated with their appliance standards lobbying activities is without sufficient evidentiary support (Statewide Plan, Exh. 1, at 39). Here, however, the Program Administrators maintain that the Council's EM&V consultant, at the direction of a councilor, would not authorize the study they submit is necessary to fully support claimable savings for these activities (Program Administrators Reply Brief at 4, citing Exh. DOER-Comm 1-1).

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[203] The Program Administrators' CSCS initiative proposal was not clearly described and insufficiently developed in the Three-Year Plans filings (see Statewide Plan, Exh. 1, at 37-39). DOER was required to elicit significant details about the Program Administrators' proposal through discovery (Exh. DOER-Comm 1-1). In fact, the Department was unable to describe the Program Administrators' proposal above without numerous references to Exhibit DOER-Comm 1-1.

The Program Administrators must be able to conduct all studies necessary to support their achievement of all cost-effective energy efficiency.[204] Before the Department is able to evaluate whether there is any attribution that can be claimed for savings related to the Program Administrators' lobbying activities, the Department must review a properly conducted study. Accordingly, the Department directs the Program Administrators to complete the standards attribution evaluation study originally proposed to the Council's EM&V consultant (Exh. DOER-Comm 1-1, at 2). The Program Administrators shall submit such study with their 2022 Annual Reports. Pending the Department's review of the study, the Program Administrators may include a ten percent attribution rate as a placeholder for planned savings in their BCR data tables.

In addition, as the Attorney General and DOER correctly note, the Program Administrators must be able to show that any savings associated with the appliance standards (or other codes and standards advancement activities) are directly attributable to the Program Administrators' lobbying efforts. The Department finds that the Program Administrators

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[204] The Department is concerned about the alleged actions under the EM&V process, as well as the Program Administrators' decision not to appeal a decision that affected their ability to present necessary information to the Department. For multiple Three-Year Plans, the Department has approved an EM&V framework that is designed to ensure the independence and objectivity of EM&V activities. See 2019-2021 Three-Year Plans Order, at 36. Under this EM&V framework, the Council's oversight is accomplished through the EM&V consultant (Statewide Plan, Exh. 1, App. H at 7-8). The Program Administrators and the EM&V consultants are supposed to work diligently to reach a consensus on evaluation issues and, if a consensus is not reached, the EM&V consultant (operating independently) or the full Council may make a final decision, subject to an appeals process (Statewide Plan, Exh. 1, App. H at 8).

cannot count these claimed savings towards their performance incentive goals without a showing in the Term Report that, but for their actions, the legislation would not have been passed.[205] 2016-2018 Three-Year Plans Order, at 51-52. Finally, consistent with longstanding Department precedent, if the Program Administrators seek to recover lobbying expenses through the EES, they must clearly demonstrate a direct benefit to Massachusetts ratepayers, which is a high burden to meet.[206] 2016-2018 Three-Year Plans Order, at 52.

C. Interim Continuation

Pursuant to the Green Communities Act, Program Administrators are required to file their three-year energy efficiency plans by October 31st of the year prior to the first year of the three-year plan. G.L. c. 25, § 21(d)(1). The Department must issue an Order on the three-year plans within 90 days of filing. G.L. c. 25, § 21(d)(2). The timing of the Program Administrators' filings and the Department's review results in the previously approved energy efficiency programs ending approximately 30 days prior to the Department's approval of the new three-year plans.

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[205] The Program Administrators provided certain evidence in discovery regarding their role in supporting appliance standards (Program Administrators Reply Brief at 3, citing Exh. DOER-Comm 1-1, Att. 1-1(b) - (e)). Although we will not make any finding on the sufficiency of this evidence now, we strongly encourage the Program Administrators to submit additional evidence in light of the required findings outlined above.

[206] In addition, the Program Administrators must provide evidence that: (1) details the structure and function of their lobbying efforts; (2) identifies the percentage of resources devoted to lobbying and legislative activities; and (3) provides the method used to derive the percentage. 2016-2018 Three-Year Plans Order, at 51-52; D.P.U. 86-33-G at 101; D.P.U. 1720, at 71, 74-75.

