

Cape Light Compact JPE Executive Committee & Governing Board Meeting

DATE: Wednesday, July 21, 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, July 20, 2021 and should follow the public comment protocol below. Public comments received after the July 20th deadline will be distributed prior to the Compact's next Board meeting.

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

Meeting ID: 864 0507 1817

[Further instructions are attached to this agenda.](#)

AGENDA

1. Public Comment – Written Only
2. Approval of June 9, 2021 Compact Board Open Session Minutes
3. Chairman's Report, Martin Culik
 - A. Testimony at Public Hearing on House Bill 3360
 - B. Introduce New Town of Bourne Alternate Board Member
4. Discussion and Potential Vote to Amend Article V.D, Manner of Acting and Quorum of the Cape Light Compact Joint Powers Agreement and to authorize Counsel to prepare a Second Amended and Restated JPA incorporating the same, Jeffrey Bernstein, Esq.
5. Administrator's Report, Maggie Downey
 - A. Review, Discuss and Potential Vote Regarding the Eversource Grid Modernization Plan, DPU 21-80, Using the Compact's Consumer Advocacy Worksheet
 - B. Main Streets Handout – lists towns and dates
 - B. Introduction of New Senior Power Supply Planner, Mariel Marchand
 - C. Discuss creating social media posts for interested Board Members
 - D. Update on Energize the Cape & Vineyard Proposal
 - E. Update on USDA Rural Utilities Service Loan
 - F. Discuss Vacation Buy-Back Proposal for Compact Staff
6. Board Member Update (Reserved for Updates on Member Activities the Chair Did Not Reasonably Anticipate Would be Discussed – No Voting)
7. **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 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 and the 2022-2024 Energy Efficiency Plan, not to return to open session thereafter. **Participation in the Executive Session is limited to CLC Board Members, CLC Staff and Invited Guests**

**Chairman's Public Comment Protocols
for the July 21, 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 July 21, 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, July 20, 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 June 8th 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, July 21, 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
Wednesday, June 9, 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 Wednesday, June 9, 2021 at 2 p.m. The meeting was held through a Zoom videoconference for members of the Board with audio call-in available for members of the public.

Participating Remotely Were:

1. Forest Filler, Aquinnah
2. David Anthony, Secretary/Executive Committee, Barnstable
3. Robert Schofield, Executive Committee, Bourne
4. Colin Odell, Executive Committee, Brewster
5. Peter Cocolis, Chatham
6. Brad Crowell, Dennis
7. Erik Peckar, Dukes County
8. Fred Fenlon, Eastham
9. Alan Strahler, Edgartown
10. Ronald Zweig, Falmouth
11. Richard Toole, Executive Committee, Oak Bluffs
12. Martin Culik, Chair/Executive Committee, Orleans
13. Nathaniel Mayo, Provincetown
14. Leanne Drake, Sandwich
15. Jay Grande, Tisbury Alternate
16. Bob Higgins-Steele, Truro Alternate
17. Richard Elkin, Executive Committee, Wellfleet
18. Sue Hruby, West Tisbury
19. Joyce Flynn, Vice Chair/Executive Committee, Yarmouth

Absent Were:

1. Timothy Carroll, Executive Committee, Chilmark
2. Valerie Bell, Harwich
3. Wayne Taylor, Mashpee
4. Kirk Metell, Tisbury
5. Jarrod Cabral, Truro

Legal Counsel Participating Remotely:

Jeffrey Bernstein, Esq., BCK Law, P.C.

Staff Participating Remotely:

Austin Brandt, Senior Power Supply Planner

Maggie Downey, Administrator

Melissa Allard, Senior Administrative Coordinator

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 May 12, 2021 Open Session Meeting Minutes.

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

Forrest	Filler	Aquinnah	Yes
David	Anthony	Barnstable	Yes
Robert	Schofield	Bourne	Abstained
Colin	Odell	Brewster	Yes
Peter	Cocolis	Chatham	Yes
Brad	Crowell	Dennis	Yes
Erik	Peckar	Dukes County	Yes
Fred	Fenlon	Eastham	Yes
Alan	Strahler	Edgartown	Yes
Ron	Zweig	Falmouth	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	Abstained
Joyce	Flynn	Yarmouth	Yes

Motion carried in the affirmative (15-0-2)

The Board considered the May 25, 2021 Open Session Meeting Minutes.

Joyce Flynn moved the Board to accept the minutes as amended and to release them as amended, seconded by Richard Elkin.

David	Anthony	Barnstable	Yes
Robert	Schofield	Bourne	Abstained
Colin	Odell	Brewster	Yes
Richard	Toole	Oak Bluffs	Yes
Martin	Culik	Orleans	Yes

Richard	Elkin	Wellfleet	Yes
Joyce	Flynn	Yarmouth	Yes

Motion carried in the affirmative (6-0-1)

CHAIR REPORT:

1. Testimony at Public Hearing on Senate Bill 2104 and House Bill 3213

Martin Culik stated there was a public hearing on Senate bill 2104 and House bill 3213. Both of these bills are related to extending remote participation for public meetings. He noted that there should be some decision regarding remote participation before the June 15th expiration of Governor Baker's Emergency Declaration relative to the pandemic.

2. Use of "chat" function when arriving or leaving Zoom meeting

Martin Culik asked Board Members who are joining the meeting late or leaving the meeting early, to send Melissa Allard a message so that she can document their arrival/departure time for the Minutes.

John Grande and Richard Toole joined meeting at 2:09 PM.

FOLLOW-UP TO APRIL BOARD MEETING DISCUSSION: PRESENTATION ON CAPE LIGHT COMPACT GREEN AGGREGATION OFFERING, AUSTIN BRANDT AD NEXTERA ENERGY SERVICES

Austin Brandt reviewed the Cape Light Compact Power Supply Overview PowerPoint. He stated that in 2016 the Board had several discussions on whether the Compact wanted to change the power supply aggregation strategy as part of the upcoming contract extension negotiations. He stated as part of the strategy discussion the Compact held several public outreach meetings to get a sense from the community what it liked or disliked about the Compact's power supply offering. As a result of the discussion, the Board decided on November 9, 2016 to change the renewable strategy for the default aggregation product. He noted that in 2018, when it was time to go out with a competitive solicitation (using a Request for Proposals (RFP) process) for a supplier for the aggregation program, the Board affirmed the policy changes in 2016 and also asked that the RFP seek new options that suppliers might be willing to offer and to ensure that suppliers supported the Compact's Green opt-in offering.

Austin Brandt stated that the current power supply contract RFP was issued on February 28, 2018. He stated that as always, the RFP review process and supplier selection process involved Maggie Downey as the Chief Procurement Officer and himself as the Power Supply Planner. He stated that three Board Members, a technical consultant, and Compact counsel also participated in the process. He stated that three suppliers responded to the RFP and the Compact selected NextEra to be the supplier for the aggregation program starting in December 2018. He explained that the current contract with NextEra includes the following features: 1) it exceeds the Massachusetts Renewable Portfolio Standard by 1%; 2) it retires additional 99% of EarthEra voluntary Renewable Energy Certificates (RECs); 3) it contributes supplier service fees and EarthEra REC revenues into a trust to build new renewable energy projects, and 4) it includes a 20-year power purchase agreement of 5 MW of solar energy and RECs from a solar farm in Maine.

Austin Brandt stated that the Compact's opt-in Local Green options began in 2019. Customers can enroll in the program and match their electric usage, for a reasonable premium of around 1.3 cents/kWh for an additional

50% Class I RECs and around 2.7 cents/kWh for an additional 100% Class I RECs. He stated to the Compact's knowledge it exceeds renewable content at a lower cost than all other comparable offerings of municipal aggregators in Massachusetts.

