Cape Light Compact JPE Executive Committee & Governing Board Meeting

DATE: Wednesday, November 10, 2021

TIME: 2:00-4:30 p.m.

Note: The meeting will be held through remote participation pursuant to Chapter 20 of the Acts of 2021, §20. Members of the Public can join in by audio and follow along with Meeting Materials, see the information below. All public comments should be submitted to Maggie Downey, Compact Administrator, at mdowney@capelightcompact.org by 2:00 PM on Tuesday, November 9, 2021 and should follow the public comment protocol below. Public comments received after the September 28th deadline will be distributed prior to the Compact's next Board meeting.

Telephone dial-in: +1 (646) 558-8656

Meeting ID: 833-5948-3441

Further instructions are attached to this agenda.

AGENDA

- 1. Presentation on Energy Markets, Mike Zenker, Managing Director of Research, NextEra Energy Resources
- 2. Open Session Vote on Entry into Executive Session pursuant to M.G.L. c. 30A §21(a)(3) and (10) to (1) review and approve executive session minutes which contain discussions regarding pending or imminent regulatory litigation and trade secrets and confidential, competitively-sensitive or other proprietary power supply information related to a proposed Low-Income Community Solar project (when the release of the discussion would have a detrimental effect on the Compact's negotiating position); (2) to discuss and potential vote on pending or imminent regulatory litigation and trade secrets and confidential, competitively-sensitive or other proprietary power supply information related to Massachusetts Department of Public Utilities 20-40, Cape & Vineyard Electrification Offering (CVEO) and the 2022-2024 Energy Efficiency Plan, DPU 21-126 to return to open session thereafter.

 Participation in the Executive Session is limited to CLC Board Members, CLC Staff and Invited Guests
- 3. Public Comment Written Only
- 4. Approval of October 14, 2021 Compact Board Open Session Minutes
- 5. Chairman's Report, Martin Culik
 - A. Richard Toole, Oak Bluffs, Recognition of Service
 - B. Introduction of Dion Alley, new Oak Bluffs Representative
- 6. Presentation on Updated Compact 2022-2024 Energy Efficiency Plan Budget, Phil Moffit
- 7. Discuss 2022 Proposed Operating Budget, Maggie Downey
- 8. Summary of Cape Light Compact's Small Business 2021 Main Streets Initiative, Lindsay Henderson
- 9. Administrator's Report, Maggie Downey
 - A. 2022-2024 Energy Efficiency Plan Process with MA Department of Public Utilities (DPU 21-126)
 - B. MA Department of Public Utilities Virtual Public Hearings on 2022-2024 Energy Efficiency Plan, December 1st and 2, 2021 (notice to be forwarded when posted)
- 10. Board Member Update (Reserved for Updates on Member Activities the Chair Did Not Reasonably Anticipate Would be Discussed No Voting)

Chairman's Public Comment Protocols for the November 10, 2021 Compact Governing Board Meeting

The Chair, pursuant to his authority under G.L. c. 30A, § 20, and consistent with Chapter 20 of the Acts of 2021, § 20, announces the following protocols to assist the public in effective participation in the November 10, 2021 Compact Board meeting, where all Board Members, staff and members of the Public shall be participating remotely:

- 1. All public comments shall be submitted in writing to the Compact Administrator, Maggie Downey, at mdowney@capelightcompact.org by 2:00 PM on Tuesday, November 9, 2021. Written comments must include a person's name and, if appropriate, the name of the organization the person is representing. Public comments received after the November 9th deadline will be distributed prior to the Compact's next Board meeting.
- 2. Public comment must be respectful, courteous, and presented in a dignified manner. All remarks must also be free of personal attacks.
- 3. All public comments consistent with these protocols shall be included in the Compact's Board meeting packet.
- 4. Board members and staff shall not respond to public comment during the Compact's Board meeting.
- 5. Copies of the Board meeting packet shall be made available to members of the public on Wednesday, November 10, 2021 at the Cape Light Compact JPE's web site at www.capelightcompact.org. Documents exempt from disclosure pursuant to the Public Records Law or protected by the attorney-client privilege shall not be included.

Cape Light Compact JPE **Governing Board Meeting Minutes** Thursday, October 14, 2021

Pursuant to Massachusetts Governor Charles D. Baker's Order Suspending Certain Provisions of the Open Meeting Law on March 12, 2020, the Cape Light Compact JPE Board of Directors met on Thursday, October 14, 2021 at 2 p.m. The meeting was held through a Zoom videoconference for members of the Board with audio jition and Committee Board Appri call-in available for members of the public.

Participating Remotely Were:

- 1. David Anthony, Secretary/Executive Committee, Barnstable
- 2. Peter Doyle, Barnstable Alternate
- 3. Robert Schofield, Executive Committee, Bourne
- 4. Francis Erdman, Bourne Alternate
- 5. Colin Odell, Executive Committee, Brewster
- 6. Peter Cocolis, Chatham
- 7. Timothy Carroll, Executive Committee, Chilmark
- 8. Erik Peckar, Dukes County
- 9. Fred Fenlon, Eastham
- 10. Alan Strahler, Edgartown
- 11. Matthew Patrick, Falmouth
- 12. Valerie Bell, Harwich
- 13. Wayne Taylor, Mashpee
- 14. Richard Toole, Executive Committee, Oak Bluffs
- 15. Martin Culik, Chair/Executive Committee, Orleans
- 16. Nathaniel Mayo, Provincetown
- 17. Leanne Drake, Sandwich
- 18. Jay Grande, Tisbury Alternate
- 19. Bob Higgins-Steele, Truro Alternate
- 20. Richard Elkin, Executive Committee, Wellfleet
- 21. Sue Hruby, West Tisbury
- 22. Joyce Flynn, Vice Chair/Executive Committee, Yarmouth

Absent Were:

- 1. Forest Filler, Aquinnah
- 2. Brad Crowell, Dennis
- 3. Kirk Metell, Tisbury
- 4. Jarrod Cabral, Truro

Legal Counsel Participating Remotely:

Audrey Eidelman Kiernan, BCK Law, P.C.

Staff Participating Remotely:

Briana Kane, Residential Program Manager Maggie Downey, Administrator Margaret Song, Commercial & Industrial Program Manager

Melissa Allard, Senior Administrative Coordinator Phil Moffitt, Planning & Evaluation Manager Lindsay Henderson, C&I Programs Senior Analyst Anna Deely, EM&V Analyst Mariel Marchand, Power Supply Planner

Public Participants:

None.

Martin Culik called the meeting to order at 2:01 PM.

PUBLIC COMMENT:

There were no members of the public present, and no public comments were submitted to the Board in writing under the public comment guidelines.

APPROVAL OF MINUTES:

The Board considered the September 29, 2021 Open Session Meeting Minutes.

Wayne Taylor stated that he was in both the participating and absent lists and needs to be removed from the absent list.

Robert Schofield moved the Board to accept the minutes as amended and to release them as amended, seconded by Peter Cocolis.

David	Anthony	Barnstable	Yes
Robert	Schofield	Bourne	Yes
Colin	Odell	Brewster	Yes
Peter	Cocolis	Chatham	Yes
Tim	Carroll	Chilmark	Yes
Erik	Peckar	Dukes County	Yes
Alan	Strahler	Edgartown	Yes
Matt	Patrick	Falmouth	Yes
Valerie	Bell	Harwich	Abstained
Wayne	Taylor	Mashpee	Yes
Martin	Culik	Orleans	Yes
Nate	Mayo	Provincetown	Yes
Leanne	Drake	Sandwich	Yes
Jay	Grande	Tisbury	Yes
Bob	Higgins-Steele	Truro	Yes
Richard	Elkin	Wellfleet	Yes
Sue	Hruby	West Tisbury Yes	
Joyce	Flynn	Yarmouth	Yes

Motion carried in the affirmative (17-0-1)

REVIEW AND DISCUSS CAPE LIGHT COMPACT'S DRAFT 2022-2024 ENERGY EFFICIENCY PLAN: PROPOSED GREENHOUSE GAS (GHG) REDUCTION GOALS, BUDGET, ELECTRIFICATION GOALS AND PROPOSED ENHANCEMENTS TO STATEWIDE INCENTIVES:

Maggie Downey started by reviewing the Cape Light Compact JPE 2022-2024 Energy Efficiency Plan (Plan) PowerPoint. She reminded the Board of the Massachusetts Energy Efficiency Advisory Council (EEAC) and Compact Board Plan priorities.

Maggie Downey reviewed the Compact's Greenhouse Gas (GHG) reduction goals. The Compact's allocation is approximately 24,406 metric tons. She stated staff incorporated all of the Compact's Governing Board and EEAC priorities and as a result, the Compact Plan proposes to achieve 44,186 metric tons of GHG reductions which is 140% of the Compact's goal. Maggie Downey reviewed the breakdown of Massachusetts' electrification goals for commercial and residential sectors that need to be achieved to reach the Global Warming Solutions Act goal by 2050. Reaching this goal will require electrification of 1 million homes and 300 to 400 million square feet of commercial building space in Massachusetts.

Maggie Downey reviewed the Compact's proposed commercial and industrial Plan enhancements. The proposed enhancements provide customer incentives up to 100% for municipal, small non-profits, small businesses, and micro business customers. Consistent with the Department of Public Utilities (DPU) directive, an evaluation is underway to review specific Compact enhancements, including these commercial and industrial enhancements. The evaluation is expected to be completed in January 2022, but draft memoranda she has reviewed to date support continuation of the increased commercial incentives. She also reviewed the newly proposed enhanced incentives for multi-family income eligible (IE)/moderate income (MI) new construction projects. In order to be eligible for the enhanced incentive, the project must be deed restricted for 25+ years and the heating system cannot use fossil fuels or be electric baseboard. For the heating system, if 51% of the site is IE, the incentive is 100% of the cost, but if 51% of the site is MI, the incentive is 80% of the cost. If the site is a mix of IE, MI, affordable and market rate, the incentive will be calculated using current methodology. The Compact will pay 100% for all weatherization measures above code. The project will need to agree to participate in the Compact's evaluation program, and the contactor must be "certified" for multi-family new construction work.

Maggie Downey reviewed the objectives of the Cape and Vineyard Electrification (CVEO) program. She stated that this is the third time it is being presented to the DPU. She stated that this program is truly targeting IE and MI customers.

Maggie Downey stated she is looking for direction from the Board on whether to remove incentives for oil and propane (fossil fuel) heating systems for market rate customers. She stated that if the Compact removes incentives for fossil fuel heating systems for these customers, the Compact will be the only Program Administrator (PA) doing this in Massachusetts which poses some implementation challenges. Matt Patrick stated that continuing to offer these incentives is counter to the Compact's GHG goals. Briana Kane stated that the incentives still have GHG savings that PAs can claim and that is why they are still being offered by other PAs. Matt Patrick asked why the Compact is not just incentivizing heat pumps for people who want to replace an oil system. Briana Kane stated that the Compact is and are encouraging people to do so. However, there are customers that may be in a situation where upgrading their oil system is more doable than converting to heat pumps. Colin Odell stated that the Compact should not be allowing incentives for new oil installation but agrees that there are instances where people may have an old furnace and they are not in a financial position to upgrade

to heat pumps. Tim Carroll stated that we sometimes blur our role between the Compact and our green responsibilities, and he thinks it is important that the Compact is as green as possible, but we need to remember that we are trying to provide electricity to our customers at a rate they can afford. He stated that he would support the oil and propane if they are improving existing conditions. He stated he would just hate to lose customers because they are unable to make that next step to convert to heat pumps. Francis Erdman stated that we have a moral obligation to pursue carbon reduction but on the other hand he stated he understands there could be a situation where heat pumps cannot be installed. He stated that he likes the idea that if someone has an existing inefficient oil or propane system that they can use the incentives but not to install new oil or propane heating systems.

Briana Kane stated that the Compact is reaching out to our local contractors, pushing heat pump training, and developing a heat pump certified training contractor list, all the Compact's focus is on getting heat pumps installed for our customers. She stated that the propane and oil incentives do have savings, and that is what the PAs statewide are saying. She stated that there will be customers that no matter what they are given, they make the decision that they do not want to switch to a heat pump, this rebate would be for them to upgrade their less efficient system to a more efficient system, and they would receive a rebate and the Compact would claim those savings.

Ricard Toole joined meeting at 2:45PM

Maggie Downey asked for a Sense of the Board on heating system incentives for propane and oil for market rate customers. The Board found it challenging to consider this request and expressed some confusion about the nature of the request. Joyce Flynn proposed a roll call rather than a hand raise to obtain a sense of the Board for offering incentives for propane and oil.

David	Anthony	Barnstable	No
Robert	Schofield	Bourne:	No
Colin	Odell	Brewster	No
Peter	Cocolis	Chatham	No
Tim	Carroll	Chilmark	No
Erik	Peckar	Dukes County	Yes
Alan	Strahler	Edgartown	Yes
Matt	Patrick	Falmouth	Yes
Valerie	Bell	Harwich	No
Wayne	Taylor	Mashpee	Absent
Richard	Toole	Oak Bluffs	Yes
Martin	Culik	Orleans	No
Nate	Mayo	Provincetown	Yes
Leanne	Drake	Sandwich	No
Bob	Higgins-Steele	Truro	Yes
Richard	Elkin	Wellfleet	Yes
Sue	Hruby	West Tisbury	No
Joyce	Flynn	Yarmouth	Yes

After this roll call Sense of the Board, there was general discussion as to whether a vote "No" meant that the Compact would, or would not, offer incentives for high efficiency oil and propane heating systems.

A formal vote was proposed to clarify the matter. Joyce Flynn moved to not offer incentives for oil and propane heating systems for any customers. Seconded by Nate Mayo.

David	Anthony	Barnstable	No
Robert	Schofield	Bourne	No
Colin	Odell	Brewster	No
Peter	Cocolis	Chatham	No
Tim	Carroll	Chilmark	No
Alan	Strahler	Edgartown	Yes
Matt	Patrick	Falmouth	Yes
Valerie	Bell	Harwich	No
Wayne	Taylor	Mashpee	Yes
Richard	Toole	Oak Bluffs	Yes
Martin	Culik	Orleans	No X
Nate	Mayo	Provincetown	Yes
Leanne	Drake	Sandwich	No No
Bob	Higgins-Steele	Truro	Yes
Richard	Elkin	Wellfleet Yes	
Sue	Hruby	West Tisbury No	
Joyce	Flynn	Yarmouth	Yes

Motion failed to carry (8-9-0)

Fred Fenlon joined meeting at 3:00PM.

Phil Moffit continued reviewing the PowerPoint. He stated that staff updated the scenario analysis from the last meeting to show the option of just removing the behavior program. He stated that based on the last discussion he does want to mention that the oil and propane measures are included in these numbers and that for the next meeting staff can put together numbers with those measures removed. Phil Moffitt reviewed the bill impacts slides. He stated that the staff recommendation is still to remove the behavior program and reduce residential heat pumps by 20%. Sue Hruby asked if the Compact does remove oil and propane incentives, how will that affect the bill impacts? Briana Kane stated that the incentive is one million dollars over the three years and believes that removing these incentives will reduce a residential customer's bill by less than \$0.25 cents on ana average electric bill.

Maggie Downey reviewed the 2022-2024 shared cost allocation method and fixed factors worksheet and looked for a sense of the Board on approval. Sense of Board is they approved.

The Board then revisited the issue of heating system incentives for oil and propane. Matt Patrick moved that the Compact's 2022-2024 energy efficiency plan include oil and propane (for non-condensing to condensing) heating system incentives for market rate customers. Seconded by Bob Schofield.

David	Anthony	Barnstable	Yes
Robert	Schofield	Bourne	Yes

Colin	Odell	Brewster	Yes	
Peter	Cocolis	Chatham	Yes	
Tim	Carroll	Chilmark	Yes	
Fred	Fenlon	Eastham	Yes	
Alan	Strahler	Edgartown	No	
Matt	Patrick	Falmouth	No	
Valerie	Bell	Harwich	Yes	
Wayne	Taylor	Mashpee	No	
Richard	Toole	Oak Bluffs	No	
Martin	Culik	Orleans	Yes	
Nate	Mayo	Provincetown	No	
Leanne	Drake	Sandwich	Yes	
Bob	Higgins-Steele	Truro	No	
Richard	Elkin	Wellfleet	No	
Sue	Hruby	West Tisbury	No v	
Joyce	Flynn	Yarmouth	No No	

Motion resulted in a tie vote (9-9-0) and failed to carry for failure to obtain a majority.

Richard Elkin moved the CLC/JPE Board of Directors vote to approve the Compact's 2022-2024 Energy Efficiency Plan as presented by staff (which incorporates required statewide greenhouse gas emissions reductions and certain Compact-specific enhanced incentives) without incentives for oil and propane heating systems for market rate residential customers and the staff recommended heat pump number, and to authorize submission of the proposed Plan to the Massachusetts Department of Public Utilities.

The Compact Administrator is authorized and directed to take all actions necessary or appropriate to implement this vote, and to execute and deliver all documents as may be necessary or appropriate to implement this vote. Seconded by Joyce Flynn.

David	Anthony	Barnstable	No
Robert	Schofield	Bourne	Yes
Colin	Odell	Brewster	No
Peter	Cocolis	Chatham	Yes
Tim	Carroll	Chilmark	No
Fred	Fenlon	Eastham	Yes
Alan	Strahler	Edgartown	Yes
Matt	Patrick	Falmouth	Yes
Valerie	Bell	Harwich	No
Wayne	Taylor	Mashpee	Yes
Richard	Toole	Oak Bluffs	Yes
Martin	Culik	Orleans	No
Nate	Mayo	Provincetown	Yes
Leanne	Drake	Sandwich	No
Bob	Higgins-Steele	Truro	Yes
Richard	Elkin	Wellfleet	Yes

Sue	Hruby	West Tisbury	Yes
Joyce	Flynn	Yarmouth	Yes

Motion carried in the affirmative (12-6-0)

ADMINISTRATOR'S REPORT:

1. Discussion and Potential Vote on Authorizing Compact Administrator to Execute a Lease for Compact Office Space

Maggie Downey stated that the Compact received three proposals in response to the Request for Proposals (RFP) to lease office space for the Compact. She stated that Colin Odell and David Anthony assisted her in her review of the proposals. It was determined that it was most advantageous for the Compact to enter into negotiations with Pathway Office Park (current location). Maggie Downey stated that the next step is for her to work with legal counsel and enter into negotiations to get the lease signed.