In recognition of the need for continuity of energy efficiency programs, upon motion of the Program Administrators, the Department has allowed for interim continuation of existing energy efficiency programs, pending approval of proposed new programs under review. See, e.g., 2019-2021 Three-Year Plans Order, at 178, citing 2013-2015 Three-Year Plans, Order on Motions for Interim Continuation (2012); 2010-2012 Three-Year Plans, Order on Motions for Interim Continuation (2009). In order to ensure the continuity of energy efficiency programs in the future and to obviate the need for motions for interim continuation, each Program Administrator may continue all energy efficiency and RCS programs approved in this Order, until the Department concludes its investigation of the 2025-2027 Three-Year Plans, unless otherwise ordered by the Department. See 2019-2021 Three-Year Plans Order, at 178. The Program Administrators shall continue their existing energy efficiency and RCS programs at Department-approved expenditure levels for program-year 2024 during the Department's review of the 2025-2027 Three-Year Plans. All funds expended during the interim continuation of energy efficiency and RCS programs will be charged against the Program Administrators' 2025 budgets.

XIII. CONCLUSION

Each Program Administrator's Three-Year Plan must provide for the acquisition of all available energy-efficiency and demand-reduction resources that are cost effective or less expensive than supply. See G.L. c. 25, §§ 19(a), 19(b), 21(b)(1); see also Guidelines § 3.4.7. The Department has reviewed the savings goals contained in the Three-Year Plans and finds that, subject to the directives and program modifications described above, they are

reasonable and are consistent with the achievement of all available cost-effective energy-efficiency and demand-reduction resources. The Department has reviewed the Three-Year Plans and finds that they are constructed in a manner that, in aggregate, meets the GHG emissions reduction goals set pursuant to G.L. c. 21N, § 3B. The Department directs the electric and gas Program Administrators to implement their respective Three-Year Plans in a manner that meets the specific electric and gas GHG emissions reduction goals set by the EEA Secretary.

Consistent with the requirements of G.L. c. 25, §§ 19(a), 19(c), 21(b)(2), the Department finds that each Program Administrator's Three-Year Plan, subject to the directives and modifications set forth above: (1) is designed to minimize administrative costs to the fullest extent practicable; (2) uses competitive procurement to the fullest extent practicable; and (3) includes a budget for low-income programs that meets the statutory minimums of ten percent for electric Program Administrators and 20 percent for gas Program Administrators.

The Green Communities Act requires the Department to ensure that the energy efficiency sectors included in the Three-Year Plans are cost effective. G.L. c. 25, § 21(b)(3). In assessing cost effectiveness, the Program Administrators must include a social value of GHG emissions reductions for all measures except fossil fuel heating and cooling conversions. The Department finds that the Program Administrators shall use the social value of GHG emissions reductions set forth in the AESC Study for the 2022-2024 Three-Year Plans (Statewide Plan, Exh. 1, App. Q). The Department finds that

each Program Administrator: (1) has appropriately evaluated the cost effectiveness of its energy efficiency programs; and (2) has demonstrated that, based on the projected benefits and costs, all energy efficiency sectors and programs are cost effective for each plan year and over the entire 2022-2024 Three-Year Plans term.

Pursuant to the Green Communities Act, the Three-Year Plans include a mechanism designed to provide an incentive to eligible Program Administrators based on their success in meeting or exceeding certain performance goals. G.L. c. 25, § 21(b)(2)(v). Subject to certain modifications and disallowances addressed herein, the Department approves: (1) the statewide incentive pool; and (2) the structure of the performance incentive mechanism for the savings, value, equity, and electrification components. The Program Administrators must file the calculation of the performance incentive mechanisms' payout rates in their compliance filing.

With respect to energy efficiency program funding, the Department has considered (1) the availability of other private or public funds, (2) whether past programs have lowered the cost of electricity to consumers, and (3) the effect of rate increases on consumers, and finds that each Program Administrator may recover the funds to implement its Three-Year Plan through the EES. G.L. c. 25, §§ 19(a), 21(b)(2)(vii). In particular, the Department finds that the proposed budgets are appropriately designed to achieve savings goals while minimizing customer rate impacts.