Austin Brandt started reviewing the CLC Board Update PowerPoint. He stated that Massachusetts, through the passage of various laws over the past few years, has been steadily increasing renewable standards, which impacts the percentage of renewables included in the Compact's, and all suppliers', offerings Austin Brandt reviewed the graph showing how increasing REC prices, as well as increasing mandates, have led to higher electric rates to cover mandated and voluntary renewable content since 2017. He also reviewed a graph of the increases to the Class 1 RPS, and the implementation of the Clean Energy Standard (CES) have increased MA Class I REC prices. He stated it is difficult to keep control of the price range or Class 1 RECs we retire because they are a market product, and the prices are driven by supply and demand.

Melva Deshmukh from NextEra Energy shared her PowerPoint presentation with the CLC Governing Board. She stated that NextEra has been supplying the Compact with an 100% renewable program since 2017 by supplying EarthEra RECs for 100% of the Compact's load. She stated that this is above and beyond the Massachusetts RPS and CES requirements for 2021 of 54.3%. She stated that it complies with the Massachusetts RPS requirements and then on top of that it retires 1% of the load Class I RECs and then 99% of the total load so that the Compact is truly 100% renewable.

Melva Deshmukh stated that EarthEra RECs are voluntary RECs. They come from the NextEra wind and solar projects around the United States. She stated that all proceeds from EarthEra voluntary REC purchases, as well as all service fees paid to NextEra, are deposited into the EarthEra Trust, and used toward new renewable projects. She stated that per the Compact's request, funds deposited into the EarthEra Trust on behalf of the CLC contract are disbursed toward new renewable projects in New England whenever possible.

Melva Deshmukh stated that the EarthEra Renewable Energy Trust was created back in 2008 to generate additionality when purchasing RECs generated from existing NextEra Energy renewable projects. EarthEra RECs are generated by existing NextEra-owned wind and solar projects that have been built in the last 15 years. Since 2009, EarthEra Renewable Trust has disbursed funds to six projects in five states across the United States. The Compact's Power Supply Program has contributed over \$14MM to the EarthEra Trust and \$13.4 MM went towards new renewable projects in New England.

Richard Elkin asked if the graph on slide five about the required certificates as a percentage of load could be projected out to 2035 to see where regulations may be going. Austin Brandt stated that he believes they can based on existing laws and regulations. However, the Compact would not be able to do the breakouts of solar 1 and solar 2 RECs since those are not set that far in advance. Richard Elkin stated that he is just looking for an overall planning sense about where we will be in terms of renewable energy. Austin Brandt stated that he believes with the CES it would get us to 80% across all these categories except for the clean peak standard by 2050.

Alan Strahler asked if there is a way for the Compact to revisit having more Class 1 RECs as a part of the Compact's basic power supply option. Austin Brandt stated that would be a strategy change. He stated that the current contract with NextEra is up at the end of 2023. Therefore, the Compact's Power Supply Planner and Maggie Downey will be working with the Board to decide what the Compact wants to do at the end of that contract. He stated that the Compact has an extension option in the contract or there is the option to go back out to bid. Either way, that is the time to talk about strategy. Maggie Downey stated that the Board needs to determine whether it wants to revise its strategy. She stated that this has been discussed before. She would like

input as to whether the Compact's customers are more price sensitive or more renewable content sensitive? She stated that work needs to be done to determine the answer to these questions.

Erik Peckar asked if an opt down option was ever discussed. Maggie Downey stated that it was not discussed at the time the Compact was going out to bid for a competitive supplier because the Board affirmed it wanted opt-in greener options. She stated to go the other way around would put the Compact's price in a large delta above the utilities and would likely require the Compact having to update its Aggregation Plan with the Department of Public Utilities. Austin Brandt stated that an opt down option is relatively new, and the Compact is going to want to look at the town's annual aggregation reports to see whether customers are opting down or opting out. He stated from his experience people are going to opt out. Erik Peckar asked if this was something the Compact would consider surveying customers about to see if they would be willing to pay a small percentage more for renewable energy. Maggie Downey stated that she will get back to the Board with a recommendation on this as part of the 2022 budget process.

Martin Culik asked when the contract with NextEra ends. Maggie Downey stated the end of 2023 with an option to extend for another 3 years. She stated either way the policy and parameters can be handled whether the Compact extends or goes out to bid.

Nate Mayo stated when talking about the local green option and the premiums, people tend to get lost in the math. There needs to be more clarity. He stated people want to know where the energy comes from and how much extra is it going to cost them. He stated he thinks, with better clarity on these issues, there are many people that are willing and eager to pay a modest premium. Austin Brandt stated that those are great points - how the Compact differentiates between these offerings and how it has been a challenge since the local green program began. He stated when talking about the standard and local green options he talks about where the energy comes from. He stated that there is also a calculator on the website for customers to put in their monthly kWh and calculate additional costs per month if they were to opt into the local green program.

DISCUSSION AND POTENTIAL VOTE TO AMEND ARTICLE V.D, MANNER OF ACTING AND QUORUM. OF THE CAPE LIGHT COMPACT JOINT POWERS AGREEMENT, JEFFREY BERNSTEIN

Jeff Bernstein stated that there is some traction in passing some legislation before the 15th of June. This legislation that would extend remote meeting protocols through April 2022.

Jeff Bernstein stated that it is recommended the Compact also consider an alternative, or additional, route that would allow for a reduced in-person total quorum. The Compact cannot change the JPA such that remote participants count towards the quorum. The Governing Board, however, can propose an amendment to the JPA with respect to what constitutes an in-person quorum. He stated that the Compact would have to give a 30 days' notice to the member towns.

Richard Elkin stated that in case no legislation is passed, the Compact should move forward with preparing such a JPA amendment. It can always be terminated at the next meeting. Sue Hruby stated that she agrees. Colin Odell stated that he is in favor of it being moved forward as well. He stated that if it is being sent to town select boards that it needs to have a well-crafted cover letter that indicates the Compact board is preparing to act in case the state does not allow remote meetings in the future. Maggie Downey stated that she will do so and that she is meeting with the town managers tomorrow so she will bring this up and let them know it is coming. She stated that Board Members will be copied on it and asked if they could speak to their towns. Martin Culik asked for a sense of the Board on moving forward with the preparations. Sense of the Board was yes.

CONTINUE DISCUSSION ON ENERGIZE THE CAPE & VINEYARD PROPOSAL PRESENTED AT THE MAY 12, 2021 COMPACT BOARD MEETING

Martin Culik stated that the executive committee met on May 25th. The executive committee indicated an interest in proceeding with development of a MOU between the Compact and the Cape Cod Climate Change Collaborative outlining the roles and responsibilities. He stated that the MOU is being worked on by Maggie Downey and Barry Margolin. He asked for a sense of the Board on whether they support the development of the MOU identifying the roles and responsibilities of the partners and bringing it back to the Board later for a discussion and vote. Sense of the Board was yes.

ADMINISTRATOR'S REPORT:

1. Consumer Advocacy Worksheet Update

Maggie Downey stated that the last time the consumer advocacy worksheet was discussed there was an allocation of 70/30 split on the DPU grid modernization and the rate case. She stated that she has instructed counsel to track their time according to the subject matter because they are now very specific. She stated that it is either all about energy efficiency or power supply. She stated that we do not need to prorate those invoices.