Colin Odell moved the CLC/JPE Board of Directors vote to authorize the Compact administrator to execute a lease for office space.

The Compact Administrator is authorized and directed to take all actions necessary or appropriate to implement this vote, and to execute and deliver all documents as may be necessary or appropriate to implement this vote. Seconded by Peter Cocolis.

David	Anthony	Barnstable	Yes
Robert	Schofield	Bourne	Yes
Colin	Odell	Brewster	Yes
Peter	Cocolis	Chatham	Yes
Tim	Carroll	Chilmark	Yes
Fred	Fenlon	Eastham	Yes
Alan	Strahler	Edgartown	Yes
Matt	Patrick	Falmouth	Yes
Valerie	Bell	Harwich	Yes
Richard	Toole	Oak Bluffs	Yes
Martin	Culik	Orleans	Yes
Nate	Mayo	Provincetown	Yes
Leanne	Drake	Sandwich	Yes
Bob	Higgins-Steele	Truro	Yes
Richard	Elkin	Wellfleet	Yes
Sue	Hruby	West Tisbury	Yes
Joyce	Flynn	Yarmouth	Yes

Motion carried in the affirmative (17-0-0)

2. Discuss November Board Meeting Agenda

Maggie Downey stated that the next Board Meeting will be on November 10th and is going to be a busy meeting. She will send out a calendar invite and will work on the agenda with Martin Culik.

ENERGIZE THE OUTER CAPE, RICHARD ELKIN:

Richard Elkin stated that Energize the Outer Cape is looking to get together with the towns of Orleans, Eastham, Truro, and Provincetown to do a volunteer led organization. He stated that they are asking the Compact to help if necessary to be a party to any contract with a solar vendor that they would need. He stated the problem is the towns are not a corporate entity and not capable of signing a contract. Before the Massachusetts Clean Energy Center played that role, but they no longer participate in Solarize Massachusetts. Therefore, they are looking for the Compact to take over that role. Martin Culik stated that since this is not an urgent matter today, that we refer this to Maggie Downey and staff and review at a future meeting.

ADJOURNMENT:

Motion to adjourn made at 4:19 PM moved by Peter Cocolis, seconded by Richard Elkin.

David	Anthony	Barnstable	Yes	
Robert	Schofield	Bourne	Yes	
Colin	Odell	Brewster	Yes	
Peter	Cocolis	Chatham	Yes	
Erik	Peckar	Dukes County	Yes	
Fred	Fenlon	Eastham	Yes	
Alan	Strahler	Edgartown	Yes	
Matt	Patrick	Falmouth	Yes	
Valerie	Bell	Harwich	Yes	
Richard	Toole	Oak Bluffs	Yes	
Martin	Culik	Orleans	Yes	
Nate	Mayo	Provincetown	Yes	
Leanne	Drake	Sandwich	Yes	
Bob	Higgins-Steele	Truro	Yes	
Richard	Elkin	Wellfleet	Yes	
Sue	Hruby	West Tisbury	Yes	
Joyce	Flynn	Yarmouth	Yes	

Motion carried in the affirmative (17-0-0)

Respectfully submitted,

Melissa Allard

LIST OF DOCUMENTS AND EXHIBITS:

- Meeting Notice/Agenda
- September 29, 2021 Draft Meeting Minutes
- Cape Light Compact JPE 2022-2024 Energy Efficiency Plan PowerPoint

- Agenda Action Request: 2022-2024 Energy Efficiency Plan Budget, Enhanced Incentives, Greenhouse Gas Reduction and Savings Goals
- Agenda Action Request: Authorize JPE Administrator to Execute a Lease for Office Space for the Cape Light Compact
- 2022-2024 Shared Cost Allocation Method and Fixed Factors Worksheet Distributes subject to correction within and committee Road Approva

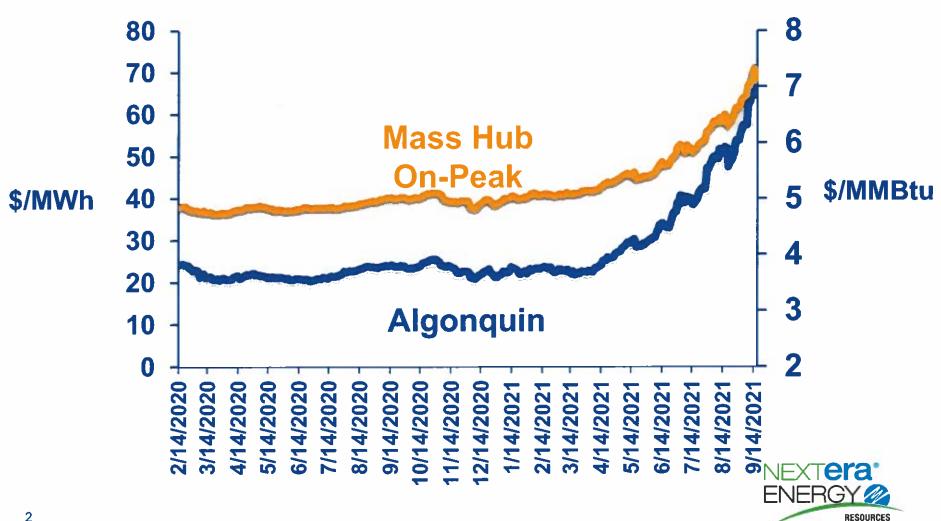


New England Natural Gas and Power Outlook for Cape Light Compact

Mike Zenker, Managing Director Energy Market Analysis NextEra Energy Marketing November 10, 2021

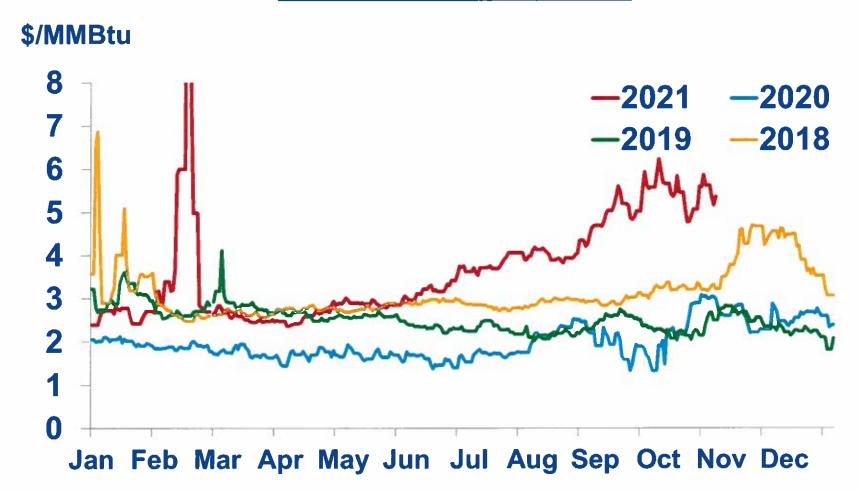
Higher gas prices are driving New England (spot and forward) power prices sharply higher

New England Calendar 2022 Power and Gas Forwards



U.S. natural gas prices started climbing this summer

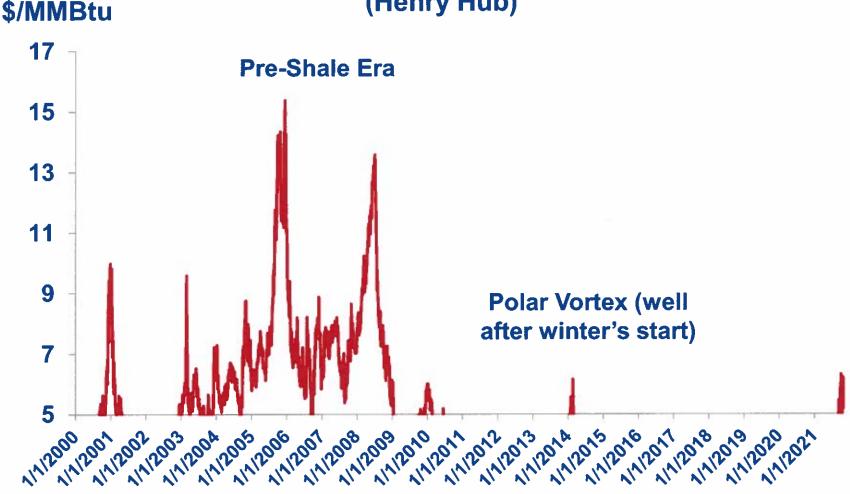
Henry Hub Cash Prices





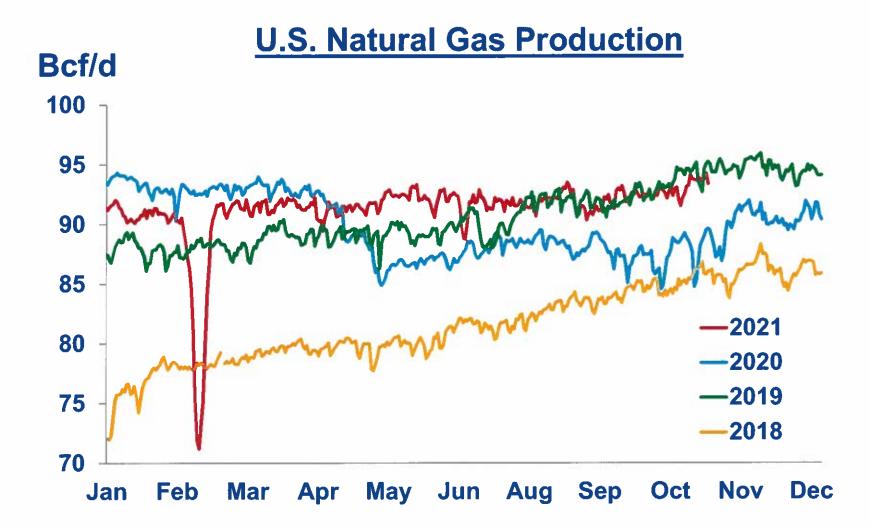
This is the first year in 12 years that we entering winter with gas prices above \$5/MMBtu

Periods of Gas Prices Above \$5/MMBtu (Henry Hub)





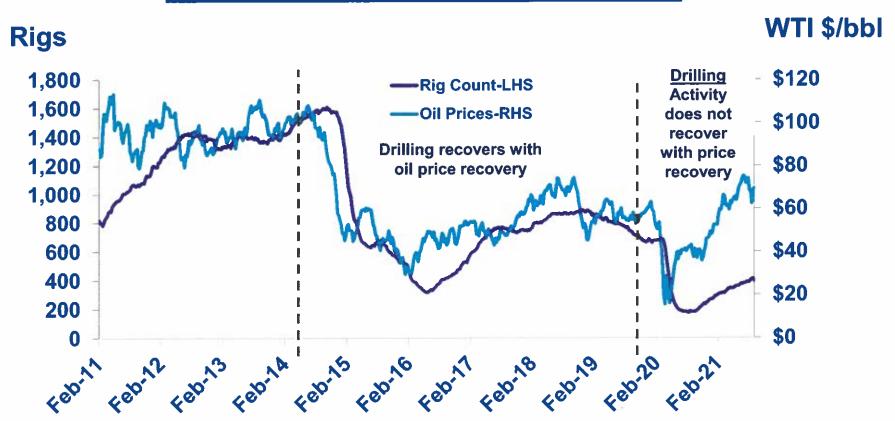
Natural gas production has stalled this year, but that is not a surprise





Gas from oil wells is expected to contribute the largest share of gas supply this decade, but drilling for oil is lagging the oil price recovery

U.S. Drilling vs West TX Oil Prices

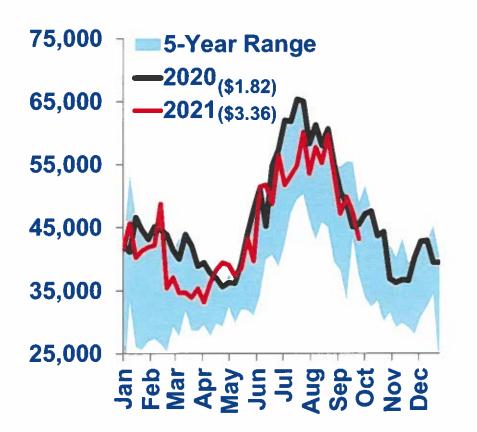




Coal has been the principal source of price-elastic demand; coal has not responded to price as seen in the past 10 years

U.S. Gas-fired Generation

MWh, daily avg.



U.S. Coal-fired Generation

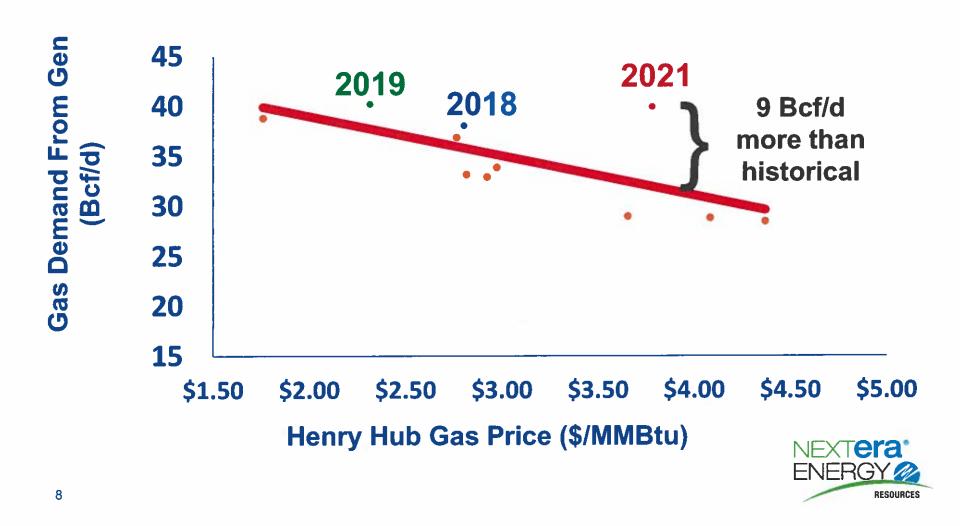
MWh, daily avg.





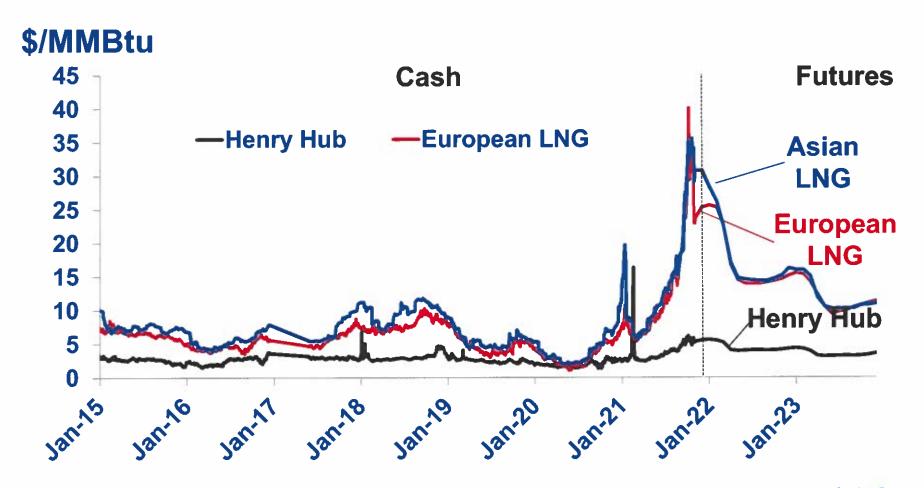
Gas demand from the generation sector has been significantly higher when compared to historical pricing relationships

U.S. Gas Demand From Generation – August 2021 (Monthly Relation to Gas Price)



Strong Asian and European gas prices are attracting high levels of imports of natural gas from the U.S.