Subject to the modifications and disallowances addressed herein, the Department concludes that each Program Administrator's Three-Year Plan is consistent with the Green

Communities Act, the Guidelines, and Department precedent. Accordingly, subject to the modifications, disallowances, and directives contained herein, the Department approves each Program Administrator's Three-Year Plan and budget. Within 60 days of the date of this Order, or the date designated above, each Program Administrator shall file a compliance filing consistent with the directives set forth herein and further containing: (1) updated exhibits as appropriate, including without limitation updated statewide and Program Administrator-specific data tables, BCR models, bill impacts, data tables embedded in the Statewide Plan, and performance incentives models and related data; (2) Key Performance Indicators for the 2022-2024 Three-Year Plans term; (3) a matrix identifying each directive set forth in the Order and indicating where and how the directive is addressed in the compliance filing; and (4) an addendum to the Statewide Plan explaining at a high level the elements of the Statewide Plan that were revised per the Order, which addendum should also be submitted to the Council.

The energy efficiency programs will provide significant benefits and GHG emissions reductions that will align with the Commonwealth's energy policies. The Three-Year Plans approved today incorporate innovative approaches designed to strategically electrify building thermal loads while emphasizing a continued commitment to lowering overall energy usage. Further, the performance incentive structure appropriately motivates the Program Administrators to purse all cost-effective energy efficiency while addressing historically underserved populations. The energy efficiency programs in these Three-Year Plans will create a solid foundation for future energy efficiency activities as the Program Administrators

continue their sustained efforts to achieve all cost-effective energy efficiency and lower GHG emissions.

XIV. ORDER

Accordingly, after due notice, hearing, and consideration, it is:

ORDERED: That the three-year energy efficiency plans for 2022 through 2024 filed by The Berkshire Gas Company ("Berkshire Gas"), Eversource Gas Company of Massachusetts, d/b/a Eversource Energy ("EGMA"), Fitchburg Gas and Electric Light Company, d/b/a Unitil (Gas Division) ("Unitil (gas)"), Liberty Utilities (New England Natural Gas Company) Corp., d/b/a Liberty ("Liberty"), Boston Gas Company, d/b/a National Grid ("National Grid (gas)"), NSTAR Gas Company, d/b/a Eversource Energy ("NSTAR Gas"), the Towns of Aquinnah, Barnstable, Bourne, Brewster, Chatham, Chilmark, Dennis, Eastham, Edgartown, Falmouth, Harwich, Mashpee, Oak Bluffs, Orleans, Provincetown, Sandwich, Tisbury, Truro, Wellfleet, West Tisbury, and Yarmouth, and Dukes County, acting together as the Cape Light Compact JPE ("Compact"), Fitchburg Gas and Electric Light Company, d/b/a Unitil (Electric Division) ("Unitil (electric)"), Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid ("National Grid (electric)"), and NSTAR Electric Company, d/b/a Eversource Energy ("NSTAR Electric") are APPROVED subject to the modifications, disallowances, and conditions contained herein; and it is

FURTHER ORDERED: That The Berkshire Gas Company ("Berkshire Gas"), Eversource Gas Company of Massachusetts, d/b/a Eversource Energy ("EGMA"), Fitchburg

Gas and Electric Light Company, d/b/a Unitil (Gas Division) ("Unitil (gas)"), Liberty Utilities (New England Natural Gas Company) Corp., d/b/a Liberty ("Liberty"), Boston Gas Company, d/b/a National Grid ("National Grid (gas)"), NSTAR Gas Company, d/b/a Eversource Energy ("NSTAR Gas"), the Towns of Aquinnah, Barnstable, Bourne, Brewster, Chatham, Chilmark, Dennis, Eastham, Edgartown, Falmouth, Harwich, Mashpee, Oak Bluffs, Orleans, Provincetown, Sandwich, Tisbury, Truro, Wellfleet, West Tisbury, and Yarmouth, and Dukes County, acting together as the Cape Light Compact JPE ("Compact"), Fitchburg Gas and Electric Light Company, d/b/a Unitil (Electric Division) ("Unitil (electric)"), Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid ("National Grid (electric)"), and NSTAR Electric Company, d/b/a Eversource Energy ("NSTAR Electric") shall comply with all other directives contained in this Order.

By Order of the Department,

/s/
Matthew H. Nelson, Chair

/s/
Robert E. Hayden, Commissioner

/s/
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.