2. Reschedule July Board Meeting from July 14 to July 21

Maggie Downey stated that the next Board Meeting will be moved from July 14th to the 21st due to scheduling conflict. She will send out the calendar invite and asked Board Members to accept or decline it to see how many are able to attend.

3. Executive Session Minutes

Maggie Downey stated that she, counsel, and secretary of the Board, David Anthony have reviewed executive session minutes as directed by the Board. She stated that there are no changes in terms of release of any minutes that are being held on a confidential basis – there is still a basis to hold all such redacted minutes confidential.

4. 2020 Annual Report

Maggie Downey stated that the Compact filed its 2020 annual report for the energy efficiency program. She stated it has been posted to the website if anyone want to review it.

Open Session Vote on entry into Executive Session pursuant to M.G.L. c. 30A §§21(a)(3) and (10) to discuss matters below, to return to open session:

Martin Culik at 3:52 PM moved to enter 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); and (2) to discuss 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, not to return to open session thereafter. Seconded by Joyce Flynn.

David	Anthony	Barnstable	Yes
Robert	Schofield	Bourne	Yes
Colin	Odell	Brewster	Yes
Peter	Cocolis	Chatham	Yes
Brad	Crowell	Dennis	Yes
Fred	Fenlon	Eastham	Did not vote due to technical issues
Alan	Strahler	Edgartown	Yes
Ron	Zweig	Falmouth	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 (15-0-0)

Respectfully submitted,

Melissa Allard

LIST OF DOCUMENTS AND EXHIBITS:

- Meeting Notice/Agenda
- May 12, 2021 Draft Meeting Minutes
- May 25, 2021 Draft Executive Committee Meeting Minutes
- Solarize Cape & Vineyard Proposal PowerPoint
- Cape Light Compact Power Supply Overview PowerPoint
- CLC Board Update PowerPoint
- 2021 Operating Budget
- 2021 Energy Efficiency Budget

**Agenda Action Request
Cape Light Compact
Meeting Date: 7/21/2021**



- Aquinnah
- Barnstable
- Bourne
- Brewster
- Chatham
- Chilmark
- Dennis
- Dukes County
- Eastham
- Edgartown
- Falmouth
- Harwich
- Mashpee
- Oak Bluffs
- Orleans
- Provincetown
- Sandwich
- Tisbury
- Truro
- Wellfleet
- West Tisbury
- Yarmouth

Proposed Amendment to the First Amended and Restated Joint Powers Agreement of the Cape Light Compact JPE (Joint Powers Agreement)

Proposed Motion(s)

I move the CLCJPE Board of Directors vote to amend the Compact's First Amended and Restated Joint Powers Agreement as presented in the June 4, 2021, Memorandum from BCK Law, Compact counsel, and to authorize Compact Counsel to prepare a Second Amended and Restated JPA incorporating the proposed amendments with an effective date of July 21, 2021.

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.

Additional Information

Please refer to the attached June 4, 2021 memorandum.

Record of Board Action

Motion by:	Second by:	# Aye	# Nay	# Abstain	Disposition



ATTORNEYS AT LAW

The firm has attorneys admitted to practice in Massachusetts, Idaho, Vermont, District of Columbia and New Hampshire (Inactive)

TELEPHONE: 617.244.9500
FACSIMILE: 802.419.8283
E-MAIL: bckboston@bck.com
WEBSITE: www.bck.com

MEMORANDUM

TO: Cape Light Compact JPE Governing Board and Administrator
FROM: BCK Law, P.C./EMO
DATE: June 4, 2021
RE: Quorum Issues/Amending the JPA

I. BACKGROUND

The purpose of this memorandum is to provide the Governing Board of the Cape Light Compact JPE (the "Compact") with background information regarding the quorum requirements under the Open Meeting Law ("OML") and the Compact's First Amended and Restated Joint Powers Agreement dated December 13, 2017 (the "JPA"), and make recommendations regarding amending the JPA quorum provisions.

II. DISCUSSION

A. Applicable OML Provisions and New OML Bills

Under the OML, a quorum is defined as "a simple majority of the members of the public body, unless otherwise provided in a general or special law, executive order or other authorizing provision." G.L. c. 30A, § 18. The remote participation regulations promulgated under the OML separately require a quorum be physically present. 940 CMR 29.10(4)(b) provides as follows: "[a] quorum of the body, including the chair or, in the chair's absence, the person authorized to chair the meeting, shall be *physically present* at the meeting location, as required by M.G.L. c. 30A, § 20(d.)" (emphasis added.)

On March 12, 2020, in response to the pandemic, Governor Baker issued an Executive Order Suspending Certain Provisions of the Open Meeting Law (the "Order"). Among other things, the Order expressly permits all members of a public body to participate in a meeting remotely, and it suspended the Open Meeting Law's requirement that a quorum of the body as well as the body's chair be physically present at the meeting. The Governor is ending the pandemic emergency orders on June 15, 2021, though there are efforts to extend the OML Order

through September 1, 2021. New bills have also been introduced to permanently permit remote participation for all members of public bodies under the OML (H.B. 3213 and S.B. 2104), and hearings on these bills were held on June 1, 2021.

B. JPA Provisions Regarding Quorum

As noted above, under the OML, a quorum is defined as “a simple majority of the members of the public body, ***unless otherwise provided in a general or special law, executive order or other authorizing provision.***” G.L. c. 30A, Section 18 (emphasis added). On the mass.gov website, there is a page for FAQs about the OML and it states “[t]he Open Meeting Law does not define what constitutes an ‘authorizing provision,’ but where a general or special law sets a body’s or type of body’s number of members or quorum requirement, no other provision can set a different number or requirement.” See <https://www.mass.gov/service-details/frequently-asked-questions-about-the-open-meeting-law-public-bodies-quorum-and>). In BCK’s view, the “authorizing provision” could be the Joint Powers Statute, or the JPA, or both. In 2017, the OAG agreed that the JPA could establish OML quorum requirements in communications with BCK.

In order for the Compact to address the difficulty in obtaining a physical quorum, it will need to lower the quorum to a number which is less than a majority of the Governing Board members. The current quorum requirement is as follows:

Art. V(D) Manner of Acting and Quorum.

The Governing Board shall act by vote of a majority of the Directors of the Municipal Members present and voting at the time of the vote. (emphasis added). Unless altered by the Governing Board in accordance with this Agreement, each Municipal Member shall be entitled to select one (1) Director whose vote shall be equal in weight to the Director of any other Municipal Member, except as expressly set forth in the succeeding paragraphs. Directors may participate in meetings remotely in accordance with the regulations of the Office of the Attorney General governing remote participation, 940 C.M.R. 29.10. In accordance with 940 C.M.R. 29.10 and the Open Meeting Law, G.L. c. 30A, §§18-25, a simple majority of the Directors of the Municipal Members must be physically present to attain a quorum. (emphasis added). County Representatives shall not count towards a quorum as they have limited participation rights. Directors abstaining from voting shall be counted for meeting quorum purposes, but their votes shall not count with respect to the matters they abstain from voting on. By way of example, if ten (10) Directors from the Municipal Members are present and four (4) abstain from voting, and the remaining Directors split their votes four (4) in favor, two (2) against, the motion would pass.