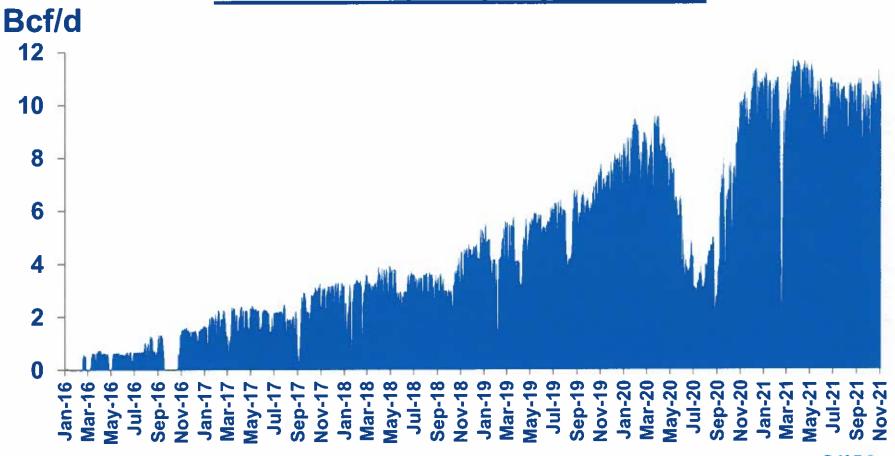
Spot and Forward Asian and European LNG Prices





LNG export levels reflect the high prices in Asia and Europe

Daily Natural Gas Deliveries to U.S. Liquefied Natural Gas (LNG) Export Plants

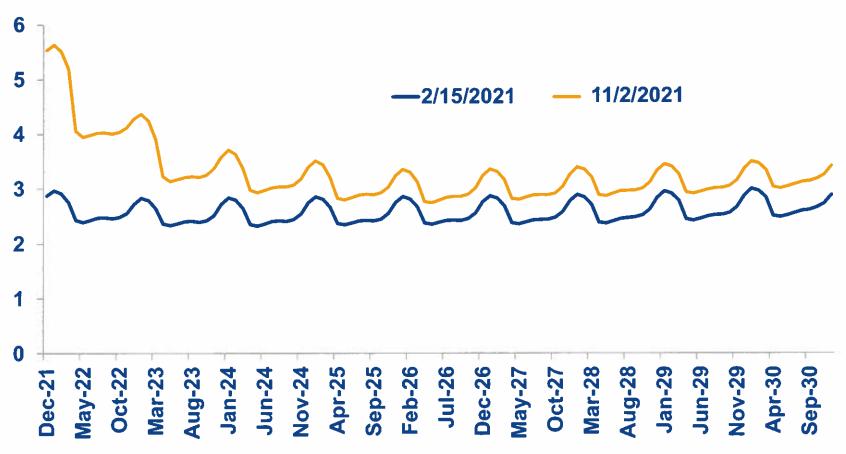




Natural gas futures prices have moved higher reflecting tighter markets in 2021 and 2022

Henry Hub Wholesale Futures Prices

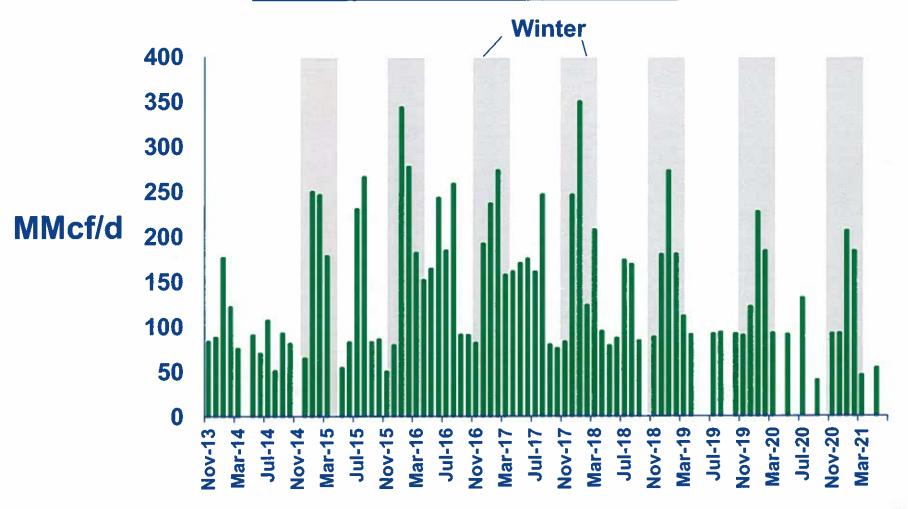
\$/MMBtu





New England has historically relied on LNG from Everett to temper winter gas prices

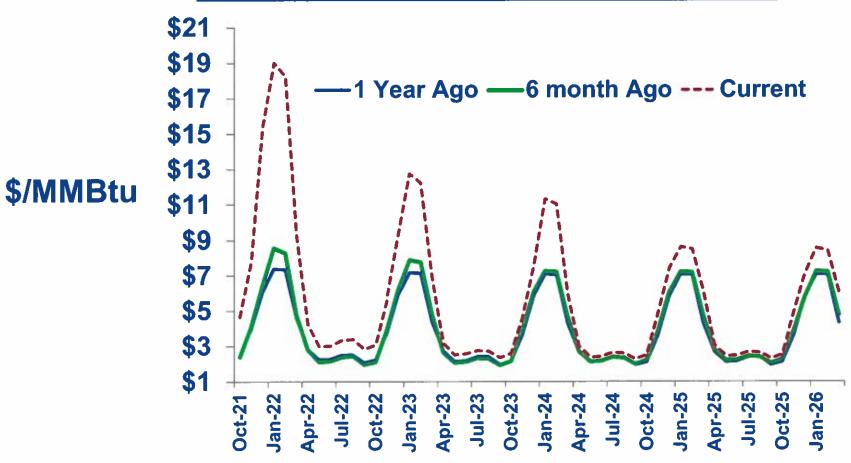
LNG Receipts at Everett, Mass





Winter New England gas prices (and power prices) are sharply higher as the market believes it will be hard to attract LNG to the region

New England (Boston) Forward Prices





Disclaimer

This presentation was prepared by NextEra Energy Marketing, LLC ("NEM") exclusively for customer's ("Company") beneficial and internal use. These materials do not constitute advice or a recommendation about the value or advisability of trading in commodity interests, including any commodity futures contract, option on a futures contract, swap, or commodity option. These materials are provided for discussion purposes only and are incomplete without reference to, and should be viewed only in connection with, the accompanying oral presentation provided by NEM. Such materials are presented for discussion purposes only and are not an offer or a commitment of NEM or any parent or affiliate of NEM. The transaction or transactions described herein is subject to further review and approval of NEM and may require revised or additional provisions or the execution of other agreements. Without limiting any of the foregoing, credit approval will be required for this transaction and all of its terms and provisions. Please also be advised that NEM makes no representations as to the actual value which may be received in connection with a transaction nor the legal, tax or accounting effects of consummating a possible transaction. Nothing in these materials constitutes investment, legal, accounting or tax advice or otherwise constitutes a recommendation to you. You should conduct your own independent analysis of the matters referred to herein. The opinions, estimates, projections and other information contained in these materials are those of NEM as of the date hereof and are subject to change without notice (with no obligation on NEM's part to update). NEM makes every effort to ensure that the contents hereof have been compiled or derived from sources believed reliable and contain information that is accurate and complete. Information may be available to NEM and/or its affiliates that is not reflected herein. Furthermore, NEM makes no representation or warranty, express or implied, in respect thereof, takes no responsibility for any errors and omissions which may be contained herein, and accepts no liability whatsoever for any loss (howsoever arising and whether direct or consequential) arising from any use of, or reliance on, these materials or their contents.

Neither this presentation nor any of its contents may be disclosed by the Company without the prior written consent of NEM.

Cautionary Statements and Risk Factors that May Affect Future Results

Any statements made herein about future operating and/or financial results and/or other future events are forward-looking statements under the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995. These forward looking statements may include, for example, statements regarding anticipated future financial and operating performance and results, including estimates for growth. Actual results may differ materially from such forward-looking statements. A discussion of risk factors that could cause actual results or events to vary is contained in the Appendix herein and in our Securities and Exchange Commission (SEC) filings.





THE COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF PUBLIC UTILITIES

CHARLES D. BAKER GOVERNOR

KARYN E. POLITO LIEUTENANT GOVERNOR

KATHLEEN A. THEOHARIDES SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS ONE SOUTH STATION BOSTON, MA 02110 (617) 305-3500 MATTHEW H. NELSON CHAIRMAN

ROBERT E. HAYDEN COMMISSIONER

CECILE M. FRASER COMMISSIONER

October 19, 2021

All Investor-Owned Gas Distribution Companies Regulated by the Department of Public Utilities (Exhibit A)

All Investor-Owned Electric Distribution Companies Regulated by the Department of Public Utilities (Exhibit B)

RE: Winter Energy Supply Costs

Dear All,

As you are aware, due to a variety of factors the cost of natural gas has increased significantly throughout the world. Accordingly, Massachusetts ratepayers will experience the impact of these rising energy supply costs through their electric basic service rates and cost of gas adjustment factors. Energy commodity markets are dynamic and influenced by many factors such as weather, supply and demand levels, availability and price of alternative fuels, global markets, and most recently the COVID-19 pandemic. The Department of Public Utilities ("Department") is deeply concerned about the impact that significant increases in energy costs have on customers. We are aware that each distribution company shares these concerns, and the Department commends the efforts many companies have already taken to help educate customers and mitigate rate impacts driven by rising energy supply costs.

Since the introduction of competitive supply in the gas and electric markets, the Department and the electric and gas utilities of Massachusetts do not control energy supply costs. Retail energy supply is available through the competitive market, while the delivery of electricity and gas is still provided by distribution companies as a regulated monopoly service. G.L. c. 164, § 1B. Electric and gas utilities procure energy supply on behalf of customers that do not participate in the competitive market, and the costs of the energy supply are recovered from ratepayers with no profit to the utilities.

While the Department does not control energy supply costs, we are keenly aware of the hardships higher energy costs create for customers, particularly during the COVID-19 pandemic. As the Department continues to examine proposals to mitigate rate impacts to customers, we are also mindful that delaying rate increases does not eliminate energy costs, but shifts the recovery to a later date, which may compound future, unforeseeable energy and economic burdens for ratepayers.

Recognizing the challenges facing Massachusetts customers, the Department directs all electric and gas distribution companies to take reasonable actions to mitigate the financial effects of large increases to energy costs this winter. Specifically, the Department directs the distribution companies to promote and allow residential customers to enroll in budget billing programs throughout the winter months, which will allow customers to spread their total electricity costs evenly over a specified time period. The distribution companies should guide customers that have difficulty paying their bills towards appropriate assistance programs, such as arrearage management plans and/or the Low-Income Home Energy Assistance Program.

In addition, the Department directs the distribution companies to continue their efforts to increase education regarding energy efficiency, particularly for low-income customers, focusing on behaviors and measures to assist customers in reducing their near-term energy bills, as well promote long term energy and demand savings. Over the past decade, the distribution companies have implemented nation-leading energy efficiency programs designed to lower energy consumption and empower customers to efficiently manage their energy use. In the coming weeks, the new energy efficiency plan will be filed with the Department. The Department strongly urges the distribution companies to ensure that the plan and their education efforts focus on delivering affordable programs that help customers lower their energy use and energy bills.

During this period of time, the Department is mindful that customers may seek alternative energy sources from the competitive supply market, which may advertise lower rates. The Department continues to strongly urges all distribution companies, stakeholders, and customers to be vigilant about potential deceptive marketing tactics from competitive suppliers.

Sincerely,

atthew H. Nelson

Qhairman

Robert E. Hayden

Commissioner

Cecile M. Fraser

Commissioner

Exhibit A

(Investor-Owned Gas Distribution Companies)

President William Akley
Eversource Gas Company of Massachusetts
d/b/a Eversource Energy
247 Station Drive
Westwood, MA 02090

President Sue Kristjansson The Berkshire Gas Company 115 Cheshire Road Pittsfield, MA 01202

President William Akley NSTAR Gas Company d/b/a Eversource Energy 247 Station Drive Westwood, MA 02090 President Tatiana Roc Liberty Utilities (New England Natural Gas Company) Corp. d/b/a Liberty Utilities 36 5th Street Fall River, MA 02722-0911

President Stephen Woerner Boston Gas Company d/b/a National Grid 40 Sylvan Road Waltham, MA 02451

President Thomas Meissner Fitchburg Gas and Electric Light Company d/b/a Unitil 6 Liberty Lane West Hampton, NH 03842

Exhibit B

(Investor-Owned Electric Distribution Companies)

President Thomas Meissner Fitchburg Gas and Electric Light Company d/b/a Unitil 6 Liberty Lane West Hampton, NH 03842 President Stephen Woerner Massachusetts Electric Company, & Nantucket Electric Company, each d/b/a National Grid 40 Sylvan Road Waltham, MA 02451

President Craig Hallstrom NSTAR Electric Company d/b/a Eversource Energy 247 Station Drive Westwood, MA 02090

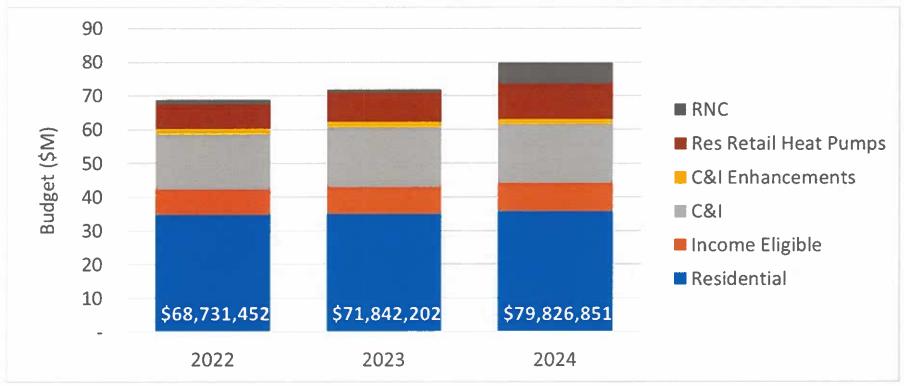
Cape Light Compact JPE 2022-2024 Energy Efficiency Plan Updated to Reflect October 14, 2021 Compact Board Votes, DPU Order on 20-40 and QC

November 10, 2021



Proposed Budget





- Proposed budget includes Board direction to reduce heat pumps by 20% and remove oil and propane heating system incentives for Residential Market Rate customers.
- Results in budget reductions of \$810k in 2022, \$1.1M in 2023 and \$1.6M in 2024.
- QC since the 10/14 version of the plan, plus the Board's direction, result in Residential budget reductions of \$3.6M and C&I budget increases of \$8M (Heat Pumps and electrification projects).
- Removal of CVEO pursuant to DPU Order in 20-40.

Scenarios: GHG Reductions



Cumulative Annual Emissions	Original State Emissions Goals			Revised State Emissions Goals			CLC Proposed Plan	
Reduction (Metric tons of	State Goals	CLC's	CLC's	State Goals	CLC's	CLC's	CLC's	Plan /
CO2e)	for 2030	Allocation	Allocation	for 2030	Allocation	Allocation	Proposed	Revised
		(%)	(CO2e)		(%)	(CO2e)	Plan (CO2e)	Allocated
1000						ren - Ingranje (September		Goal (%)
Residential and Income Eligible	351,000	5.0%	17,652	Not sector-	Not sector-	Not sector-	30,246	Not sector-
Commercial and Industrial	153,000	4.4%	6,754	specific	specific	specific	3,721	specific
Electric Total	504,000	4.8%	24,405	474,000	4.8%	22,953	33,967	148%

- Secretary Theoharides' allocation of GHG reductions assigned 70% to residential and 30% to C&I. Program Administrators (PA) allocated GHG goals amongst PAs.
- Negotiations among PAs and stakeholders resulted in shifting 30,000 metric tons from electric PAs to gas PAs. Sector-specific allocations were not re-determined.
- The Compact assumed the same total allocation (4.8%) as used in the original goal.
- The Compact's residential heat pump goals resulted in a higher proportion of the GHG goal achieved through residential programs.
- The Compact expects to achieve almost 150% of its estimated allocated GHG goal.

Residential Bill Impacts



Current Bill

Supplier (NEXTERA ENERGY SERVICES)		
Generation Service Charge	650 kWh X 0.10743	\$69.83
Subtotal Supplier Services		\$69.83
Delivery		
Customer Charge		\$7.00
Distribution Charge	650 kWh X 0.07035	\$45.73
Transition Charge	650 kWh X -0.00117	-\$0.76
Transmission Charge	650 kWh X 0.03524	\$22.91
Revenue Decoupling Charge	650 kWh X 0.00299	\$1.94
Distributed Solar Charge	650 kWh X 0.00123	\$0.80
Renewable Energy Charge	650 kWh X 0.00050	\$0.33
Energy Efficiency	650 kWh X 0.02829	\$18.39
Subtotal Delivery Services		\$96.33
Total Cost of Electricity		\$166.16

2022 Bill

Supplier (NEXTERA ENERGY SERVICES)			
Generation Service Charge	650 kWh X	0.10743	\$69.83
Subtotal Supplier Services			\$69.83
Delivery			
Customer Charge			\$7.00
Distribution Charge	650 kWh X	0.07035	\$45.73
Transition Charge	650 kWh X	-0.00117	-\$0.76
Transmission Charge	650 kWh X	0.03524	\$22.91
Revenue Decoupling Charge	650 kWh X	0.00299	\$1.94
Distributed Solar Charge	650 kWh X	0.00123	\$0.80
Renewable Energy Charge	650 kWh X	0.00050	\$0.33
Energy Efficiency	650 kWh X	0.04312	\$28.03
Subtotal Delivery Services			\$105.97
Total Cost of Electricity			\$175.80

- The Energy Efficiency charge on the current bill represents 11.1% of the total bill.
- The Energy Efficiency charge on the 2022 bill represents 15.9% of the total bill.
- Assumes average monthly usage of 650 kWh.

Bill Impacts – Residential



Years	EERF		Energy Conservation		Avg. Monthly Usage (kWh)		Total Cost (per month)	% Change from 2021
2021 In eff	ect					13,000.0		
2021	\$0.02579	+	\$0.00250	X	650	=	\$18.39	
2022-2024								
2022	\$0.04062	+		Х		=	\$28.03	52%
2023	\$0.04241	+		X		=	\$29.19	59%
2024	\$0.05079	+		Х		=	\$34.64	88%
2022-2024								
2022	\$0.04142	+		Х		=	\$28.55	55%
2023	\$0.04348	+		Х		=	\$29.89	63%
2024	\$0.05239	+	E Chry Crashy Vives	X		=	\$35.68	94%

Reducing heat pumps by 20% and removing residential market rate fossil fuel heating system incentives results in:

- Monthly bill impact savings of \$0.52 in 2022, \$0.70 in 2023 and \$1.04 in 2024.
- Average monthly usage was increased from 530 kWh to 650 kWh.

Bill Impacts – Income Eligible



Years	EERF		Energy Conservation		Avg. Monthly Usage (kWh)		Total Cost (per month)	% Change from 2021
2021 In effe	ect							
2021	\$0.00148	+	\$0.00250	X	582	=	\$2.32	
2022-2024								
2022	\$0.00244	+		Х		=	\$2.88	24%
2023	\$0.00317	+		X		=	\$3.30	42%
2024	\$0.00339	+		Х	_	=	\$3.43	48%
2022-2024								
2022	\$0.00244	+		X		=	\$2.88	24%
2023	\$0.00317	+		Х		=	\$3.30	42%
2024	\$0.00339	+		х		=	\$3.43	48%

There was no change in the bill impact for income eligible customers as a result of reducing heat pumps by 20% and removing residential market rate fossil fuel heating system incentives.

Bill Impacts - C&I



Years	EERF	Energy Conservation		Avg. Monthly Usage (kWh)		Total Cost (per month)	% Change from 2021	Avg. Monthly Usage (kWh)	200	Total Cost (per month)	% Change from 2021
2021 In eff	ect								100		
2021	\$0.01085	+ \$0.00250	х	400	=	\$5.34		10,800	=	\$144.18	
2022-2024	Proposed Plan	, CVEO removed	100							500000	
2022	\$0.01761	+	х		=	\$8.04	51%		=	\$217.19	51%
2023	\$0.02698 -	+	х		=	\$11.79	121%		=	\$318.38	121%
2024	\$0.02817 -	+	х		=_	\$12.27	130%		=	\$331.24	130%
2022-2024	Plan - Octobe	r 14 Board meeting									
2022	\$0.01694	+	Х		=	\$7.78	46%		=	\$209.95	46%
2023	\$0.02507 -	+	Х		=	\$11.03	107%		=	\$297.76	107%
2024	\$0.02309 -	+	х		=	\$10.24	92%		Ξ	\$276.37	92%

C&I changes due to QC results in an \$8M increase over the term, relative to the October 14 Board meeting.