While a quorum is present, unless another provision is made by law, this Agreement or by the Cape Light Compact JPE’s own rules, all business shall be determined by a majority vote of the Directors of the Municipal Members then present and voting. Notwithstanding the foregoing, any vote involving a matter concerning issues which would or could bear in a direct and material fashion on the financial interests of the Municipal Members shall be taken by a weighted vote in which the vote of each

Director shall be weighted in the same proportion as the population of the Municipal Member such Director represents bears to the whole population of the Municipal Members of the Cape Light Compact JPE, such population as determined, in the case of Barnstable County, by the most recent federal census, or decennial census, and, in the case of Dukes County, by the most recent data available from the Martha's Vineyard Commission. In case of a dispute as to whether a vote shall be taken on a weighted basis as set forth in this paragraph or on a one (1) town, one (1) vote basis as set forth in the preceding paragraph of this subsection, the determination shall be made by weighted vote as set forth herein. Exhibit B sets forth the population for each Municipal Member, and provides an example of a vote taken in accordance with weighted voting procedures.

C. Role of Executive Committee

The Executive Committee has acted in lieu of the full Governing Board many times when the Governing Board failed to meet quorum requirements. This happened twice in 2019 (April and June meetings).

Art. V(C) Executive Committee.

At such time as there are more than five (5) Municipal Members, there shall be an Executive Committee composed of no less than five (5) Directors elected by the Governing Board from among the Directors appointed by the Municipal Members. The Executive Committee shall be selected by majority vote of all of the Directors of the Municipal Members. In addition to the delegation of powers set forth in Article V(A) (Powers of Governing Board), the powers of the Governing Board shall be delegated to the Executive Committee in the following circumstances: (i) when a quorum of the full Governing Board is not present for a regularly scheduled meeting; and (ii) exigent circumstances require Governing Board action, and there is insufficient time to convene a regular meeting of the Governing Board. (emphasis added.)

The Executive Committee shall conduct its business so far as possible in the same manner as is provided by this Agreement by the Governing Board. A majority of the Executive Committee shall constitute a quorum. The Executive Committee shall keep records of its meetings in form and substance as may be directed by the Governing Board and in accordance with the Open Meeting Law, G.L. c. 30A, §§18-25, and other applicable law.

Any Director who is not a member of the Executive Committee may attend and participate in Executive Committee meetings, but may not vote. Attendance may be in-person or by telephone.

From time to time upon request and at each meeting of the Governing Board, the Executive Committee shall make a full report of its actions and activities since the last meeting of the Governing Board.

If two (2) members of the Executive Committee object to the affirmative action taken by the Executive Committee, they may appeal such decision within forty-eight (48) hours of such action or vote by requesting a special meeting of the Governing Board in accordance with Article VI(C) (Special Meetings) which must occur as soon as possible

but no later fourteen (14) days after the Executive Committee action if the original Executive Committee action was necessitated by exigent circumstances. At such special meeting, the Governing Board may overturn the action or vote of the Executive Committee by a two-thirds vote of the Directors. A vote by the Executive Committee to take no action cannot be appealed.

D. Proposed Amendments to JPA

BCK proposes to amend the quorum provisions in the JPA to address the difficulties that the Compact has had in achieving a quorum of the full Governing Board. BCK recommends that a simple majority of the members of the Executive Committee (including the Chair or, in the Chair's absence, the person authorized to chair the meeting) must be physically present to attain a quorum to satisfy OML requirements. However, in order for a meeting of the Governing Board to convene and take any action, additional Governing Board members equal to or greater than a simple majority of the Municipal Members of the Governing Board must be physically present or participating remotely.

The specific language of the proposed amendments to Art. V(D) Manner of Acting and Quorum are as follows (red text is proposed new language, ~~strikeout text~~ is for suggested deletions, blue text has been moved):

A simple majority of the members of the Executive Committee (including the Chair or, in the Chair's absence, the person authorized to chair the meeting) must be physically present to attain a quorum. In order for a meeting of the Governing Board to convene and take action, additional members of the Governing Board equal to or greater than a majority of the Municipal Members of the Governing Board must be physically present or participating remotely (the "Additional Participating Governing Board Members"). By way of example, if the Governing Board has a total of twenty-one Municipal Members, and five members of the Executive Committee (including the Chair or, in the Chair's absence, the person authorized to chair the meeting) are physically present, an additional six Governing Board members must participate in person or remotely in order for a meeting to convene. If there are not enough Additional Participating Governing Board Members to attain a majority of the Governing Board, the provisions of Article V(C) (Executive Committee) shall apply to convening and taking action at a meeting to the meeting.

The Governing Board shall act by vote of a majority of the Directors of the Municipal Members present and voting at the time of the vote. Directors may participate in meetings remotely in accordance with applicable laws regarding remote participation, including the regulations of the Office of the Attorney General governing remote participation, 940 C.M.R. 29.10. [moved up and edited slightly] Unless altered by the Governing Board in accordance with this Agreement, each Municipal Member shall be entitled to select one (1) Director whose vote shall be equal in weight to the Director of any other Municipal Member, except as expressly set forth in the succeeding paragraphs. ~~Directors may participate in meetings remotely in accordance with the regulations of the Office of the Attorney General governing remote participation, 940 C.M.R. 29.10. [moved up]~~ In accordance with 940 C.M.R. 29.10 and the Open Meeting

~~Law, G.L. c. 30A, §§18-25, a simple majority of the Directors of the Municipal Members must be physically present to attain a quorum.~~ County Representatives shall not count towards a quorum as they have limited participation rights. Directors abstaining from voting shall be counted for meeting quorum purposes, but their votes shall not count with respect to the matters they abstain from voting on. By way of example, if ten (10) Directors from the Municipal Members are present and four (4) abstain from voting, and the remaining Directors split their votes four (4) in favor, two (2) against, the motion would pass.

While a quorum is present plus the Additional Participating Governing Board Members, unless another provision is made by law, this Agreement or by the Cape Light Compact JPE's own rules, all business shall be determined by a majority vote of the Directors of the Municipal Members then present and voting. Directors participating remotely are to be considered present and may vote. Notwithstanding the foregoing, any vote involving a matter concerning issues which would or could bear in a direct and material fashion on the financial interests of the Municipal Members shall be taken by a weighted vote in which the vote of each Director shall be weighted in the same proportion as the population of the Municipal Member such Director represents bears to the whole population of the Municipal Members of the Cape Light Compact JPE, such population as determined, in the case of Barnstable County, by the most recent federal census, or decennial census, and, in the case of Dukes County, by the most recent data available from the Martha's Vineyard Commission. In case of a dispute as to whether a vote shall be taken on a weighted basis as set forth in this paragraph or on a one (1) town, one (1) vote basis as set forth in the preceding paragraph of this subsection, the determination shall be made by weighted vote as set forth herein. Exhibit B sets forth the population for each Municipal Member, and provides an example of a vote taken in accordance with weighted voting procedures.

BCK believes that amending the JPA as set forth above will actually have the effect of increasing Governing Board member participation and thus eliminate (or at least significantly reduce) the need for the Executive Committee to meet in lieu of the full board. **Thus, the amendments when implemented should expand Municipal Members' rights as their appointed Directors on the Governing Board should be able to participate in and vote virtually at all Governing Board meetings.** Given current participation rates in the pandemic, Governing Board attendance should significantly improve from historic pre-pandemic rates if the proposed amendments are implemented. Of the 12 meetings held from April of 2020 through April of 2021, 9 meetings had 15 or more Governing Board members in. This is especially true for the Directors representing the towns on Martha's Vineyard. Should this trend continue, it may no longer be necessary to notice every meeting as both an Executive Committee and Governing Board meeting.

E. Power to Amend Quorum Provisions in JPA

In 2017, Jonathan Sclarsic, Esq. at the OAG told BCK that while there is no case law on point, the OAG takes the view that a board cannot set its own quorum requirements for public policy reasons. Therefore, if the Compact were to adopt his view, new quorum requirements would need to be approved by the JPE's Municipal Members. This opinion is not legally binding on the Compact, and Jonathan Sclarsic is no longer with the OAG. There are multiple

OML determinations that state the following standard for reviewing complaints: “[t]he Division of Open Government is charged specifically with reviewing complaints to determine compliance with the Open Meeting Law, G.L. c. 30A, §§ 18-25. The Division does not review for compliance with a public body’s own policies and procedures.” OML 2021–20; 2019-85 (“Our Division only has jurisdiction to evaluate Open Meeting Law violations and therefore we decline to review any allegations relating to Board regulations or municipal ordinance.”; 2013-162; OML determination dated 9/4/12 (Cambridge Historical Commission). In BCK’s opinion, because the proposed amendments will actually expand Municipal Members’ rights under the JPA, and the JPA only provides for Member approval of JPA amendments dealing with eligibility for membership/addition of Members (see Article XV of the JPA), liability of members and termination of the Compact, approval of the Municipal Members is not legally required.

III. RECOMMENDATIONS/NEXT STEPS

If the Governing Board wants to consider amending the JPA, we recommend lowering the threshold of the Governing Board quorum to a quorum of the Executive Committee (including the Chair). While this is a small number and thus could appear to be a drastic change, in reality the current practice is that when the Compact is unable to obtain a physical quorum of the full Governing Board, the meeting then becomes a meeting of Executive Committee. We are recommending adding a requirement that additional members be present (remotely or in person) to attain a majority of the full board before the Governing Board can convene and take action. In practice, this should mean that it is far less likely that the Executive Committee would need to be used in lieu of the full board and thus have the effect of increasing Municipal Members’ voting rights.

The Governing Board will need to decide if it wants to (i) follow the OAG’s guidance on requiring the Municipal Members to approve the amendments, or (ii) take the position the OAG has no authority over JPE governance and move forward with the Governing Board amending the JPA without seeking Municipal Member approval. If Municipal Member approval is sought, we recommend drafting a short memorandum explaining the necessity of the amendments, reaching out to KP Law, and offering to have a Zoom call with other Municipal Members’ town counsel to answer any questions regarding the proposed amendments. If the Governing Board decides to proceed with the board taking up the amendments, amending the JPA can be accomplished in a matter of a few months (30 days’ advance notice to members is required under Article XV of the JPA.)

Agenda Action Request

Cape Light Compact

Meeting Date: 7/21/2021



- Aquinnah
- Barnstable
- Bourne
- Brewster
- Chatham
- Chilmark
- Dennis
- Dukes County
- Eastham
- Edgartown
- Falmouth
- Harwich
- Mashpee
- Oak Bluffs
- Orleans
- Provincetown
- Sandwich
- Tisbury
- Truro
- Wellfleet
- West Tisbury
- Yarmouth

Consumer Advocacy Worksheet: MA Department of Public Utilities (DPU) 21-80, Eversource Grid Modernization Plan

REQUESTED BY: Maggie Downey

Proposed Motion(s)

I move the Cape Light Compact JPE Board of Directors vote to adopt a process to allocate consumer advocacy costs between the Compact's energy efficiency and operating budgets as follows:

1. After identifying a regulatory matter, rule-making proceeding, legislative action or other activity relating to or affecting the Compact's administration of its energy efficiency plan or its provision of power supply (taken together, "Consumer Advocacy Matter"), the Compact Administrator will provide the Board with pertinent information regarding the Consumer Advocacy Matter and present a completed consumer advocacy worksheet (as attached) for the Board's consideration and review.

2. The Board will thereafter vote to authorize and direct the Compact Administrator to take all actions deemed necessary or appropriate to implement the Compact's participation in the Consumer Advocacy Matter (subject to any limitations imposed by the Board), and to execute and deliver all documents as may be necessary or appropriate to enable and effectuate such participation

Additional Information

Pursuant to the Order of the Massachusetts Department of Public Utilities approving the Compact's 2019-2021 Energy Efficiency Plan dated January 29, 2019, the Compact is required to demonstrate that its consumer advocacy activities have a direct energy efficiency related benefit. The attached Consumer Advocacy Allocation Worksheet details the direct energy efficiency benefits of participating in DPU 21-80.

A memo summarizing Eversource Grid Modernization Plan, DPU 21-80, is also attached. The Eversource 2022-2025 Grid Modernization Plan and AMI Proposal will be posted to the Compact's website as part of the Board meeting packet.

Record of Board Action

Motion by:	Second by:	# Aye	# Nay	# Abstain	Disposition

Consumer Advocacy Allocation Worksheet

Parties involved:

It is currently too early in the proceeding to know the parties other than Eversource. Parties to the previous grid modernization included the Cape Light Compact, Attorney General's Office, Department of Energy Resources, Acadia Center, and National Grid as a limited party. It is expected that those parties may again participate in this docket.

Description of the Matter or Proceeding:

The Department of Public Utilities will investigate the proposed 2022-25 Grid Modernization Plan ("GMP") filed by Eversource Energy on July 1, 2021. The Department originally began investigating grid modernization in D.P.U. 12-76 in 2012, with Eversource filing its first Grid Modernization Plan in D.P.U. 15-122. These investigations are held in furtherance of the Department's responsibilities under the Green Communities Act, St. 2008, c. 169 ("Green Communities Act") (to support the development of energy efficiency, demand response, distributed generation, and renewable resources), the Global Warming Solutions Act, St. 2008, c. 298 ("Global Warming Solutions Act") (emissions reduction targets), and its responsibilities to ensure reliable electric distribution service. See Order 12-76-B at 8-9.

Docket Number (if any):

D.P.U. 21-80

1. Does this proceeding raise issues that may impact the Compact's administration of its three-year energy efficiency plan? If yes, please explain.

Yes, this proceeding will affect the Compact's energy efficiency program through proposed customer-facing investments, including advanced metering infrastructure ("AMI"). AMI data will allow the Compact to identify customers likely to benefit from energy efficiency and demand response programs while providing customers with the data they need to participate in programs and optimize their usage. While no storage projects are proposed in this docket, Eversource updates the Department that it intends to make a filing in a separate docket later this year. Eversource's grid modernization investments are also intended to improve renewable energy deployment.

2. Does this proceeding raise issues regarding the general administration of energy efficiency in Massachusetts? Are other Program Administrators parties or otherwise intervening? Other stakeholders? If yes, please explain.

Yes, Eversource Energy (a PA) filed the proposed GMP that resulted in this proceeding. National Grid (also a PA) may participate as a limited party. Energy efficiency topics are considered in this proceeding, including renewable energy integration and advanced metering.

3. Does this proceeding raise issues regarding the Compact's administration of active demand response programs/initiatives/measures? If yes, please explain.

Yes, the proceeding raises active demand response ("ADR") issues for the Compact. Eversource has proposed customer-facing investments as part of its grid modernization plan, including advanced metering infrastructure ("AMI"), the deployment of which will be a central issue considered by the Department. Eversource's AMI proposal may significantly affect ADR program administration by the Compact, including access to meters by the Compact's customers and the ability of customers to have better awareness and control of their energy usage during times of peak demand. AMI would also enable time-varying rates ("TVR") for residential and small business customers, which has the potential to both increase the level of participation in the Compact's ADR programs and reduce the per-participant participation incentive funded by energy efficiency. The ability for customers to enroll in a TVR could motivate more customers to participate in the Compact's ADR offerings to facilitate their own demand reduction in order to reduce their electric bill, if the TVR involves higher pricing during the times of peak demand. This bill reduction-based incentive could also reduce the amount of the direct incentive that the Compact currently has to pay residential and small commercial customers to enroll in its ADR offerings, thereby decreasing the per-participant cost of its ADR offerings. Among other issues raised by Eversource's proposal is data access by competitive suppliers, including the Compact, so that those parties may effectively participate in the development of a demand response marketplace.