Monthly bill increases range by year:

• 2022: \$0.27 to \$7.24

• 2023: \$0.76 to \$20.63

• 2024: \$2.03 to \$54.86

245,100.00 75,000.00 108,000.00

40,000.00 96,000.00 38,779.00 30,000.00 51,000.00 25,000.00 10,350.00 16,870.00 22,925.00 16,000.00 5,000.00 10,000.00 25,000.00 2,000.00 5,000.00 5,000.00 10,000.00 4,500.00 4,000.00 1,500.00 500.00 1,620.00 1,500.00 600.00 1,200.00 500.00 1,200.00 1,200.00 5,000.00 3,900.00 1,500.00 1,500.00 500.00 500.00 500.00 500.00

Legal	\$	196,900.00	\$
Outreach/Marketing Contractor	\$	103,000.00	\$
Salaries	\$	102,000.00	\$
Operating Contingency Fund	\$	185,000.00	\$
Advertising	\$	75,000.00	\$
Marketing CLC Local Green	\$	*	S
Pension Liability	\$	42,700.00	\$
Retirement	\$	28,560.00	\$
Sponsorships	\$	28,167.00	\$
Contractual	\$	25,000.00	\$
Rent	\$	22,500.00	\$
OPEB Liability	\$	15,000.00	\$
Health Insurance	\$	14,844.00	S
Insurance	\$	14,250.00	\$
Printing	\$	12,500.00	\$
Postage	\$	10,000.00	\$
Subscriptions	S	10,000.00	S
Financial Software	\$	5,000.00	\$
Professional Development	\$	5,000.00	\$
Salary Reserve	\$	5,000.00	\$
Travel In-state	\$	5,000.00	\$
Auditor	\$	4,100.00	S
Internet Service	\$	4,000.00	\$
Computer Equipment	\$	3,000.00	\$
Unpaid Bills	\$	2,000.00	\$
Treasury Services	\$	1,620.00	\$
Supplies	\$	1,500.00	\$
Telephones	S	1,260.00	\$
IT Services	\$	1,200.00	\$
Payroll Services	\$	1,200.00	\$
Software License	\$	1,140.00	\$
Misc. Rental	\$	1,000.00	\$
Travel Out-of-state	\$	1,000.00	\$
Custodial	\$	3,900.00	\$
Medicare/Other Taxes	\$	775.00	\$
Food	\$	500.00	\$
MA UI	\$	500.00	S
Misc Equipment	\$	500.00	\$
Misc Fringes	\$	500.00	\$
Utilities	\$	500.00	\$
			100

ORG	OBJECT	ACCOUNT DESCRIPTION	ORIGI	NAL APPROP	REV	ISED BUDGET	YTD E	XPENDED	AVA	LABLE BUDGET	% USED
01001	5110	OP-SALARIES		102,000)	102,000		81,934.92		20,065	80.30
01001	5119	OP-SALARY RESERVE		5,000)	4,500		0.00		4,500	0.00
01001	5171	OP-RETIREMENT		28,560)	28,560		0.00		28,560	0.00
01001	5173	OP-GROUP INSURANCE		14,250)	14,250		2,506.08		11,744	17.60
01001	5174	OP-MEDICARE/OTHER TAXES		775	;	1,275		1,113.03		162	87.30
01001	5175	STATE UNEMPLOYMENT INSURANCE		500)	500		151.75		348	30.40
01001	5179	OP-MISC FRINGES		500)	500		0.00		500	0.00
01001	5180	OP-RETIREMENT LIABILITY		42,700)	42,700		0.00		42,700	0.00
01001	5181	OP-OPEB LIABILITY		15,000)	15,000		0.00		15,000	0.00
01001	5210	OP-UTILITIES		500)	500		45.60		454	9.10
01001	5270	OP-MISC RENTALS		1,000)	1,000		94.43		906	9.40
01001	5272	OP-RENT		22,500)	22,500		20,625.00		1,875	91.70
01001	5290	OP-CUSTODIAL SERVICES		3,900)	3,900		3,543.54		356	90.90
01001	5301	OP-ADVERTISING		75,000)	75,000		56,404.42		18,596	75.20
01001	5302	OP-PUBLIC MARKETING SUPPORT		0)	-10,000		730.72		-10,731	-7.30
01001	5309	OP-IT SERVICES		1,200)	2,200		88.20		2,112	4.00
01001	5313	OP-STAFF PROFESSIONAL DEVELOP		5,000)	50,000		1,076.00		48,924	2.20
01001	5314	OP-PAYROLL SERVICES		1,200)	1,200		82.52		1,117	6.90
01001	5315	OP-LEGAL SERVICES		196,900	}	196,900	:	214,332.43		-17,432	108.90
01001	5316	OP-AUDIT FEES		4,100)	4,100		898.12		3,202	21.90
01001	5318	OP-TREASURY SERVICES		1,620)	1,620		1,428.58		191	88.20
01001	5319	OP-CONTRACTUAL		25,000)	15,000		3,554.75		11,445	23.70
01001	5320	OP-OUTREACH/MARKETING CONTRACT		103,000)	47,000		12,959.54		34,040	27.60
01001	5341	OP-POSTAGE		10,000)	10,000		6,221.19		3,779	62.20
01001	5343	OP-TELEPHONES		1,260)	1,260		394.80		865	31.30
01001	5344	OP-INTERNET		4,000)	4,000		488.56		3,511	12.20
01001	5345	OP-PRINTING		12,500		12,500		9,832.49		2,668	78.70
01001	5400	OP-SUPPLIES		1,500)	1,500		0.00		1,500	0.00
01001	5490	OP-FOOD SUPPLIES		500)	500		100.00		400	20.00
01001	5710	OP-TRAVEL IN STATE		5,000)	5,000		102.49		4,898	2.00
01001	5720	OP-TRAVEL OUT STATE		1,000)	1,000		799.80		200	80.00
01001	5730	OP-SPONSORSHIPS		28,167	,	38,167		34,575.00		3,592	90.60
01001	5731	OP-SUBSCRIPTIONS		10,000)	30,000		19,120.00		10,880	63.70
01001	5732	OP-SOFTWARE LICENSES		1,140)	1,140		1,132.82		7	99.40
01001	5741	OP-INSURANCE		14,844	1	14,844		14,147.00		697	95.30
01001	5789	OP-UNPAID BILLS		2,000)	2,000		0.00		2,000	0.00
01001	5850	OP-MISC EQUIPMENT		500)	500		218.00		282	43.60
01001	5854	OP-FINANCIAL SOFTWARE SYSTEM		5,000)	5,000		0.00		5,000	0.00
01001	5855	OP-COMPUTER EQUIPMENT		3,000)	3,000		0.00		3,000	0.00
01001	5900	CONTINGENCY		185,000)	185,000		0.00		185,000	0.00
		Expense Total	\$	935,616.00	\$	935,616.00	\$ 4	88,701.78	\$	446,914.22	52.20

CLC Local Green Marketing Budget

- The Board asked staff to increase participation in CLC Local Green
- The goal of the marketing campaign is to increase enrollment in CLC Local Green from approximately 60 customers to over 750 by the end of 2022
- With this goal in mind, staff recommends the following tactics, which would be in addition to the radio ads that we are currently running and plan to continue running for CLC Local Green:

Tactic	Description	Recommended \$
Social Media Ads	Facebook, Instagram; Target to audience likely to participate in program (higher education level, concerned about the environment); link to Local Green page	\$10,000
Direct Mailing	Use USPS Every Door Direct Mail to send postcards on select postal routes; can target routes based on average income, household size, age distribution	\$21,000
Custom Content Email	Create custom content emails or content features in relevant categories (community news, environmental news) that are geo-targeted to CLC customers	\$15,000
Native Content	Work with vendors that host local news websites to share longer form content on sites; embed links that drive users to long form content and to Local Green page	\$30,000
Streaming Audio	Create messaging that generates awareness of the Local Green program; millennials have strong streaming presence; ads drive listeners to Local Green page	\$20,000



CAPE LIGHT COMPACT JPE LEGAL SERVICES BUDGET – OPERATING ACCOUNT January – December 2022

General Power Supply Matters (e.g., advise on Open Meeting Law, Public Records Law, general municipal law, monitor statewide aggregations, attend Board Meetings, competitive electric supply agreement review and amendments, low-income community shared solar (LICSS) projects, representation in non-energy efficiency regulatory proceedings, DPU power supply related docket monitoring, etc.): \$211,100

Other Miscellaneous Matters (e.g., monitor and review state legislation, monitor DPU net metering dockets, RUS Rural Energy Savings Program (RESP), special legal research and direct expenses (such as mileage and copying), etc.):ⁱⁱ \$34,000

Fotal Budget: \$245,10 0	Γotal	Budget:	\$245,100
---------------------------------	-------	----------------	-----------

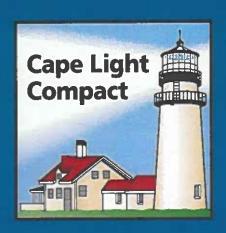
Notes:

· Notes:

- This budget does not include any extensive correspondence or in-person meetings with the Attorney General's Office regarding Public Records Law matters.
- This budget *may* be sufficient to handle an appeal of a Commission decision in D.P.U. 20-145 (SMART Tariff/LICSS), or at least part of an appeal, but we are unable to provide certainty on a budget amount without review of the Commission decision.
- This budget includes costs that may be reimbursed by a LICSS project owner. This budget includes a working assumption on LICSS and is entirely subject to the action taken by DOER on LICSS Guidelines and by D.P.U. in D.P.U. 20-145.
- This budget includes monitoring and review of active dockets, such as D.P.U. 20-46 (Eversource 2019 Grid Modernization Annual Report), D.P.U. 21-30 (Eversource 2020 Grid Modernization Annual Report), D.P.U. 21-80 (Eversource Grid Modernization Plan for 2022 to 2025), D.P.U. 21-90 (Eversource Phase II Electric Vehicle Infrastructure Program and Electric Vehicle Demand Charge Alternative Proposal). This does not include participation in or monitoring of new dockets that commence in 2022 (including a forthcoming Eversource rate case). The Compact would need to account for cases in which it plans to participate actively (e.g., evidentiary hearings or extended notice and comment dockets) with supplemental or special budget allocations at that time.

"Notes:

- This budget includes *some* drafting of legislation.
- This budget includes legal service costs for the RESP project that are reimbursed as part of the RESP loan.



Your Trusted, Local Energy Resource

2021 Main Streets - Recap

11/10/21

What is Main Streets

- Worked with RISE Engineering and NRM (refrigeration vendor), went door-to-door to small businesses in a specified area to install energy efficiency measures on-site. For other opportunities we are following up with customer.
- Partners in this effort:
 - Worked with Chambers of Commerce and Merchant Associations
 - Worked with Town staff to promote effort and partnered with Town on materials





Logistics

- Incentives
 - Offered up to 100% incentive for all Small Businesses who have measures installed through an energy assessment.
 - Those incentives would apply to these Main Street events
- Direct mail letters/flyers were sent out to the targeted customers in advance of the Main Street effort in the applicable town
- CLC and Mass Save posted on Facebook about the effort
- Engaged the local Chambers of Commerce/Business Assoc. to help with outreach to the businesses





Spring Results

Spring 2021

Town	Dates	List Target Count	Sites Visited/ Contacted	Participants	Signed - Installed	kWh Savings (Annual)	kW	mmbtu saved	Incentives
Harwich	4/27-4/29	157	82	31	25	122,958	63.97	0.00	143,921
Yarmouth	5/11-5/13	351	133	60	62	308,196	131.25	7.00	285,764
Dennis	5/18-5/20	343	85	37	33	108,135	45.76	0.00	125,062
Sandwich	5/25-5/27	229	75	30	27	125,968	47.07	0.00	95,134
Aquinnah	5/4-5/6	4	2	2	2	3,141	1.50	38.70	3,515
Chilmark	5/4-5/6	25	8	9	5	39,194	10.30	131.80	13,824
Oak Bluffs	5/4-5/6	131	108	21	15	35,023	14.41	56.10	51,422
Truro	6/15-6/16	51	27	14	10	52,834	39.96	7.00	57,061
Brewster	6/1-6/3	105	47	23	19	54,078	22.92	0.00	65,999
Provincetown	6/8-6/10	226	105	50	43	205,855	63.39	188.30	158,006
10 Towns		1622	672	277	241	1,055,382	441	429	\$999,708.8

Fall Results

Fall 2021

Town	Dates	List Target Count	Sites Visited/ Contacted	Participants	Signed - Installed	kWh Savings (Annual)	kW	mmbtu saved	Incentives
Eastham	8/17-8/19	74	57	25	22	46,853	23.72	0.00	\$ 75,919
Bourne	8/24-8/26	124	81	51	48	154,059	64.69	5.20	\$ 196,164
Falmouth	8/31-9/2	351	59	35	27	119,862	45.14	1.70	\$ 124,829
Orleans	9/7-9/9	123	52	13	10	31,538	12.50	0.00	\$ 38,316
West Tisbury	9/14-9/16	45	6	2	-	-	0.00	0.00	\$ -
Edgartown	9/14-9/16	136	51	15	4	18,387	5.99	3.40	\$ 13,741
Tisbury	9/14-9/16	159	20	6	2	3,260	2.19	0.00	\$ 3,727
Chatham	9/21-9/23	156	55	22	19	58,963	24.82	0.00	\$ 76,907
Wellfleet	9/28-9/30	59	51	12	5	38,753	15.72	20.10	\$ 46,132
Osterville	10/5-10/7	80	49	14	8	28,415	14.14	0.00	\$ 30,420
Mashpee	10/12-10/14	162	52	23	9	65,947	33.68	0.00	\$ 85,013
11 Towns		1,469	533	218	154	566,036	243	30	\$691,168.60



Total Results

RISE Totals from Spring and Fall as of 10/22/21

List Target Count	Sites Visited/ Contacted	Participants – audit scheduled/performed	Signed - Installed	kWh Savings (Annual)	kW	mmbtu saved	Incentives
3,091	1,205	495	395	1,621,419	683	459	\$1,690,877.47

NRM Totals from Spring and Fall as of 11/8/21

Participants – audit scheduled/performed	Signed - Installed	kWh Savings (Annual)	Incentives
121	70	902,756	\$615,688.91

- Total Incentives: \$2,306,566.38
- Total annual savings: 2,524,175 kWh
- Total Signed/Installed: 465 customers

- These numbers may fluctuate as both RISE and NRM are following up with customers who participated but have not moved forward with recommendations
- Visited all 21 towns



Questions?

Lindsay Henderson 508-375-6889

Ihenderson@capelightcompact.org





The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 20-40-A

November 5, 2021

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, for Approval to Implement a Strategic Electrification and Energy Optimization Offering and Associated Budget.

APPEARANCES:

Jeffrey M. Bernstein, Esq.

Audrey Eidelman Kiernan, Esq.

BCK LAW, P.C.

1337 Massachusetts Avenue, Box 314

Arlington, Massachusetts 02476

FOR: CAPE LIGHT COMPACT JPE

<u>Petitioner</u>

Maura Healey, Attorney General Commonwealth of Massachusetts

By: De

Donald Boecke

Jo Ann Bodemer

Assistant Attorneys General

Office of Ratepayer Advocacy

One Ashburton Place

Boston, Massachusetts 02108

<u>Intervenor</u>

Rachel Graham Evans, Esq.
Robert Hoaglund, Esq.
Ben Dobbs, Esq.
Colin Carroll, Esq.
Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, Massachusetts 02114
Intervenor

Jerrold Oppenheim, Esq.
Democracy and Regulation
57 Middle Street
Gloucester, Massachusetts 01930

FOR: LOW-INCOME WEATHERIZATION AND FUEL ASSISTANCE PROGRAM NETWORK

Intervenor

John K. Habib, Esq. Ashley S. Wagner, Esq. Keegan Werlin LLP 99 High Street, 29th Floor Boston, Massachusetts 02110

FOR: NSTAR ELECTRIC COMPANY Limited Participant

TABLE OF CONTENTS

I.	INT	RODUCTION AND PROCEDURAL HISTORY	1					
II.	BAC	CKGROUND	3					
III.	SUM	MMARY OF PROPOSAL						
IV.	POS	ITIONS OF THE PARTIES	15					
	A.	Cape Light Compact	15					
	B.	Attorney General	17					
	C.	Department of Energy Resources	18					
V.	ANALYSIS AND FINDINGS							
	A.	Introduction	19					
	B.	Consistency with Applicable Law	20					
	C.	Other Issues	24					
	D.	Conclusion	31					
VI.	ORI	DER	32					

I. INTRODUCTION AND PROCEDURAL HISTORY

On May 15, 2020, 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"), filed with the Department of Public Utilities ("Department"), a petition for approval to implement a strategic electrification and energy optimization offering known as the "Cape and Vineyard Electrification Offering" ("CVEO"). The Compact proposes to implement the CVEO as part of its 2019-2021 Three-Year Energy Efficiency Plan ("Three-Year Plan"), which was approved by the Department in 2019-2021 Three-Year Energy Efficiency Plans,
D.P.U. 18-110 through D.P.U. 18-119 (2021) ("Three-Year Plans Order"). The Department docketed this matter as D.P.U. 20-40.

The Compact is a municipal aggregator that has received Department approval to act as the energy efficiency Program Administrator for electric customers in its member municipalities. G.L. c. 164, § 134; see, e.g., Cape Light Compact, D.P.U. 15-166 (2016). Through the CVEO, the Compact proposes to enable 250 low- and moderate-income residential customers to: (1) convert their oil, propane, or electric resistance heat to cold climate air source heat pumps ("heat pumps"); (2) install solar photovoltaic systems ("solar PV") to support electrification of their heating systems; and (3) install battery energy storage

The Compact's Three-Year Plan was docketed as D.P.U. 18-116.

("battery storage") for demand response and resiliency. To implement the proposed CVEO, the Compact proposes a budget of \$10,354,148 through the end of the current Three-Year Plan term (i.e., 2021).

Due to the 2019 novel Coronavirus ("COVID-19") and pursuant to notice duly issued, the Department provided an extended period for public comment in lieu of a public hearing.² The Department received written comments from the Massachusetts Department of Energy Resources ("DOER"), Cape Cod Commission, Dennis-Yarmouth Regional School District, municipal energy committees, non-profit organizations, stakeholder groups, and members of the public.

On May 18, 2020, the Attorney General of the Commonwealth of Massachusetts ("Attorney General") filed a notice of intervention pursuant to G.L. c. 12, § 11E(a) and was recognized by the Department as a full party in this proceeding. Additionally, the Department granted (1) the petitions to intervene as full parties filed by DOER and the Low-Income Weatherization and Fuel Assistance Program Network ("Low-Income Network"); and (2) the petition for limited participant status filed by NSTAR Electric Company d/b/a Eversource Energy ("NSTAR Electric").³

On March 10, 2020, Governor Baker issued an Executive Order declaring a state of emergency regarding COVID-19. See Executive Order No. 591: Declaration of a State of Emergency to Respond to COVID-19, dated March 10, 2020 and available at: https://www.mass.gov/doc/governors-declaration-of-emergency-march-10-2020-aka-executive-order-591/download (last visited October 15, 2020).

NSTAR Electric is the electric distribution company for customers in the Compact's member municipalities.

In support of its filing, the Compact sponsored the testimony of Austin T. Brandt, the Compact's senior power supply planner. The evidentiary record includes the Compact's responses to 51 information requests.⁴ No party requested an evidentiary hearing.

On January 6, 2021, the Compact, DOER, and the Attorney General submitted initial briefs. On January 20, 2021, the Compact submitted a reply brief.⁵

II. <u>BACKGROUND</u>

The Department reviewed the Compact's Three-Year Plan pursuant to An Act Relative to Green Communities, St. 2008, c. 169, 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"), and by An Act to Advance Clean Energy, St. 2018, c. 227 ("Energy Act of 2018") (collectively, "Green Communities Act") and Investigation by the Department of Public Utilities on its own Motion into Updating its Energy Efficiency Guidelines Consistent with An Act Relative to Green Communities, D.P.U. 08-50 (2008); D.P.U. 08-50-A (2009); D.P.U. 08-50-B (2009); D.P.U. 08-50-C (2011); D.P.U. 08-50-D (2012); Investigation by the Department of Public Utilities on its own Motion into Updating its Energy Efficiency Guidelines, D.P.U. 11-120-A, Phase II

On its own motion, the Department moves into the evidentiary record the Compact's responses to information requests DPU 1-1 through DPU 1-12, DPU 2-1 through DPU 2-17, DPU 3-1 through DPU 3-5, DPU 4-1 through DPU 4-10, and DPU 5-1 through DPU 5-7, including all attachments thereto.

The Department finds that the evidentiary record and briefs in this proceeding provide an adequate basis to address the Compact's filing without a need for an evidentiary hearing.

(2013) ("Guidelines").⁶ Pursuant to G.L. c. 164, § 134(b), the Compact proposed to offer several enhancements to the Statewide Plan as part of its Three-Year Plan.⁷ One proposed enhancement was a nascent version of the CVEO.

After review, the Department did not approve the proposed CVEO.⁸ Three-Year

Plans Order at 131. Among other things, the Department found that the proposed offering

did not benefit from a full, robust stakeholder process.⁹ Three-Year Plans Order at 131. In

addition, the Department shared DOER's concern that, given the availability of other solar

PV incentives and financing programs, it was not appropriate for the Compact to finance the

solar PV component of the CVEO with ratepayer-provided energy efficiency funds.

On May 3, 2021, the Department issued updated Energy Efficiency Guidelines for effect starting with the 2022-2024 Three-Year Plans review process. <u>Investigation by the Department of Public Utilities on its own Motion into Updating its Energy Efficiency Guidelines</u>, D.P.U. 20-150-A (2021).

General Laws c. 164, § 134(b) provides that approved municipal aggregators "shall not be prohibited from proposing for certification an energy plan which is more specific, detailed, or comprehensive or which covers additional subject areas than any such state-wide conservation goals."

Although the Attorney General and DOER generally supported the concept of an electrification offering, each raised concerns about different aspects of the Compact's proposal. Three-Year Plans Order at 121-122.

The Energy Act of 2018, which allows the Program Administrators, among other things, to pursue energy storage and strategic electrification as part of their energy efficiency plans, became law on August 9, 2018. The Compact publicly presented the CVEO as a complete offering on September 14, 2018. Three-Year Plans Order at 130 n.65. The Compact filed its Three-Year Plan, including the proposed CVEO, with the Department on October 31, 2018. Three-Year Plans Order at 130 n.65. The Energy Efficiency Advisory Council did not discuss the proposed CVEO before it was filed with the Department. Three-Year Plans Order at 131, citing Tr. 3, at 410-411.

Three-Year Plans Order at 131. In this regard, the Department found that it must consider how any proposed solar PV incentives comply with the statutory directive to transition to a stable solar marketplace at a reasonable cost to ratepayers. Three-Year Plans Order at 131, citing An Act Relative to Solar Energy, St. 2016, c. 75.

Although it did not approve the CVEO, as proposed, the Department found that the Compact could submit a revised CVEO proposal for Department review if it: (1) refined its proposed offering; (2) thoroughly vetted its proposal with stakeholders; and (3) obtained approval from the Energy Efficiency Advisory Council ("Council"). Three-Year Plans Order at 131. The Department addresses the Compact's revised CVEO proposal below.

III. SUMMARY OF PROPOSAL

The Compact states that the proposed CVEO is designed to fill affordability and accessibility gaps in the solar PV, battery storage, and heat pump markets for low- and moderate-income customers (Exh. ATB, Att. A at 4). To this end, the proposed CVEO combines home weatherization from the Compact's energy efficiency programs with three technologies: (1) heat pumps; (2) battery storage; and (3) solar PV (Exh. ATB, Att. A at 2). The total cost of the proposed CVEO is approximately \$19.4 million over two years (Exhs. ATB, Att. A at 11-13, 16 & Table 3, 20 & Table 5, 23-24 & Table 7; DPU 1-7; DPU 2-4). After projected funding offsets 10 of approximately \$9.0 million, as discussed

In its filing, the Compact uses the term "offset" in two ways. First, the Compact uses the term "offset" to represent an electrical energy offset to compensate for increased electric use (primarily from electric heating) from a renewable energy generation solar PV system (see, e.g., Exh. ATB at 6, 11, 14, 16; Atts. A at 2; B

below, the Compact's total proposed (two-year) CVEO budget is \$10.4 million (Exh. ATB at 9; Att. A at 23-24 & Table 7).

The Compact maintains that it made three significant changes to the CVEO, as originally proposed in D.P.U. 18-116, aimed at addressing the issues raised by the Department in Three-Year Plans Order at 130-131 (Exh. ATB, Att. A at 3, 7). First, the Compact states that it no longer seeks to offer the CVEO to extended moderate-income or market-rate residential customers (Exh. ATB, Att. A at 7). The Compact now proposes to offer CVEO only to low- and moderate-income residential customers (Exh. ATB, Att. A at 7). Second, the Compact states that it reduced the total number of low- and moderate-income participants in the CVEO (Exh. ATB, Att. A at 7). In this regard, the Compact initially proposed to enroll a total of 320 low- and moderate-income customers in the CVEO in 2020 and 2021 (Exh. ATB, Att. A at 7). Now, the Compact proposes to enroll no more than 250 low- and moderate-income participants in the CVEO during this same period¹¹ (Exh. ATB, Att. A at 7, 9). Third, the Compact states that it amended its proposal to leverage available state and federal tax and incentive programs to fund aspects of the CVEO (Exh. ATB, Att. A at 7). In particular, the Compact proposes to leverage what it

at 2; D at 5). Second, the Compact uses the term "offset" in reference to estimated funding from existing incentive programs, such as the Alternative Portfolio Standard and the Solar Massachusetts Renewable Target program (see, e.g., Exh. ATB, Att. A at 12, 15-16).

The Compact states that, in order to stay within its proposed budget, it will enroll no more than 250 customers in the CVEO, regardless of demand (Exh. ATB, Att. A at 9).

estimates will be approximately \$9.0 million in funding sources for the CVEO through participation in the Solar Massachusetts Renewable Target ("SMART") program,

ConnectedSolutions, 12 federal investment tax credits ("ITC") and depreciation, Alternative Portfolio Standard ("APS") incentives, and moderate-income participant contributions

(Exhs. ATB at 9; Att. A at 7-8, 11-13, 16 & Table 3, 20 & Table 5; DPU 1-7; DPU 2-4).

The Compact states that several requirements must be met in order for customers to participate in the CVEO: (1) the customer's home must be heated with oil, propane, or electric resistance heat; (2) the customer must be income constrained (i.e., low- or moderate-income); ¹³ (3) for low-income participants, the customer must reside in a deed-restricted property; ¹⁴ (4) the customer must have completed an energy efficiency home energy assessment within the previous two years and must have implemented all recommendations from the audit; ¹⁵ (5) the site must be suitable and in proper condition for

ConnectedSolutions is a statewide pay-for-performance battery active demand response incentive program. See, e.g., Active Demand Reduction, Daily Dispatch Pay-For Performance Offering, D.P.U. 20-33 through D.P.U. 20-36 (2020).

For energy efficiency program purposes, "low-income" is defined as a customer earning 60 percent or less of the state median income and "moderate-income" is defined as a customer earning 61 to 80 percent of the state median income.

A deed-restricted property is one that may only be sold or rented to occupants with income less than 61 percent of the state median income (Exhs. ATB, Att. A at 9; DPU 1-1).

The Compact provides 100 percent incentives for audit-recommended measures for low- and moderate-income customers and, therefore, it anticipates that CVEO participants will meet this requirement. Nonetheless, the Compact proposes to be

the installation of all three technologies (i.e., heat pumps, battery storage, and solar PV); and (6) the customer must implement all three technologies in their home (Exh. ATB, Att. A at 8-9).

The total proposed two-year budget for CVEO heat pump measures is \$5,382,600, comprised of participant incentives and sales, technical assistance, and training ("STAT") costs (Exh. ATB, Att. A at 12, 24 & Table 7). The proposed CVEO heat pump budget assumes total costs range from \$13,000 to \$25,000 per installed system (Exh. ATB, Att. A at 11). The Compact projects that the heat pump measures will produce approximately \$3.7 million in net benefits, with a benefit-cost ratio of 1.8 (Exh. ATB, Att. A at 12).

The Compact proposes to install heat pumps through its normal energy efficiency program delivery channels (Exh. ATB, Att. A at 8). Participants will own the heat pumps outright at the time of installation (Exh. DPU 4-9). The Compact intends to contract with a vendor to install the heat pumps and will secure warranties and a five- to ten-year maintenance contract for CVEO participants (Exhs. ATB, Att. A at 11; DPU 1-2). 16

The Compact proposes to provide a 100 percent incentive to low- and moderate-income customers for the cost to switch their current heating source (i.e., oil,

permitted to waive this requirement, as it determines necessary, on a case-by-case basis (Exh. DPU 4-2).

¹⁶ CVEO participants will not be responsible for any heat pump maintenance costs that occur during the contract period (Exhs. ATB, Att. A at 11, 17; DPU 1-3).

propane, or electric baseboard) to heat pumps¹⁷ (Exh. ATB, Att. A at 11). The projected two-year CVEO heat pump incentive cost for low-income customers is \$2.8 million (Exh. ATB, Att. A at 11-12). The Compact's proposed 100 percent heat pump incentive for low-income customers is consistent with the statewide incentive for these customers (Exh. ATB, Att. A at 11). Alternately, the Compact's proposed 100 percent heat pump incentive for moderate-income customers is an enhanced incentive (Exh. ATB, Att. A at 12). The projected two-year CVEO heat pump incentive cost for moderate-income customers is \$2.0 million, of which \$1.6 million is the projected incremental incentive above the statewide incentive for market-rate customers¹⁸ (Exh. ATB, Att. A at 12).

The Compact proposes to leverage approximately \$450,000 in APS incentives over the two-year period to offset approximately eight percent of the total CVEO heat pump budget (Exhs. ATB, Att. A at 12; DPU 1-7; DPU 2-3; DPU 2-4). The Compact, however, proposes to collect the full CVEO heat pump costs from electric ratepayers in its member municipalities via its energy efficiency surcharges and then reduce its future energy efficiency surcharges to account for any APS revenues it ultimately receives (Exhs. ATB, Att. A at 12; DPU 1-7; DPU 2-3; DPU 2-4).

The Compact expects that the majority of CVEO participants will fully replace their existing heating systems with heat pumps (Exh. ATB, Att. A at 11). The Compact states, however, that it may not be feasible for all customers to fully replace their existing heating systems (Exh. ATB, Att. A at 11). Such customers would use their existing heating system to supplement the heat pump (Exh. ATB, Att. A at 11).

The statewide incentive for moderate-income customers is the same as the statewide incentive for market-rate customers (Exh. ATB, Att. A at 12).

The total cost for the proposed CVEO paired solar PV and battery storage measures is approximately \$13.2 million over two years (Exh. ATB, Att. A at 13, 16 & Table 3, 20).

After funding offsets totaling approximately \$8.4 million (i.e., SMART program, ConnectedSolutions, federal ITC and depreciation, and moderate-income participant contributions) the Compact's total proposed paired solar PV and battery storage budget is approximately \$4.8 million over two years (Exh. ATB, Att. A at 13-16 & Table 3, 20 & Table 5). The budget is comprised of approximately \$4.3 million in installation and related expenses, \$30,000 in marketing costs, and approximately \$430,000 in STAT costs (Exh. ATB, Att. A at 16, 19-20, 24 & Table 7). The proposed budget assumes a solar PV and battery storage cost of approximately \$48,000 per installed system (Exh. ATB, Att. A at 13). The Compact projects that the solar PV and battery storage measures will produce approximately \$13.5 million in net benefits, with a benefit-cost ratio of 2.9 (Exh. ATB, Att. A at 20).

The Compact proposes to install the paired solar PV and battery storage systems at participants' homes using a third-party ownership structure (Exh. ATB, Att. A at 8, 13). Specifically, the Compact proposes that a third-party will own the solar PV and battery storage systems for ten years (Exh. ATB, Att. A at 13). At the end of the ten-year term, ownership of the solar PV and battery storage system would transfer to the CVEO participant

The Compact expects that two batteries will be needed per CVEO participant but the number of batteries will be determined on a per-participant basis (with a maximum of two) (Exhs. ATB, Att. A at 13; DPU 2-5).

at no cost²⁰ (Exh. ATB, Att. A at 18). The Compact states that CVEO participants will be permitted to net meter the solar PV systems, with any net metering credits accruing directly to the participating customer (Exh. ATB, Att. A at 16).

The Compact proposes to install the solar PV and battery storage systems at no cost to low-income customers (Exh. ATB, Att. A at 13). Moderate-income customers will be required to pay 25 percent of the cost of the solar PV and battery storage system, capped at \$5,000, with the potential to finance this contribution²¹ (Exh. ATB, Att. A at 13).

The Compact states that the third-party owner will install the paired solar PV and battery storage systems, ²² harnessing funds from existing tax and incentive programs (i.e., SMART, ConnectedSolutions, federal ITC and depreciation) to offset the installation

The third-party owner will be responsible for removing the paired solar PV and battery energy storage system if the participant does not want to own it at the end of the ten-year term (Exh. ATB, Att. A at 18). Where a low-income CVEO participant takes ownership of the solar PV and battery storage system at the end of the ten-year term, the Compact states that it will use outside funds from a grant commitment from the Mayflower Wind project to cover the cost of decommissioning the system at the end of its useful life (Exh. ATB, Att. A at 18). Moderate-income participants who take ownership of the paired systems will be responsible for decommissioning costs at the end of their useful lives (Exh. ATB, Att. A at 18).

The Compact states that it will endeavor to work with a third-party owner that will allow moderate-income customers to finance their portion of the cost over a ten-year term (Exhs. DPU 1-5; DPU 4-10).

As part of the installation process, the third-party owner will undertake any mechanical upgrades necessary to the participant's electrical panel to install the solar PV and battery storage systems (Exh. ATB, Att. A at 17).

costs²³ (Exh. ATB, Att. A at 15-16). In this regard, the Compact states that the third-party owner will qualify the solar PV and battery storage systems for all incentives and (1) participate in the ConnectedSolutions program and receive the battery energy storage incentive payment for at least five years after installation; and (2) participate in the SMART program and receive the incentive payment for solar PV paired with battery storage for a period of ten years (Exh. ATB, Att. A at 17). The Compact proposes to use ratepayer-provided energy efficiency funds to cover the remaining costs (less the moderate-income customer contribution, described above) (Exh. ATB, Att. A at 16).

The Compact projects that approximately \$7.9 million in funding will be available from incentive programs to offset the total CVEO solar PV and battery storage system costs (Exh. ATB, Att. A at 13, 16, 19-20). The Compact projects that, over two years, it will require an additional \$2.7 million from energy efficiency program funding to cover low-income participant costs and \$1.6 million for moderate-income participant costs²⁴ (Exh. ATB, Att. A at 19). Finally, the Compact projects that it will require an additional

The Compact maintains that the Massachusetts ITC is a personal tax credit and, therefore, cannot be claimed by a corporate entity such as the third-party owner (Exh. ATB, Att. A at 16).

As noted above, the third-party owner will claim the ConnectedSolutions incentive and use this to "offset" its installation costs. However, the Compact will collect ConnectedSolutions program costs from electric customers in its member municipalities through the energy efficiency surcharge (Exh. ATB, Att. A at 20). The Compact estimates that the cost of CVEO batteries participating in ConnectedSolutions in 2020 and 2021 will be approximately \$250,000 (i.e., \$210,000 in incentives and \$41,000 in STAT) (Exh. ATB, Att. A at 21).

\$0.5 million from energy efficiency program funding for marketing and STAT (Exh. ATB, Att. A at 20).

The third-party owner and CVEO participant will execute a ten-year contract that outlines the rights and obligations of paired system ownership (Exh. ATB, Att. A at 17). The contract will govern site access and maintenance, 25 and include a solar power purchase agreement ("PPA") (Exh. ATB, Att. A at 17). The Compact states that low-income customers will have a zero-dollar solar PPA rate, while moderate-income customers will have a solar PPA rate designed to finance their customer contribution (i.e., a maximum of \$5,000) (Exhs. ATB, Att. A at 17; DPU 4-10). Finally, the Compact notes that CVEO participants will be required to execute various documents for the purposes of qualifying the solar PV and battery storage systems for SMART, qualifying the battery storage for ConnectedSolutions, and net metering the solar PV system (Exh. ATB, Att. A at 17).

The Compact will enter into a separate contract with the third-party owner to govern program implementation (Exh. ATB, Att. A at 17). The Compact states that this contract will include customer protections, vendor warranty requirements, and best practices that the Compact currently incorporates in its existing energy efficiency vendor contracts (Exhs. ATB, Att. A at 17; DPU 1-2).