4. Does this proceeding raise issues regarding the general administration of active demand response in Massachusetts? Are other program administrators parties or otherwise intervening? Other stakeholders? If yes, please explain.

Yes, this proceeding directly impacts Eversource's administration of ADR since it involves Eversource's own proposed GMP. National Grid may also be a limited party since National Grid's own GMP will be investigated simultaneously by the Department. Advanced metering and other issues related to ADR will be a central focus in this proceeding.

5. Does this proceeding concern the efficient utilization of energy in Massachusetts? Are other Program Administrators parties or otherwise intervening? Other stakeholders? If yes, please explain.

Yes, grid modernization by nature concerns the efficient utilization of energy in Massachusetts. A key outcome sought by the Department will be a more efficient grid. As noted above, Eversource is the main party in this docket and National Grid may become a limited party to the proceeding. As noted above, the Attorney General's Office, DOER, the Compact and other parties (especially those that participated in D.P.U. 15-122) are likely to participate as well.

6. Describe the direct energy efficiency benefit resulting from the Compact's participation in this proceeding.

Eversource's proposed GMP seeks to make grid modernization investments that will improve renewable energy integration, reliability and outage response for customers, including the Compact's customers. The details of Eversource's AMI proposal need to be explored in this proceeding to determine what impacts there may be on the Compact and its customers. The Compact's participation in the docket seeks to ensure that AMI is fairly deployed to all Eversource customers (e.g., not just those on Basic Service). See Response to Question 8 below.

AMI provides the Compact the ability to implement time-varying rates which would reduce energy efficiency budgets by providing a bill reduction incentive for customers to participate in its ADR offerings. This could potentially benefit customers by enabling them to save money on their bills by participating in the Compact's ADR offerings, while simultaneously reducing the amount per-customer participation incentives the Compact needs to pay to customers to enroll in its ADR offerings. In addition, in its filing, Eversource notes that "data available from AMI will enable more sophisticated targeting of customers likely to benefit from the Company's energy efficiency programs" and that AMI will make participation in demand management programs more effective by providing "the data and tools to assist customers in optimizing their usage."

7. Is the described benefit quantifiable? If yes, please explain and provide any supporting documentation.

Not at present, given that Eversource's proposals are subject to an adjudicatory proceeding and thus may not be approved or may be adjusted over the course of the proceeding.

8. Will the Compact's participation assist its planning for future energy efficiency plans and/or programs?

Yes. AMI would enable customers to better control their energy usage, especially during times of peak demand, and may broaden the Compact's energy efficiency offerings. This proceeding will investigate Eversource's AMI proposal, which is of great interest to the Compact. It is important for the Compact to understand what grid modernization investments Eversource will undertake as well as how AMI may be deployed in its service territory and the possible ramifications of that deployment to the Compact and its customers. In Eversource's prior GMP proceeding (D.P.U. 15-122), Eversource proposed to ensure AMI only for its own Basic Service customers, which would have limited the AMI rollout in the Compact's service territory, where the majority of customers are not on Basic Service. Accordingly, the Compact needs to participate to

make sure this current proposal will include AMI for Compact customers. The Compact could also be an ideal selection for early roll-out of AMI, if approved.

9. Is the Compact's participation in this proceeding a reasonable use of energy efficiency ratepayer funds? Please explain.

Yes, it is necessary for the Compact to participate given the direct impact the outcome will have on the Compact and its energy efficiency customers. Eversource's AMI proposal has the potential – if deployed properly and fairly – to allow the Compact to enhance its energy efficiency offerings by providing access to data to verify customer usage and target customers for program participation. The ability to implement time-varying rates will reduce energy efficiency budgets by incentivizing ADR participation with reduced use of energy efficiency-funded incentives. The Compact will seek to ensure consistent opportunities across energy efficiency service territories.

10. Does this proceeding involve other non-energy efficiency issues? If yes, please explain.

Yes, the proceeding also implicates power supply concerns, including time-varying rates. In D.P.U. 15-122, Eversource's proposal would have required Compact customers to return to Basic Service to receive advanced metering under the GMP and other harms to the competitive markets (e.g., no access to usage data to develop innovative demand response market products). The Compact needs to participate here to better understand Eversource's proposals and what the impacts may be on the Compact's power supply, including its ability to offer TVR supply rates to its aggregation customers.

11. What is the initial estimate of the percentage allocation between energy efficiency and non-energy efficiency issues, as set forth in this worksheet?

The costs for this proceeding will be allocated based on the actual subject matter, meaning that any work related to energy efficiency will be allocated as such and any work related to non-energy efficiency will be allocated as such.

12. Discuss any other factors as may be appropriate.

It is important for the Compact to be involved in this proceeding as Eversource's grid modernization efforts will be ongoing for years to come. This proceeding may set the stage for Eversource to roll out AMI, which would be a significant metering change for the Compact and its customers.

13. **To be completed at the conclusion of the proceeding/matter or every 12 months, which ever comes first,** a summary of the actual total costs associated with the Compact's participation and costs recovered through energy efficiency ratepayer funds and operating funds. A brief narrative should accompany any readjustment to the percentage allocation explaining the basis for the reallocation.

Please attach:

1. Initial Petition (available on the Compact's website)
2. Notice of Proceeding (not yet available)
3. Compact's Petition to Intervene (not yet available)
4. Agreements with Expert Consultants, if any

**D.P.U. 21-80: SUMMARY OF
EVERSOURCE’S 2022-25 GRID MODERNIZATION PLAN
BY BCK LAW, P.C. / RFZ
JULY 15, 2021**

Eversource submitted its 2022-25 Grid Modernization Plan (“GMP”) as required on July 1, 2021. There are two main parts of the filing: (1) customer-facing investment (i.e., advanced metering infrastructure (“AMI”)); and (2) grid-facing investments. Eversource’s AMI Plan would deploy over the period 2023-2028 and would cost an estimated \$620 million. Eversource proposes an annual cost recovery mechanism outside of base rates for those costs. There are also changes to the infrastructure and performance metrics.

The Department of Public Utilities (“Department” or “DPU”) has not yet issued its Notice of Filing. We will want to discuss participation in this proceeding, including potential discovery questions based on the filing. For example, there is some information on time-varying rates (“TVR”) and data access that is included in a third-party report contracted by Eversource, but is not otherwise in the AMI Plan itself, so we may want to confirm that it is incorporated by reference into the AMI Plan.

CUSTOMER-FACING INVESTMENT

Eversource submitted testimony by Jennifer A. Schilling, Jessica Brahaney Cain, and Robert W. Frank with its AMI deployment proposal.