For example, the Compact states that CVEO participants will be required keep the solar PV and battery storage systems in operation and not shut off the systems unless there is an emergency (Exh. ATB, Att. A at 18). In addition, CVEO participants will be required to maintain their property to allow for solar insolation (Exh. ATB, Att. A at 18).

As noted above, the Compact will require the third-party owner to enroll CVEO batteries in the ConnectedSolutions program in order to reduce load during targeted peak periods (Exh. ATB, Att. A at 21). The Compact proposes to implement ConnectedSolutions using the same program design that the Department approved for the other electric Program Administrators in Three-Year Plans Order at 29-35²⁶ (Exh. ATB, Att. A at 20-21). The Compact states that the third-party owner must assist in facilitating battery dispatch for the Compact and comply with any necessary requirements of the Compact's dispatch vendor (Exh. ATB, Att. A at 17).

The Compact proposes to evaluate the CVEO using statewide evaluation protocols (Exh. ATB, Att. A at 22, citing Three-Year Plans Order at 35-37). At the time of its filing, however, the Compact states that it was still developing its final CVEO evaluation plan (Exhs. ATB, Att. A at 22; DPU 1-11).

Finally, the Compact proposes to allocate the CVEO budgets and measures across statewide core initiatives, with the costs and savings for low-income customers allocated to the income-eligible sector and the costs and savings for moderate-income customers allocated to the residential sector (Exh. ATB, Att. A at 9-10, 24 & Table 7). The Compact projects that the income-eligible and residential sectors will remain cost-effective with the allocation of the CVEO budgets and measures (Exh. ATB, Att. A at 27).

The Compact states that it will coordinate active demand response activities with NSTAR Electric in accordance with an August 14, 2019 Memorandum of Agreement (Exh. ATB, Att. A at 7, citing Cape Light Compact JPE, D.P.U. 18-116-A (2020)).

IV. POSITIONS OF THE PARTIES

A. Cape Light Compact

The Compact argues that its revised CVEO proposal complies with the Department's directives in Three-Year Plans Order (Compact Initial Brief at 7). Further, the Compact asserts that the proposed CVEO does not violate the laws of the Commonwealth and it has the authority under the municipal aggregation statute, G.L. c. 164, § 134(b), to administer the CVEO as proposed as an enhancement to the Statewide Plan (Compact Initial Brief at 20-21). The Compact maintains that the proposed CVEO is an innovative and cost-effective offering for low- and moderate-income customers to reduce overall energy use, offset increased electric use from heat pumps, and provide battery storage for active demand reduction and resiliency purposes (Compact Initial Brief at 1).

The Compact maintains that the revised CVEO proposal better leverages existing state and federal incentives to offset the overall cost of the offering (Compact Initial Brief at 8).

The Compact maintains that its revised CVEO proposal decreases the overall budget, reduces the use of energy efficiency ratepayer funding, and lowers the overall rate subsidy of low-income customers by non-low-income customers (Compact Initial Brief at 8).

The Compact asserts that the proposed CVEO appropriately expands the scope of energy efficiency and advances the Department's goals for innovation in programming (Compact Initial Brief at 9). In this regard, the Compact maintains that the proposed CVEO is a strategic electrification and energy optimization offering that is designed to enhance the

traditional focus of Program Administrator energy efficiency activities (Compact Initial Brief at 10).

The Compact contends that all three CVEO technologies (i.e., heat pumps, battery storage, and solar PV) are cost-effective, both individually and collectively, with a benefit-cost ratio greater than 1.0 using the total resource cost test (Compact Initial Brief at 12). In addition, the Compact claims that that, by packaging the three CVEO technologies together, CVEO participants will experience overall bill reductions (Compact Initial Brief at 14). The Compact argues that that proposed CVEO budget is reasonable for an offering that serves low- and moderate-income customers (Compact Initial Brief at 14).

The Compact asserts that the proposed CVEO is designed to promote equitable program delivery to low-income customers by offering heat pumps at a 100 percent incentive level, which is consistent with current statewide heat pump incentives (Compact Initial Brief at 15). The Compact also contends that its targeted deployment of CVEO to low- and moderate-income customers with incentives designed to ensure participation, is consistent with the Commonwealth's goal to promote equity in the administration of incentive programs (Compact Initial Brief at 17).

The Compact argues that the proposed CVEO will benefit all ratepayers and not just participating customers (Compact Initial Brief at 17). In this regard, the Compact asserts that the portfolio of technologies included in the proposed CVEO will provide benefits to all ratepayers in terms of avoided energy and capacity costs, and reduced environmental impacts (Compact Initial Brief at 18).

The Compact asserts that that the proposed CVEO is aligned with the Commonwealth's environmental policies because strategic electrification through heat pumps, increased renewable energy installation, and increased reliability are all components of the Massachusetts 2050 Decarbonization Plan (Compact Initial Brief at 19, citing Massachusetts Decarbonization Roadmap (December 2020) available at https://www.mass.gov/doc/ma-2050-decarbonization-roadmap/download (last visited October 26, 2021)). The Compact also argues that the proposed CVEO is responsive to the Council's priorities, which include promoting fuel switching strategies that support the achievement of greenhouse gas reduction requirements under the Global Warming Solutions Act, St. 2008, c. 298 ("GWSA") (Compact Initial Brief at 19-20).

B. Attorney General

The Attorney General supports the redesigned CVEO and urges the Department to approve the proposed offering (Attorney General Initial Brief at 2). The Attorney General argues that the proposed CVEO is appropriately designed to support the transition of residential heating away from fossil fuels and towards heat pumps fueled by renewable energy (Attorney General Initial Brief at 2). In addition, the Attorney General maintains that, with the inclusion of solar PV and battery storage, the proposed CVEO appropriately promotes active demand reduction and demand side management (Attorney General Initial Brief at 2).

The Attorney General argues that the proposed CVEO targets an appropriate number of customers (Attorney General Initial Brief at 1). In this regard, the Attorney General

supports the Compact's proposal to limit participation in the CVEO to low- and moderate-income residential customers (Attorney General Initial Brief at 2). The Attorney General maintains that these customers have proven difficult to serve under existing energy efficiency programs and face significant financial obstacles in the form of large upfront costs required to install heat pumps (Attorney General Initial Brief at 2). Finally, the Attorney General notes that, by reducing the size of the program and leveraging third-party financing and federal/state incentives for both solar PV and battery storage, the Compact has appropriately reduced the proposed CVEO budget from \$27.6 million (as originally proposed in D.P.U. 18-116) to \$10.4 million (after funding offsets) (Attorney General Initial Brief at 1-2).

C. Department of Energy Resources

DOER asserts that, consistent with the Department's directives in Three-Year Plans

Order, the Compact revised the proposed CVEO after extensive stakeholder feedback and the proposal should be approved (DOER Initial Brief at 2, 5). DOER maintains that the Compact reduced its original D.P.U. 18-116 CVEO budget proposal by \$17.2 million by leveraging federal and state incentives and the proposed CVEO is cost-effective (DOER Initial Brief at 2-3).

DOER contends that the proposed CVEO is an opportunity to test an approach for removing the significant financial barriers that currently exist for low- and moderate-income customers seeking to install and operate heat pumps (DOER Initial Brief at 4). DOER argues that consistent with the Council's priorities for the next Three-Year Plan term, the proposed

CVEO will help ensure that low- and moderate-income customers have access to electrification and any associated energy savings (DOER Initial Brief at 4).

In addition, DOER contends that the proposed CVEO supports the Commonwealth's climate goals under the GWSA and the Commonwealth's Clean Energy and Climate Plan ("CECP") (DOER Initial Brief at 4, citing the 2030 CECP available at https://www.mass.gov/info-details/massachusetts-clean-energy-and-climate-plan-for-2030 (last visited October 26, 2021)). DOER maintains that programs like the proposed CVEO are needed for Massachusetts to achieve its greenhouse gas emissions reduction goals (DOER Initial Brief at 4).

V. ANALYSIS AND FINDINGS

A. Introduction

The Department appreciates the Compact's efforts in redesigning the CVEO with an emphasis on serving low-income customers. The Department recognizes the barriers to serving these customers and expects that these barriers will be addressed in various proposals in the upcoming Three-Year Plan filings for 2022 through 2024. See Three-Year Plans

Order at 41-44. After a careful review, the Department finds that the proposed manner of funding for the revised CVEO is contrary to the laws of the Commonwealth and cannot be approved as an enhancement to the Statewide Plan under G.L. c. 164, § 134. Further, even if the CVEO did not violate applicable law, other issues exist that prevent the Department from approving the CVEO as proposed here.

B. Consistency with Applicable Law

There is no question that the Compact's Three-Year Energy Efficiency Plan is subject to the standards set forth in G.L. c. 25, §§ 19, 21, and 22 for the development and evaluation of energy efficiency plans. General Laws c. 25, §§ 19 and 21 explicitly apply to certified energy plans by municipal aggregators under G.L. c. 164, § 134.²⁷ A municipal aggregator's certified energy plan may be more specific, detailed, or comprehensive or cover additional subject areas than a statewide energy efficiency plan so long as the plan does not violate the laws of the Commonwealth. G.L. c. 164, § 134(b).

²⁷ General Laws c. 25, §§ 19 and 21 explicitly apply 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 through 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 [C]ommonwealth Paragon Holdings, LLC, D.P.U. 14-119, at 4 (2014), citing Green Communities Act at Preamble. We 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, stated, 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 being a national leader in energy efficiency.

General Laws c. 25, § 19 sets forth the exclusive sources of funding for a Department-approved energy efficiency program administered by electric distribution companies and municipal aggregators with certified energy plans. G.L. c. 164, §§ 19(a), 21. In this docket, the question we must answer is whether a distributed generation resource like solar PV can be classified as an energy efficiency resource pursuant to G.L. c. 25, §§ 19, 21, and 22 and receive funding from the sources set forth in Section 19.

The electric Program Administrators, including the Compact, are charged under the Green Communities Act to reduce energy use, and a goal of energy efficiency is to lower the overall consumption of a customer's energy resources. Three-Year Plans Order at 109, citing D.P.U. 08-50-A at 58; 2010-2012 Electric Three-Year Energy Efficiency Plans, D.P.U. 09-116 through D.P.U. 09-120, at 88 (2010); 2010-2012 Gas Three-Year Energy Efficiency Plans, D.P.U. 09-121 through D.P.U. 09-128, at 74 (2010). Solar PV is an energy generating electrical system. It does not seek to lower a customer's consumption but rather it is an alternative means of satisfying a customer's consumption levels with renewable energy. Accordingly, the Department finds that solar PV is not an energy efficiency resource for purposes of G.L. c. 25, §§ 19, 21, and 22 and programs relying on solar PV like the CVEO cannot be funded using energy efficiency funds as the Compact proposes.

For similar reasons, the Department finds that ratepayer-provided energy efficiency funding cannot be used to support the costs of installing battery storage. Demand may be reduced through the dispatch of battery storage resources and compensation for this service is already provided through a performance-based incentive using energy efficiency funds

(i.e., ConnectedSolutions). However, installation of new battery storage resources as backup generation resources for the purpose of deployment during power outages is outside the scope of energy efficiency and demand reduction. That use of battery storage gives the battery an intrinsic on-site value using a different dispatch priority instead of simply focusing on the battery's use in system-wide peak demand reduction.

To the extent there is any ambiguity as to whether solar PV can be funded with energy efficiency funds, the Department must look at overall statutory scheme. The Green Communities Act established the current energy efficiency program construct and further established a separate and distinct regulatory construct to develop and promote renewable energy development, including the Renewable Energy Portfolio (G.L. c. 25A, § 11F); the Massachusetts Renewable Energy Trust Fund, which is funded pursuant to G.L. c. 25, § 20 for the development and promotion of renewable energy projects (G.L. c. 40J, § 4E); and the net metering framework, which is specifically designed to promote and compensate solar development (G.L. c. 164, §§ 138-140). Following enactment of the Green Communities Act, the Legislature established the SMART solar incentive program. The preamble and Section 11(b) of an Act Relative to Solar Energy, St. 2016, c. 75, describe a stable, self-sustaining solar market, and the SMART program, which the Compact seeks to leverage in implementing the proposed CVEO, is intended to ultimately move away from incentives.

For example, the proposed CVEO is not designed to replace an existing on-site inefficient backup diesel or gas generator with an electric storage system that would function more efficiently.

Specifically, Section 11(a)-(b) of St. 2016, c. 75 provides that DOER shall lower the cost of the solar incentive programs for ratepayers, develop a statewide solar incentive program, encourage the development of solar PV, and implement a program that promotes the orderly transition to a stable and self-sustaining solar PV market at a reasonable cost to ratepayers.

The Department cannot interpret energy efficiency statutes to promote incentives for solar PV where the Legislature has enacted separate statutes and a regulatory framework specifically to provide incentives for solar PV and has further evinced a desire to terminate the use of incentives for solar PV through the program implemented under that statute; the result would be an inconsistent body of law. Parris v. Sheriff of Suffolk County,

93 Mass. App. Ct. 864, 868 (2018) (finding that 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) (citations omitted); see supra n.27. Authorizing the Compact to create a separate incentive program for solar PV development, including low-income solar PV development, thwarts the clear statutory framework created by the Legislature. Accordingly, consideration of the overall statutory scheme supports the finding that the proposed CVEO cannot be funded with Section 19 energy efficiency funds approved through the Three-Year Plan.

The Department agrees that facilitating low-income customer access to solar PV while electrifying heating is consistent with Commonwealth policy but doing so requires the intersection of multiple programs. For that reason, the Department sees value in marketing energy efficiency programs and the SMART program together and encourages partnerships,

with Program Administrators assisting in coordination. However, this must be done while respecting that the solar PV market is a competitive market that the Legislature intends to become stable and self-sustaining. Any incentive provided for the solar PV market should be made in coordination with DOER's regulations governing the solar program and St. 2016, c. 75. The use of energy efficiency funds to support the proposed CVEO is inconsistent with the goal of self-sufficiency and, for that reason, the Department cannot approve the proposed revised CVEO as it would violate the laws of the Commonwealth, contrary to the mandate of G.L. c. 164, § 134(b).

C. Other Issues

Even if the Compact's CVEO proposal did not violate applicable law, it suffers from several other deficiencies that would prevent our approval. Although we need not make detailed findings on each of these deficiencies given our findings above regarding the proposed manner of funding, the Department hopes that by raising these issues here, we will provide guidance to the Program Administrators for any future related proposals.

As noted above, the Compact presented the proposed CVEO as an enhancement to the Statewide Plan. The Department must consider proposed Statewide Plan enhancements in the context of the comprehensive statutory scheme for energy efficiency provided by the Green Communities Act. The Department's review must ensure, among other things, that the proposed Statewide Plan enhancement complies with all ratepayer protections in the Green Communities Act including cost effectiveness, funding, and bill impacts. G.L. c. 25, § 21(a), (b)(1), (b)(2)(iv)(A); Three-Year Plans Order at 124-125. In addition to the other

requirements of the Green Communities Act, the Department must ensure that the Program Administrators, including the Compact, spend energy efficiency funds in a reasonable and prudent manner when implementing their energy efficiency plans. Three-Year Plans Order at 125-126 & n.56.

The Department recognizes the challenges in providing low-income customers with the technologies the CVEO seeks to deploy because of the high upfront costs associated with these technologies (Exhs. DPU 1-12, Att. at 13; DPU 2-9). We commend the Compact for their attempt to address these barriers for low-income customers through the design of the proposed CVEO. However, as discussed below, the Department has concerns about the reasonableness and certainty of the bill impacts that would result from implementation of the CVEO. In addition, the Department is concerned that subjecting low- and moderate-income customers to a complex third-party ownership structure, which has not been implemented or evaluated for these purposes, may lead to unintended consequences and additional costs.

Electric customers in the Compact's member municipalities may opt out of participation in the Compact's municipal aggregation program but they cannot opt out of having the Compact act as their energy efficiency Program Administrator. Three-Year Plans Order at 125. The Compact relies almost exclusively on funds provided by ratepayers in its member municipalities to support its energy efficiency programs.²⁹ Pursuant to G.L. c. 25,

A municipal aggregator with a certified energy plan, like the Compact, may receive and expend funds collected by the applicable distribution company and charged to the municipality's customers. The municipal aggregator also may apply to the Massachusetts Clean Energy Center for funds, including from the Massachusetts

§ 19(a), the Department must consider the bill impacts the CVEO would have on both participating and non-participating customers.

The Compact's residential program budget would increase significantly with the addition of CVEO (i.e., by \$10.4 million over two years) (Exh. ATB, Att. A at 23). This budget increase would support participation only by a small percentage of the Compact's customers (i.e., no more than 250 customers) with an average total cost per-participant of \$41,600 (Exh. ATB, Att. A at 23). While the annual bill impacts for participating customers appear to be favorable as presented by the Compact, the Department is concerned about the reasonableness of bill impacts for non-participating customers as well as the sustainability of these impacts if the program were later implemented at full scale (Exh. ATB, Atts. A at 25-26; C at 8).

As described above, the design of CVEO relies heavily on the availability of funding sources and tax credits/depreciation to offset a significant percentage of the program costs. The Compact projects that total CVEO costs over two-years will be \$18.7 million before funding offsets (Exhs. ATB, Att. A at 11-13, 16 & Table 3, 20 & Table 5, 23-24 & Table 7; DPU 1-7; DPU 2-4). Of this amount, the Compact projects that it will be able to leverage an estimated \$8.4 million in funding through participation in the SMART and ConnectedSolutions programs (\$2.9 million total), federal ITC and depreciation (\$5.0 million total), and moderate-income participant contributions (\$0.5 million) for a total CVEO budget

Renewable Energy Trust Fund, to operate the municipal aggregator's energy efficiency plan. G.L. c. 164, § 134(b).

of approximately \$10.3 million recovered from ratepayers through its energy efficiency surcharges³⁰ (Exhs. ATB, Att. A at 7, 8, 11-13, 16 & Table 3; DPU 2-1; DPU 2-3).

A series of assumptions about the availability of other funding streams factored into the Compact's analysis of program cost-effectiveness and ratepayer bill impacts (Exh. ATB, Att. A at 7-8, 19, 21, 23-26). In addition to a general lack of certainty about the availability of future funding streams (see, e.g., Exhs. DPU 1-7, DPU 1-9), the Department has identified certain errors in the Compact's assumptions. For example, the Compact did not account for declining compensation blocks when analyzing SMART as a funding source (Exh. ATB, Att. A at 16). In addition, as described above, the Compact characterizes the ConnectedSolutions program as an outside funding source and removes these costs from the projected budget for battery storage³¹ (Exh. ATB, Att. A at 15-16 & Table 3). However, ConnectedSolutions is funded primarily as a statewide energy efficiency program (Exh. ATB, Att. A at 16). Therefore, any ConnectedSolutions incentive payments received by the third-party owner should not be characterized as an offset to CVEO program costs as these funds will be provided by ratepayers in the Compact's member municipalities through the energy efficiency surcharges.

The Compact maintains that it would refund to ratepayers any APS revenues it ultimately receives (i.e., \$0.5 million) (Exh. DPU 2-4).

In doing so, the Compact inappropriately removes these costs from both its cost-effectiveness and bill impact analyses (Exh. ATB, Att. A at 16 & Table 3, 20-21).

In addition, the Compact failed to analyze fully the cost impact that the CVEO proposal would have on ratepayers through net metering. Under the proposed CVEO, solar PV installations would be qualified as net metering facilities and would generate net metering credits (Exh. ATB, Att. A at 16). The costs of net metering credits are recovered from ratepayers through the net metering recovery surcharge ("NMRS"). See e.g., NSTAR Electric Net Metering Tariff, M.D.P.U. No. 68H at 18-20 (effective June 10, 2020).

The Compact states that it did not directly account for net metering in the third-party ownership structure as bill savings and net metering credits will accrue directly to participating customers under the proposed CVEO (Exh. ATB, Att. A. at 16). In a typical third-party owner arrangement, the customer receiving solar PV and/or battery energy storage would receive the net metering credits³³ and also compensate the third-party owner for the balance of costs not covered by incentive payments through a long-term lease, PPA, and/or some upfront capital investment (Exh. ATB, Att. B at 3). However, as described above, the proposed CVEO program design requires the use of energy efficiency funds to pay the third-party owner for an unspecified percentage of the costs associated with installing and maintaining the solar PV and battery storage facilities. The Compact maintains this use

The NMRS recovers the net metering credits applied to customers and the non-reconciling distribution portion of revenues displaced by customers who have installed on-site generation facilities in accordance with G.L. c. 164, §§ 138 and 139.

The value of the net metering credits would typically be greater than the cost of the customer's financial obligations to the third-party owner.

of ratepayer funds is necessary as participants will have no PPA or lease agreement that would otherwise compensate the third-party owner for the balance of costs that it would incur (e.g., installation and ongoing operations and maintenance costs) but be unable to recover through tax or incentive programs (or, in the case of moderate-income customers, a modest customer contribution) (Exh. ATB, Att. A at 15-17, 25).

The Department understands that a lease or PPA option with a third-party owner may not be feasible for low-income customers, even with the availability of net metering to offset these costs (Exh. DPU 1-12, Att. at 6). As a result, however, electric ratepayers in the Compact's member municipalities would essentially pay for CVEO-related costs twice: once through the Compact's energy efficiency surcharges and a second time through NSTAR Electric's NMRS. The Compact was not able to estimate how many net metering credits a typical CVEO participant would likely generate (Exh. DPU 5-7). This missing information is crucial to any analysis of the program and, without it, the full scope of the CVEO's impact on ratepayers cannot be discerned.³⁴

The Compact also was not able to estimate seasonal bill impacts for participating customers and did not analyze the expected monthly value of the net metering credits generated by a typical CVEO participant (Exhs. DPU 4-7; DPU 5-7). While net metering is expected to offset CVEO participants' electric bills, the use of heat pumps may result in

The Compact notes that that any bill savings from net metering will reduce the low-income distribution rate subsidy (Exh. ATB, Att. A at 5). The Compact did not provide an estimate of this reduction (Exhs. ATB, Att. A at 16; DPU 5-7, at 1-2).

seasonal increases in electric use that may not align with the seasonal generation profile of the solar PV installations, resulting in high bills in certain months and large surplus net metering credits in other months (Exhs. DPU 4-7; DPU 5-7).

The Department generally expects the provision of incentives for approved energy efficiency measures to occur within the Three-Year Plan term. Three-Year Plans Order at 129. While active demand reduction programs may initially warrant longer-term commitments in order to provide a sufficient incentive to realize savings, the Department has found that the commitment term must balance a recognition that costs placed on the customers must align with benefits customers receive over time. Three-Year Plans Order at 129 (Department approval of a five-year commitment for statewide pay-for-performance model to provide sufficient revenue certainty to support upfront investment in battery storage).

The Department agrees that low-income customers should have meaningful opportunities to benefit from energy programs. For example, the Department previously identified barriers to participation in energy efficiency programs for certain residential customers (i.e., hard-to-reach customers in low-income communities and communities where a large percentage of the population has limited English language proficiency) and required the Program Administers to conduct a stakeholder process to address such barriers.

2013-2015 Three-Year Energy Efficiency Plans, D.P.U. 12-100 through D.P.U. 12-111, at 23, 45-47 (2013).

The Compact appropriately identified some of the barriers to participation by low-income customers and this issue currently is being explored in other dockets before the Department, specifically those related to the SMART program. See Order Approving Model SMART Provision, D.P.U. 17-140-A at 57-73 (2018). The Department supports Program Administrator partnerships with solar PV and battery storage programs to help market comprehensive energy solutions. Accordingly, the Department urges the Program Administrators to coordinate with DOER and other stakeholders on any future programs designed to market integrated solar PV, battery storage, and heating solutions for low-income customers. Any future proposals must address the legal and substantive issues raised in the Order and, where the use of ratepayer funding is contemplated, ensure the efficient and appropriate use of ratepayer funds to best accomplish the Commonwealth's policy objectives.

D. Conclusion

The Department commends the Compact for its desire to address the barriers for low-income access to the proposed CVEO technologies. However, solar PV is not an energy efficiency resource for purposes of G.L. c. 25, §§ 19, 21 and 22 and programs relying on solar PV, like the proposed CVEO, cannot be funded using energy efficiency funds. Similarly, energy efficiency funds cannot be used to support the costs of installing new battery storage as backup generation resources. Even were the CVEO permissible under applicable law, the proposed program suffers from other defects including concerns about the reasonableness of non-participant bill impacts, as calculated by the Compact, and underestimated bill impacts due to the Compact's failure to properly account for all CVEO

program costs in its analyses. Accordingly, the Department does not approve the proposed CVEO.

VI. ORDER

Accordingly, after notice and consideration, it is

ORDERED: That the petition of the Cape Light Compact JPE for approval to implement a strategic electrification and energy optimization offering and associated budget is DENIED; and it is

<u>FURTHER ORDERED</u>: That the Cape Light Compact JPE shall comply with all other directives contained in this Order.

By Order of the Department,

Matthew H Nelson, Chair

Robert E. Hayden, Commissioner

Cecile M. Fraser, Commissioner

An appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part. Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of the twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. G.L. c. 25, § 5

2022-2024 Energy Efficiency Regulatory Timeframe



- Compact Board Approved the Budget and Goals on October 14, 2021
- Plan was filed with the Department of Public Utilities on November 1
 - Discovery period from November 2-29
 - Public hearings scheduled for December 1 & 2
 - Evidentiary Hearings: December 9th- 15th
- Per statute, DPU has 90 days from date of filing to issue an order



The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

This is an important notice. Please have it translated. Este é um aviso importante. Quiera mandálo traduzir. Este es un aviso importante. Sirvase mandarlo traducir. Avis important. Veuillez traduire immediatement. Questa è un'informazione importante, si prega di tradurla. 此为重要通知。请加以翻译.

NOTICE OF FILING AND PUBLIC HEARING

D.P.U. 21-126 November 2, 2021

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.

On November 1, 2021, 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"), filed with the Department of Public Utilities ("Department"), a petition for approval of a three-year energy efficiency plan for calendar years 2022 through 2024 ("Three-Year Plan"). The Compact filed its Three-Year Plan pursuant to An Act Relative to Green Communities, Acts of 2008, c. 169, § 11 ("Green Communities Act"). The Department docketed this matter as D.P.U. 21-126.

The Green Communities Act requires the Commonwealth's electric and gas distribution companies, and municipal aggregators with certified efficiency plans (together, "Program Administrators") to develop, in consultation with the Energy Efficiency Advisory Council ("Council"), 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. The Compact's proposed Three-Year Plan includes energy efficiency programs for residential, low-income, and commercial and industrial ("C&I") customers. The proposed Three-Year Plan also incorporates the Compact's Residential Conservation Service filing pursuant to G.L. c. 164, App. § 2-7(h).

D.P.U. 21-126 Page 2

The Compact's proposed budget for its Three-Year Plan is \$231,749,455 (i.e., \$75,392,662 in 2022, \$76,067,442 in 2023, and \$80,289,351 in 2024). If the Compact's Three-Year Plan is approved as proposed, the Compact states that customers could experience the following bill impacts:

- A residential customer (R-1) using 516 kilowatt-hours ("kWh") of electricity per month could experience a monthly bill increase of \$9.78 or 7.33 percent in 2022; a monthly bill increase of \$0.14 or 0.10 percent in 2023; and a monthly bill increase of \$3.14 or 2.19 percent in 2024;
- A low-income residential customer (R-2) using 488 kWh of electricity per month could experience a monthly bill increase of \$0.82 or 1.12 percent in 2022; a monthly bill increase of \$0.06 or 0.08 percent in 2023; and a monthly bill decrease of \$0.25 or 0.34 percent in 2024;
- Actual bill impacts may be lower for customers who participate in energy efficiency programs that lower their electricity usage;
- Bill impacts for C&I customers will vary. These customers should contact the Compact for specific bill impact information.

Due to certain ongoing safety measures and precautions relating to in-person events as a result of the COVID-19 pandemic, the Department will conduct two virtual public hearings to receive comments on the Compact's filing. The Department will conduct two public hearings using Zoom videoconferencing:

- Wednesday, December 1, 2021, beginning at 7:00 p.m.
- Thursday, December 2, 2021, beginning at 2:00 p.m.

Attendees can join the December 1, 2021 hearing at 7:00 p.m. by entering the link, https://us06web.zoom.us/j/85706654588, and the December 2, 2021 hearing at 2:00 p.m. by entering the link, https://us06web.zoom.us/j/84475716947, from a computer, smartphone, or tablet. No prior software download is required. For audio only access to the hearings, attendees can dial in to either hearing at (646) 558-8656 or (301) 715-8592 (not toll free) and then enter the Meeting ID# 857 0665 4588 for the December 1, 2021 hearing and Meeting ID# 844 7571 6947 for the December 2, 2021 hearing. If you anticipate providing comments via Zoom during either public hearing, please send an email by Monday, November 29, 2021, to jeffrey.leupold@mass.gov with your name, email address, mailing address, and hearing date. If you anticipate commenting by telephone, please leave a voicemail message by Monday, November 29, 2021, at (617) 305-3684 with your name, telephone number, mailing address, and hearing date.

When using the Zoom platform, you will be able to listen to the hearing and provide comments in English or Spanish. To access interpretation services through Zoom during the

D.P.U. 21-126 Page 3

hearing, click on the "Interpretation" button on the menu at the bottom of the Zoom application screen and select your language (i.e., English or Spanish).

Alternately, any person interested in commenting on the Compact's filing may submit written comments to the Department no later than the close of business (5:00 p.m.) on **Friday, December 3, 2021**. To the extent a person or entity wishes to submit comments in accordance with this Notice, electronic submission, as detailed below, is sufficient.

Any person who desires to participate in the evidentiary phase of this proceeding must file a written petition for leave to intervene with the Department. A petition for leave to intervene must satisfy the timing and substantive requirements of 220 CMR 1.03. The following persons/entities who desire to participate in the evidentiary phase of this proceeding must file a written petition for leave to intervene with the Department not later than the close of business on Tuesday, November 2, 2021: (1) voting and non-voting members of the Council; (2) any entity whose interests are represented on the Council; (3) any person/entity that has participated in the Council process; and (4) any person/entity that was previously granted intervention as a full party or limited participant in a three-year energy efficiency plan proceeding. All other persons/entities who desire to participate in the evidentiary phase of this proceeding must file a written petition for leave to intervene with the Department not later than the close of business on Monday, November 15, 2021. Receipt by the Department, not mailing, constitutes filing and determines whether a petition has been timely filed. A petition filed late may be disallowed as untimely, unless good cause is shown for waiver under 220 CMR 1.01(4). To be allowed, a petition under 220 CMR 1.03(1) must satisfy the standing requirements of G.L. c. 30A, § 10. All responses to petitions to intervene must be filed by the close of business on the second business day after the petition to intervene was filed.

Ordinarily, all parties would follow Sections B.1 and B.4 of the Department's Standard Ground Rules (D.P.U. 15-184-A, App. 1 (March 4, 2020)) regarding the filing of documents. However, at this time, all filings will be submitted to the Department only in electronic format, consistent with the Department's June 15, 2021 Memorandum addressing continued modified filing requirements. Until further notice, parties must retain the original paper version of the filing and the Department will later determine when the paper version must be filed with the Department Secretary.

All comments or petitions to intervene must be submitted to the Department in .pdf format by e-mail attachment to dpu.efiling@mass.gov and jeffrey.leupold@mass.gov. In addition, all comments or petitions to intervene should be submitted to the Compact's attorneys, Jeffrey M. Bernstein and Audrey Eidelman Kiernan, BCK LAW, P.C., by email attachment to jbernstein@bck.com and akiernan@bck.com. The text of the e-mail must specify: (1) the docket number of the proceeding (D.P.U. 21-126); (2) the name of the person or company submitting the filing; and (3) a brief descriptive title of the document. The electronic file name should identify the document but should not exceed 50 characters in

D.P.U. 21-126 Page 4

length. Importantly, all large files submitted must be broken down into electronic files that do not exceed 20 MB.

At this time, a paper copy of the filing will not be available for public viewing at the Compact's offices or the Department. The filing and other documents submitted in electronic format will be posted as soon as practicable at on the Department's website through our online File Room at: https://eeaonline.eea.state.ma.us/DPU/Fileroom/dockets/bynumber (enter "21-126").

Reasonable accommodations at public hearings for people with disabilities are available upon request. Contact the Department's ADA Coordinator at DPUADACoordinator@mass.gov. Include a description of the accommodation you will need, including as much detail as you can. Also include a way the Department can contact you if we need more information. Please provide as much advance notice as possible. Last minute requests will be accepted, but may not be able to be accommodated. To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), contact the Department's ADA Coordinator at DPUADACoordinator@mass.gov.

Any person desiring further information regarding the Three-Year Plan should contact counsel for the Compact, Jeffrey M. Bernstein and Audrey Eidelman Kiernan, BCK LAW, P.C., at (617) 244-9500. Any person desiring further information regarding this notice should contact Jeffrey Leupold, Hearing Officer, Department of Public Utilities, at ieffrey.leupold@mass.gov.



The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

ORDER OF NOTICE

D.P.U. 21-126 November 2, 2021

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.

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"), are required to publish the attached Notice of Filing and Public Hearing ("Notice") on or before **November 9, 2021**, in (1) either The Boston Globe or the Boston Herald; and (2) the Cape Cod Times.

In addition, the Compact is required to serve a copy of the attached Notice on or before **November 9, 2021**, on: (1) the Mayors, the Chairs of Select Boards, the Town Clerks, and the City Clerks in its service area; (2) the service list in <u>Cape Light Compact JPE</u>, D.P.U. 18-116 (2019); (3) members of the Energy Efficiency Advisory Council convened pursuant to G.L. c. 25, § 22; and (4) any person who has filed a request for notice with the Compact. The Compact's service may be by electronic distribution, which the Department finds reasonable and consistent with the public interest.

Finally, the Compact shall prominently display the Notice on its website from three business days following receipt of the Notice from the Department through **December 3, 2021**.

The Compact shall make proof of publication (including evidence of the required website posting) and return of service by **December 3, 2021**.

By Order of the Department,

/s/ Mark D. Marini, Secretary



CONTACT:
Rachel Gage, on behalf of the Sponsors
of Mass Save
rgage@ksvagency.com

The Sponsors of Mass Save Submit Three-Year Electric and Natural Gas Energy Efficiency Plan Projected to Provide \$13 Billion in Benefits

The Sponsors of Mass Save® have submitted to the Massachusetts Department of Public Utilities (DPU) a three-year electric and natural gas energy efficiency plan for 2022 through 2024 that will provide an estimated \$13 billion in benefits to the Commonwealth. With this energy efficiency framework, Massachusetts continues to lead the nation through its focus on equity that follows a long-established and successful regulatory pathway providing customers with best-in-class energy saving and bill-reduction tools.

For the first time ever, this plan assigns a social cost of carbon value to greenhouse gas emissions (GHG) to measure climate impacts—and the damages avoided through avoided CO₂ emissions. The Sponsors' plan projects a GHG emission reduction of 845,000 tons, which puts Massachusetts on a path to achieving mandated 2030 and 2050 emission reduction targets, including, for the first time, support through gas energy efficiency programs for customers who want to transition to high-efficiency forms of electric heating.

The Energy Efficiency Plan demonstrates the Sponsors' commitment to make the robust investments needed to achieve the Massachusetts Energy Efficiency Advisory Council's residential and income-eligible priorities, including more than \$800 million for electrification incentives and more than \$600 million for targeted equity initiatives. To position the Sponsors' programs—and the Commonwealth in general—for longer-term success, the Plan includes nearly \$50 million in workforce development investments designed to build the diverse and inclusive human capital necessary to drive the cleanenergy transition.

The Plan calls for the following investments between 2022-2024:

- A total budget of \$3.94 billion, including \$800 million in electrification incentives.
- Over \$600 million in targeted equity initiatives, including \$136 million to serve moderate-income (61%-80% of the state median income) customers, including a moderate-income offer of 100% incentive for weatherization and enhanced incentives for heating systems for customers who income-qualify.
- Nearly \$640 million in incentives for residential and income eligible customers to weatherize their homes.

WE ARE MASS SAVE":















"This Three-Year Energy Efficiency Plan filing represents a significant milestone for the Mass Save programs and our work together to help support the Commonwealth's clean energy goals," said Chris Porter, Director, Customer Energy Management at National Grid, and Tilak Subrahmanian, Vice President at Ever source Energy. "As the world focuses its attention on climate change at the COP26 Climate Summit in Glasgow, this plan demonstrates how the Program Administrators will provide Massachusetts customers the tools necessary to maintain the Commonwealth's leadership position tackling the critical need for greenhouse gas emissions reductions. Our plan accomplishes this important goal while staying true to our historical mission of helping all residents and businesses reduce their energy usage and manage energy costs, and we look forward to our continued collaboration."