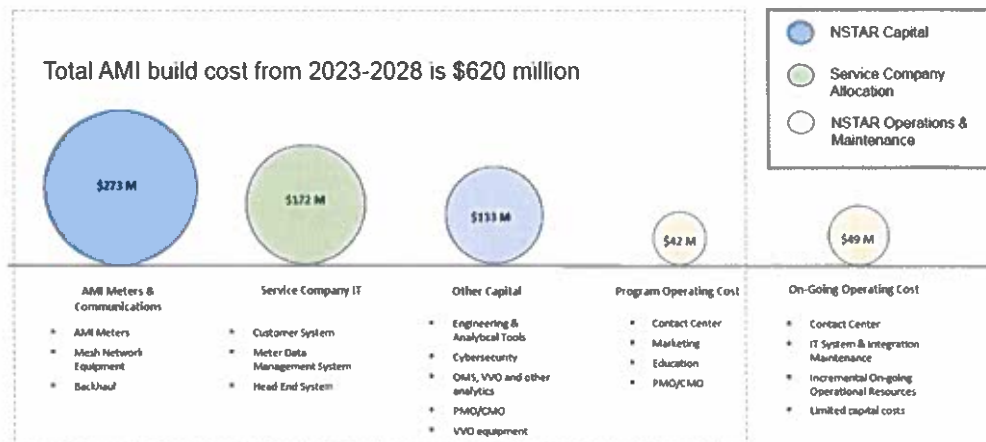
- Eversource highlighted the “changing industry landscape and evolving customer expectations,” the “technological transformation” of the utility industry, the Commonwealth’s clean energy goals, and the proliferation of distributed energy resources (“DER”) for the need for its AMI proposal.
- Explanation for why AMI now rather than in DPU 15-122:

At the time of the Department’s investigation in D.P.U. 12-76 and its subsequent order in D.P.U. 15-122, the transition to AMF was a very significant departure from the Company’s normal course of business, involving the need for the Department’s intervention to establish the “cost effectiveness” of the investments to be made to warrant adoption of the technology over other prevailing metering technologies. Now, almost 10 years later, the ongoing evolution of technology has made the installation and use of AMI the only feasible operating alternative as compared to other technological solutions, with the potential to produce benefits for customers, if implemented in an organized, comprehensive and carefully sequenced process. Therefore, while the implementation of AMI is becoming part of the natural progression of the operating platform, the need for supportive cost recovery over the multi-year implementation process is critical to further this operating progression.

- Current AMR situation is unable to take Eversource’s customers into the future. Now is the time to begin to address the need to switch out the AMR meters that are at or nearing their useful lives. AMI presents the “only replacement solution” that ensures Eversource can manage its grid safely and effectively. There are no alternatives to AMI. Replacing with AMR at this point would simply be replacing with already outdated technology.
 - In its next rate case, Eversource will include a review of its AMR costs that will be included in its cost of service, including depreciation.
- Noted DPU’s requirements in DPU 20-69 Order to make an AMI proposal here.
- Filing includes background on DPU 12-76, 15-122, and 20-69.
- Eversource discussed AMI deployment efforts of its affiliates and possible synergies across its service territories: Connecticut Light and Power (“CL&P”) filed a comprehensive business and implementation plan on July 31, 2020. CL&P’s proposal is still under review by PURA. Public Service of New Hampshire, in its most recent base distribution rate proceeding settlement, committed to conduct a feasibility study of AMI deployment in New Hampshire.
- Noted AMI benefits, including: improved customer service, reliability, energy efficiency and demand response participation (“Data available from AMI will enable more sophisticated targeting of customers likely to benefit from the Company’s energy efficiency programs.”), system efficiency, shared costs (e.g., theft and non-technical line losses), operational efficiency (e.g., meter readings, turn on/turn off, bad debt expenses), and demand management (e.g., near real time usage to optimize participation).
- Filing includes a third-party review of industry trends and technology maturity commissioned by the Company that supports the conclusion that this type of comprehensive deployment of AMI is the necessary course of action to transition away from existing aging meter infrastructure and associated systems.
- “The Plan provides a detailed description of the optimal path forward towards a cost effective full deployment of AMI for all 1.4 million residential and small commercial electric customers.”
- AMI proposal is a complete system – inclusive of meters, communications, a Headend System (“HES”), an MDMS and CIS, as well as customer engagement systems and integration to the Company’s existing OMS and platforms to enable engineering analytics with an overlay of Cybersecurity on all these components.
 - Current CIS cannot handle complex bill rates and would not enable the full use of AMI.
- Investment Bundles – Total Budget: \$620 million for 2023-2028.
 - First = Meters and CIS for \$273 million
 - Eversource will follow its established competitive procurement process to test and evaluate AMI meter equipment solutions. [See Page 26 Exh. ES-AMI-2.]
 - Second = Communications \$172 million
 - Wireless network: The AMI meters, which contain communications modules, communicate back to Eversource via a wireless network. The Company expects that a hybrid approach, utilizing a private wireless “mesh” network coupled with public carrier cellular networks, is likely to be the most effective technology for its electric AMI telecommunications network needs.

- The HES decrypts incoming meter data to be used in other systems and encrypts outgoing meter commands, ensuring the AMI system is secured end-to-end, e.g., advanced meter functions like service switch reconnections and pinging of the meters to confirm outages or service restorations status. The purpose of the HES is not to store or process the meter data, but rather to pass the decrypted data to specialized systems like the MDMS.
- The MDMS is the system that houses all the data collected from the meters. The data is transferred from the HES to the MDMS, which processes meter data into information that can be used by other back-office systems such as the CIS and OMS.
- The customer portal will utilize the meter data housed in the MDM to provide customers with their usage data to enable them to make informed choices about usage.
- Third = engineering and analytic tools (includes cybersecurity) \$133 million
- Fourth = enhanced customer web portal. \$42 million. Includes a Customer Engagement Plan (smooth transition to AMI). Customer call center will have access to portal.

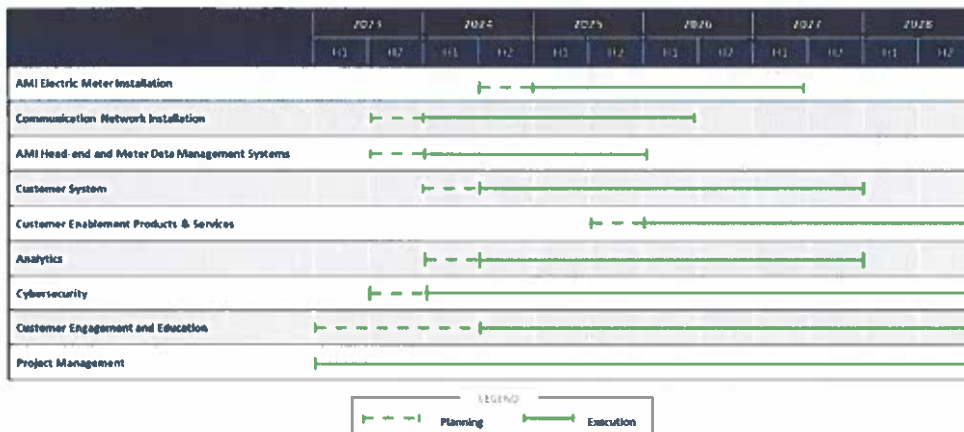
AMI Project Cost Components (2023-2028)



- Following DPU approval, Eversource will refine its budget and “present those pre-construction quality estimates to the Department for review and approval prior to commencing cost recovery under the proposed cost recovery mechanism outlined below. All spending under the AMI Plan investment bundles will be subject to a further prudence review.”
- Following approval of the decision to proceed with AMI, the Company will conduct a formal RFP to select the best technology solution to meet communications network requirements.
- Implementation Schedule: Five-year deployment schedule – 2023-28 (2023 is designed to coincide with AMR meters coming due). Timing of the deployment is crucial.

The Company cannot deploy the AMI meters until the updated communications network is in place, tested and operational. Absent the updated communications network, the Company will have no way to collect the data from the AMI meters, which negates the significant benefits associated with the meters' data collection and other functionalities, such as being able to determine whether customers have power following an emergency event like a storm.