About Mass Save

Mass Save® is a collaborative of Massachusetts' natural gas and electric utilities and energy efficiency service providers including Berkshire Gas, Cape Light Compact, Eversource, Liberty, National Grid, and Unitil. We empower residents, businesses, and communities to make energy efficient upgrades by offering a wide range of services, rebates, incentives, trainings, and information.

WE ARE MASS SAVE













2021Budgeted (Based on 2021 EES)

	2021 Budgeted (Based on 2021 EES) PA Costs												
Program	PP&A		Marketing		Incentives		STAT		EMV		Total PA Costs		
A - Residential	#########		\$	782,814	82,814 ###		#########		\$	596,133	***************************************		
A1 - Residential New Buildings	\$	66,115	\$	27,609	\$	755,235	\$	190,546	4		4	1,039,50	
Ala - Residential New Homes & Renovations	\$	66,115	\$	27,609	\$	755,235	\$	190,546	\$	-	\$	1,039,504	
A2 - Residential Existing Buildings	\$	1,261,424	\$	493,549	\$	15,093,348	\$	5,581,736	\$	-	\$	22,430,05	
A2a - Residential Coordinated Delivery	\$	719,895	\$	186,558	\$	10,763,380	\$	2,294,245	\$	-	\$	13,964,07	
A2b - Residential Conservation Services (RCS)	\$	136,319	\$	50,643	\$		\$	1,779,672	\$	-	\$	1,966,63	
A2c - Residential Retail	\$	325,987	\$	233,629	\$	4,147,049	\$	618,731	\$	-	\$	5,325,39	
A2d - Residential Behavior	\$	43,525	\$	9,163	\$		\$	631,641	\$	-	\$	684,32	
A2e - Residential Active Demand Reduction	\$	35,698	\$	13,556	\$	182,919	\$	257,446	\$	-	\$	489,61	
A3 - Residential Hard-to-Measure	\$	365,668	\$	261,656	\$	1,810,464	\$	237,276	\$	596,133	\$	3,271,19	
A3a - Residential Statewide Marketing	\$		\$	159,797	\$		\$		s		s	159.79	
A3b - Residential Statewide Database	\$	1.000	\$	-	\$	-	s	-	s	-	\$	1.00	
A3c - Residential DOER Assessment	\$	157,723	\$		\$	-	\$	-	\$	-	\$	157.72	
A3d - Residential Sponsorships & Subscriptions	\$	-	\$		\$	-	s	-	s	-	s	-	
A3e - Residential Workforce Development	\$		\$	-	\$	-	s	37,590	\$	-	s	37,59	
A3f - Residential Evaluation and Market Research	\$		\$		\$		\$		\$	596,133	\$	596,13	
A3g - Residential EEAC Consultants	\$	88.867	\$		\$		s		s		s	88.86	
A3h - Residential R&D and Demonstration	\$		\$		\$		s		\$		\$		
A3i - Residential HEAT Loan	\$	118.078	\$	26.859	\$	1.810.464	s	149,686	\$		\$	2.105.08	
A3i - Residential Education	\$	110,070	\$	75,000	\$	1,010,101	s	50,000	\$		\$	125.00	
B - Income Eligible	\$	366.628	\$	114,122	÷	4.126.278	\$,	S	135,358	Ė	5,555,158	
B1 - Income Eligible Existing Buildings	\$	290,145	\$	95,549	\$	4.126.278	5	787,772	\$	133,330	5	5.299.74	
BIa - Income Eligible Coordinated Delivery	\$	290,145	\$	95,549	\$	4,126,278	\$	787,772	\$	-	\$	5,299,74	
B1b - Income Eligible Active Demand Reduction	\$		\$		\$		\$		\$		\$		
B2 - Income Eligible Hard-to-Measure	\$	76,483	\$	18,573	\$		\$	25,000	\$	135,358	\$	255,41	
B2a - Income Eligible Statewide Marketing B2b - Income Eligible Statewide Database	\$	1.013	\$ 5	18,573	\$		\$	-	\$	-	\$	18,57	
B2c - Income Eligible DOER Assessment	\$	45,883	\$		\$		\$		\$		\$	45.88	
B2d - Income Eligible Sponsorships & Subscriptions	\$	-	\$		\$	-	s	-	s	-	s	-	
B2e - Income Eligible Workforce Development	\$		\$		\$		s	25,000	s		s	25.00	
B2f - Income Eligible Evaluation and Market Research	\$		\$	-	\$		\$		\$	135,358	\$	135,35	
B2g - Income Eligible Energy Affordability Network	\$	29,587	\$		\$		\$	-	\$	-	\$	29,58	
C - Commercial & Industrial	#	***************************************	s	394,036		************		***********	S	731,147	1	************	
C1 - C&I New Buildings	\$	44,124	\$	8,522	\$	690,000	s	101.359	s	-	s	844.00	
C1a - C&I New Buildings & Major Renovations	\$	44,124	\$	8,522	\$	690,000	s	101.359	s	-	s	844.00	
C2 - C&I Existing Buildings	\$	1,180,259	\$	351.252	\$	13,027,475	s	1.603.825	s		\$	16,162,81	
C2a - C&I Existing Building Retrofit	\$	949,582	\$	278,499	\$	10.592.498	s	996,619	s	-	s	12.817.19	
C2b - C&I New & Replacement Equipment	\$	90,507	\$	46.662	\$	1,163,752	\$	211.055	\$		\$	1,511,97	
C2c - C&I Active Demand Reduction	\$	140,170	\$	26.091	\$	1,271,225	\$	396.151	\$		\$	1,833,63	
C3 - C&I Hard-to-Measure	\$	98.070	\$	34,261	\$	37,500	s	28,354	\$	731,147	\$	929.33	
C3a - C&I Statewide Marketing	\$	70,070	\$	29.261	\$	-	s	-	s		s	29.26	
C3b - C&I Statewide Patabase	\$	1.394	\$	27,201	\$		S		\$		\$	1.39	
C3c - C&I DOER Assessment	\$	83,162	\$		\$		\$		\$		\$	83,16	
	\$	83,162	\$		\$		\$		\$		\$	83,16	
C3d - C&I Sponsorships & Subscriptions C3e - C&I Workforce Development	\$		\$	5.000	\$		S	28.354	\$		\$	33.35	
C3e - C&I Workforce Development C3f - C&I Evaluation and Market Research	\$				\$				\$	731.147		731.14	
			\$				\$	-			\$	/31,14	
C3g - C&I EEAC Consultants C3h - C&I R&D and Demonstration	\$	13,514	\$		\$	37.500	\$		\$		\$	37.50	
	<u> </u>	-	÷	-	÷		-	-	÷	-	÷		
Grand Total	Ħ	************	7	**********		**********	,	******	#	******	7	******	

2021 Actuals through October 2021												
	PA Costs											
Program		PP&A	Ma	arketing	-	ncentives		STAT		EMV	-	Total PA Costs
A - Residential	Ħ	***************************************	\$4	104,906	#	************	#	*********	\$	533,822	#	************
AI - Residential New Buildings	\$	38,234	\$	19,861	\$	478,544	\$	111,779	\$	-	\$	648,418
Ala - Residential New Homes & Renovations	\$	38,234	\$	19,861	\$	478,544	\$	111,779	\$		\$	648,418
A2 - Residential Existing Buildings	\$	736,683	\$	304,884	\$	15,441,739	\$	3,500,955	\$	-	\$	19,984,262
A2a - Residential Coordinated Delivery	\$	416,314	\$	118,601	\$	10,566,324	\$	1,630,877	\$	-	\$	12,732,116
A2b - Residential Conservation Services (RCS)	\$	84,088	\$	19,236	\$		\$	1,219,067	\$	-	\$	1,322,390
A2c - Residential Retail	\$	188,518	\$	152,969	\$	4,541,904	\$	447,377	\$	-	\$	5,330,768
A2d - Residential Behavior	\$	25,170	\$	7,357	\$	310,737	\$	127,024	\$	-	\$	470,288
A2e - Residential Active Demand Reduction	\$	22,593	\$	6,722	\$	22,775	\$	76,610	\$	-	\$	128,700
A3 - Residential Hard-to-Measure	\$	234,487	\$	80,161	\$	2,046,278	\$	169,372	\$	533,822	\$	3,064,121
A3a - Residential Statewide Marketing	\$		\$	62,585	\$	-	\$	-	\$	-	\$	62,585
A3b - Residential Statewide Database	\$	969	\$		\$		\$	-	\$	-	\$	969
A3c - Residential DOER Assessment	\$	134,309	\$		\$		\$	-	\$	-	\$	134,309
A3d - Residential Sponsorships & Subscriptions	\$		\$		\$		\$	-	\$	-	\$	-
A3e - Residential Workforce Development	\$		\$		\$		\$	5,884	\$	-	\$	5,884
A3f - Residential Evaluation and Market Research	\$		\$		\$		\$	-	\$	533,822	\$	533,822
A3g - Residential EEAC Consultants	\$	30,925	\$		\$		\$	-	\$	-	\$	30,925
A3h - Residential R&D and Demonstration	\$		\$		\$		\$	-	\$	-	\$	-
A3i - Residential HEAT Loan	\$	68,284	\$	15,662	\$	2,046,278	\$	147,490	\$	-	\$	2,277,714
A3j - Residential Education	\$		\$	1,914	\$		\$	15,999	\$	-	\$	17,913
B - Income Eligible	\$	223,923	\$	58,148	\$	1,645,904	\$	362,284	\$	131,570	\$	2,421,828
BI - Income Eligible Existing Buildings	4	170,730	\$	43,705	8	1,645,904	\$	357,865	\$		\$	2,218,205
B1a - Income Eligible Coordinated Delivery	\$	170,730	\$	43,705	\$	1,645,679	\$	357,849	\$		\$	2,217,964
B1b - Income Eligible Active Demand Reduction B2 - Income Eligible Hard-to-Measure	\$ \$	53,193	\$	14,443	9	225	\$	4,418	\$	131,570	\$	241
B2a - Income Eligible Statewide Marketing	\$	-	\$	14,443	\$	-	\$	- 1,110	\$	-	\$	14,443
B2b - Income Eligible Statewide Database	\$	167	\$	-	\$	-	\$	-	\$	-	\$	167
B2c - Income Eligible DOER Assessment	\$	39,072	\$		\$		\$		\$		\$	39,072
B2d - Income Eligible Sponsorships & Subscriptions	\$		\$		\$		\$		\$		\$	
B2e - Income Eligible Workforce Development	\$	-	\$		\$	-	\$	4,418	\$	131,570	\$	4,418
B2f - Income Eligible Evaluation and Market Research	\$.	-	\$		\$		\$	-	\$	131,5/0	\$	
B2g - Income Eligible Energy Affordability Network	\$	13,954	\$		\$		\$		\$		\$	13,954
C - Commercial & Industrial	\$	737,838		71,798		5,090,228	\$	746,649	\$	515,816	_	7,362,329
C1 - C&I New Buildings	\$	28,945	\$	5,388	\$	77,441	\$	54,292	\$	-	\$	166,067
C1a - C&I New Buildings & Major Renovations	\$	28,945	\$	5,388	\$	77,441	\$	54,292	\$	-	\$	166,067
C2 - C&I Existing Buildings	\$	632,709		223,082	\$	5,012,787	\$	690,841	\$	-	\$	6,559,419
C2a - C&I Existing Building Retrofit	\$	513,855		43.109	\$	4,395,150	\$	403,555	\$	-	\$	5,477,374
C2b - C&l New & Replacement Equipment	\$	49,643	\$,	\$	603,615	\$	124,186	\$	-	\$	820,553
C2c - C&l Active Demand Reduction	\$	69,210	\$	15,158	\$	14,023	\$	163,100	\$		\$	261,491
C3 - C&l Hard-to-Measure	\$	76,184	\$	43,328	\$		\$	1,515	\$	515,816	\$	636,843
C3a - C&I Statewide Marketing	\$		\$	43,328	\$		\$	-	\$	-	\$	43,328
C3b - C&I Statewide Database	\$	535	\$	-	\$		\$	-	\$	-	\$	535
C3c - C&I DOER Assessment	\$	70,818	\$	-	\$		\$	-	\$	-	\$	70,818
C3d - C&I Sponsorships & Subscriptions	\$		\$		\$		\$		\$	-	\$	
C3e - C&l Workforce Development	\$	-	\$	-	\$	-	\$	1,515	\$	-	\$	1,515
C3f - C&l Evaluation and Market Research	\$	4077	\$	-	\$	-	\$	-	\$	515,816	\$	515,816
C3g - C&l EEAC Consultants	s	4,832	\$	-	\$	-	\$	-	\$	-	\$	4,832
C3h - C&I R&D and Demonstration	÷	-	÷		÷	-	÷	-	·	-	·	-
Grand Total	Ħ	***************************************	\$7	34,852	,	************	#	**********	#	**********	#	***************************************

		PA Cos	ts		110140					
Program	PP&	PP& Incentive STA								
-		Marketing	s	т.	EMV	PA				
A - Residential	A 59.6%	51.7%	101.7%	62.9%	####	88.6				
A1 - Residential New Buildings	57.8%	71.9%	63.4%	58.7%	0.0%	62.4				
Ala - Residential New Homes & Renovations	57.8%	71.9%	63.4%	58.7%	0.0%	62.4				
			102.3%		0.0%	89.1				
A2 - Residential Existing Buildings	58.4%	61.8%		62.7%	0.070					
A2a - Residential Coordinated Delivery	57.8%	63.6%	98.2%	71.1%	0.0%	91.2				
A2b - Residential Conservation Services (RCS)	61.7%	38.0%	0.0%	68.5%	0.0%	67.2				
A2c - Residential Retail	57.8%	65.5%	109.5%	72.3%	0.0%	100.1				
A2d - Residential Behavior	57.8%	80.3%	0.0%	20.1%	0.0%	68.7				
A2e - Residential Active Demand Reduction	63.3%	49.6%	12.5%	29.8%	0.0%	26.3				
A3 - Residential Hard-to-Measure	64.1%	30.6%	113.0%	71.4%	89.5%	93.7				
A3a - Residential Statewide Marketing	0.0%	39.2%	0.0%	0.0%	0.0%	39.2				
A3b - Residential Statewide Database	96.9%	0.0%	0.0%	0.0%	0.0%	96.9				
A3c - Residential DOER Assessment	85.2%	0.0%	0.0%	0.0%	0.0%	85.2				
A3d - Residential Sponsorships & Subscriptions	0.0%	0.0%	0.0%	0.0%	0.0%	0.0				
A3e - Residential Workforce Development	0.0%	0.0%	0.0%	15.7%	0.0%	15.7				
A3f - Residential Evaluation and Market Research	0.0%	0.0%	0.0%	0.0%	89.5%	89.5				
A3g - Residential EEAC Consultants	34.8%	0.0%	0.0%	0.0%	0.0%	34.8				
A3h - Residential R&D and Demonstration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0				
A3i - Residential HEAT Loan	57.8%	58.3%	113.0%	98.5%	0.0%	108.2				
A3i - Residential Education	0.0%	2.6%	0.0%	32.0%	0.0%	14.3				
B - Income Eligible	61.1%	51.0%	39.9%	44.6%	####	43.6				
BI - Income Eligible Existing Buildings	58.8%	45.7%	39.9%	45.4%	0.0%	41.9				
B1a - Income Eligible Coordinated Delivery	58.8%	45.7%	39.9%	45.4%	0.0%	41.9				
B1b - Income Eligible Active Demand Reduction	0.0%	0.0%	0.0%	0.0%	0.0%	0.0				
B2 - Income Eligible Hard-to-Measure B2a - Income Eligible Statewide Marketing	69.5%	77.8% 77.8%	0.0%	17.7%	97.2%	79.7 77.8				
B2b - Income Eligible Statewide Database	16.5%	0.0%	0.0%	0.0%	0.0%	16.5				
B2c - Income Eligible DOER Assessment	85.2%	0.0%	0.0%	0.0%	0.0%	85.2				
B2d - Income Eligible Sponsorships & Subscriptions	0.0%	0.0%	0.0%	0.0%	0.0%	0.0				
B2e - Income Eligible Workforce Development	0.0%	0.0%	0.0%	17.7%	0.0%	17.7				
B2f - Income Eligible Evaluation and Market Research	0.0%	0.0%	0.0%	0.0%	97.2%	97.2				
B2g - Income Eligible Energy Affordability Network	47.2%	0.0%	0.0%	0.0%	0.0%	47.2				
C - Commercial & Industrial	55.8%	69.0%	37.0%	43.1%	####	41.0				
CI - C&I New Buildings	65.6%	63.2%	11.2%	53.6%	0.0%	19.7				
C1a - C&I New Buildings & Major Renovations	65.6%	63.2%	11.2%	53.6%	0.0%	19.7				
C2 - C&I Existing Buildings	53.6%	63.5%	38.5%	43.1%	0.0%	40.6				
C2a - C&I Existing Building Retrofit	54.1%	59.2%	41.5%	40.5%	0.0%	42.7				
C2b - C&I New & Replacement Equipment	54.9%	92.4%	51.9%	58.8%	0.0%	54.3				
C2c - C&I Active Demand Reduction	49.4%	58.1%	1.1%	41.2%	0.0%	14.3				
C3 - C&I Hard-to-Measure	77.7%	126.5%	0.0%	5.3%	70.5%	68.5				
C3a - C&I Statewide Marketing	0.0%	148.1%	0.0%	0.0%	0.0%	148.1				
C3b - C&I Statewide Planketing	38.3%	0.0%	0.0%	0.0%	0.0%	38.3				
	85.2%	0.0%	0.0%	0.0%	0.0%	85.2				
C3c - C&I DOER Assessment	0.0%	0.0%	0.0%	0.0%	0.0%	0.0				
C3d - C&I Sponsorships & Subscriptions						4.5				
C3e - C&I Workforce Development	0.0%	0.0%	0.0%	5.3%	0.0%					
C3f - C&l Evaluation and Market Research	0.0%	0.0%	0.0%	0.0%	70.5%	70.5				
C3g - C&I EEAC Consultants	35.8%	0.0%	0.0%	0.0%	0.0%	35.8				
C3h - C&I R&D and Demonstration	0.0%	0.0%	0.0%	0.0%	0.0%	0.0				
Grand Total	58.3%	56.9%	69.5%	57.2%	####	66.7				