AMI Project Schedule



- Cost Recovery: Given that this is a complex and will be a prolonged deployment, Eversource proposed a ratemaking mechanism outside of base rates: “the recovery of the costs associated with the investment bundles ... through a cost recovery mechanism outside of base rates will provide a more stable rate path for customers and will enable the Company to offset its share of project costs during the implementation of the AMI Plan.”
 - Eversource proposed a Model AMI Tariff - provides for the recovery of incremental costs associated with the Company’s implementation and deployment of AMI.
 - The AMI Factor (“AMIF”) shall be applied to all retail delivery service kilowatt-hours in accordance with a formula.
 - The AMIF would be determined annually, subject to a filing and DPU review.
 - Eversource is not yet seeking approval of the Model AMI Tariff. Instead, in a separate, future proceeding (likely the upcoming base distribution rate case), Eversource would seek DPU approval of an NSTAR Electric-specific tariff containing the approved provisions of the model tariff. In that proceeding, Eversource would file refined AMI budget estimates and present those pre-construction quality estimates to the DPU, and would seek DPU approval to begin recovery of costs under the tariff. All spending under the AMI Plan investment bundles would be subject to a comprehensive prudence review following implementation.

- **Implementation Reports:** Eversource is asking for broad approval of its AMI Plan and then it would, as it progresses in its AMI plan, update the DPU:

As Eversource progresses into the final stages of planning, including completion of its RFP process to select vendor partners for hardware, software and services, the Company expects to provide the Department and other stakeholders with more detailed implementation plans with respect to scope, schedule and budget. Once the deployment period has commenced, it will be important for the Company to provide regular status updates relative to implementation metrics, including narrative descriptions of outcomes achieved, challenges, lessons learned and next steps. These implementation reports should reflect progress relative to expectations on the final AMI project scope, schedule, and budget.

- **TVR:** Eversource recognizes TVR as a benefit of AMI and that the CIS would need to be overhauled in order to provide TVR. Eversource indicates that it would begin TVR offerings in 2028. Eversource discusses TVR in the Customer Engagement Plan and Business Plan – see below. The information is pretty general (e.g., no costs to third parties given).

- The Customer Engagement Plan states:

Once all AMI meters have been deployed and the Customer Information System has developed the Time-Varying-Rates design determined, we will be building awareness and educating customers on Time-Varying Rates. We will accomplish this by using existing communications tools, such as customer emails, on-bill messaging and inserts, free social media, online videos, press releases and earned media, direct mail, print collateral, town halls, and paid social media campaigns. Based on our energy efficiency programs and our best knowledge of current costs, we would expect a customer acquisition cost of approximately \$50/customer (assuming 10% customer acquisition) with increasing costs per customer to reach additional customers that the Company estimates would be approximately \$75/customer at a 20% opt-in enrollment level.

- The Business Case Report by WestMonroe included the following chart:

Time Varying Rates

Description:
 The interval data made available by AMI meters can be leveraged to expand customer choice by providing advanced rate options including Time Varying Rates ("TVR") to customers. TVRs encourage customers to reduce or shift electricity use from high demand peak hours to lower demand off-peak hours and can result in savings on customer electric bills. The TVRs will be designed based on AMI data decoupling actual customer use and load profiles, system constraints, and generation mixes. Different types of TVRs can be offered and targeted to different customer segments. Eversource will gather input from customers and other stakeholders, as well as findings at other utilities, to determine the desired rate types and structures to implement. The quantitative benefit of TVRs to customers is calculated based on expected customer adoption of TVRs and the expected reduction and shifting of load across those customers (based on previous pilots and industry benchmarks). For demand shifted, the estimated financial benefit is calculated by the average difference between on and off-peak energy prices using the estimated demand shift from the pilot and industry data. For the reduced demand benefit, the AESC 2021 capacity savings rate (\$/kW) was used to calculate the savings. Sharing AMI data with 3rd parties will also enable 3rd party suppliers to offer TVRs to their customers, as well as provide data to other 3rd parties such as renewable energy suppliers for additional value-added services to customers.



Calculation Approach:

Demand Reduction	Participating Customers (% of total)	x	Demand Reduction per Participant (kW)	x	Residential Peak Load (kW)	x	Demand Reduction Savings Rate (\$/AW)
Energy Shift Benefit	Participating Customers (% of total)	x	Energy Shifted Per Participant (kWh)	x	On-Peak Demand (kW)	x	Energy Shift Savings Rate (\$/kWh)

Benefit by Year (\$ in millions):

	2021	2022	2023	2024	2025	2026	2027	Average*	Total	NPV
Residential Demand Benefit	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.45	\$6.69	\$2.43
C&I Demand Benefit	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.20	\$2.95	\$1.07
Residential Energy Shift Benefit	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.02	\$0.34	\$0.12
C&I Demand Energy Shift Benefit	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.04	\$0.62	\$0.22
Total	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.71	\$10.59	\$3.84

* Represents Average (2028 - 2042)



- The West Monroe Report (Exh. ES-AMI-4) also includes the following chart that has the text below in small print (emphasis added) [Note, no costs seem to be discussed – possible discovery topic]:

AMI implementation will enable new customer tools, usage insights & alerts, and EE/DR program information. Many digital channels will need updates to reflect changes due to AMI. The insights and choices will be available across several channels (such as web, mobile, social etc.). **Additionally, the AMI data will enable 3rd Parties and competitive suppliers to leverage AMI data for value added services. This initiative will configure a standardized solution to allow 3rd parties and competitive suppliers to receive data access through a configured API while also enabling the continuation of existing supplier services.** New usage and high bill alerts will be enabled through the mobile and web-based channels. Enabling digital features will require the AMI installation to be complete in addition to data brought together from the new MDMS and CIS solutions leveraging Eversource developed analytics and vendor solutions to maximize insights shared to customers.

05 Customer Enablement Products & Services

Description:

AMI implementation will enable new customer tools, usage insights & alerts, and DER program information. Many digital channels will need updates to reflect changes due to AMI. The insights and alerts will be available across several channels (such as web, mobile, social etc.). Additionally, the AMI data will enable 3rd Parties and competitive suppliers to leverage AMI data for value added services. This initiative will configure a standardized solution to allow 3rd parties and competitive suppliers to receive their access through a configured API while also enabling the continuation of existing supplier services. New usage and high bill alerts will be enabled through the mobile and web-based channels. Enabling digital features will require the AMI installation to be complete in addition to data brought together from the new MDMIS and CIS solutions leveraging Eversource developed analytics and vendor solutions to maximize insights shared to customers.

Investment Summary (\$ in millions):

	Capital	O&M	Total Cost	% of Total
Develop Delivered Energy Insights & Alerts	\$0.44	\$0.00	\$0.44	1%
Web/App Development Visuals & Alerts	\$4.22	\$0.00	\$4.22	5%
Creation of Data Sharing Solution	\$7.76	\$0.00	\$7.76	9%
Incremental Resources for Alert and Insights	\$0.00	\$5.50	\$5.50	6%
All Other Customer Enablement Service O&M	\$0.00	\$68.51	\$68.51	79%
Total	\$12.43	\$74.01	\$86.43	100%

Key Milestones:



Cost and Timeline by Year (\$ in millions):

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030*	20 Yr. Total	20 Yr. NPV
Capital	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4.07	\$4.14	\$4.21	\$0.00	\$0.00	\$12.43	\$8.82
O&M	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.52	\$3.06	\$4.64	\$4.98	\$74.01	\$31.27
Total	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4.07	\$5.66	\$7.27	\$4.64	\$4.98	\$86.43	\$40.09

* Represents Average Annual Amount from 2030-2042



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- Page 35 of ES-AMI-2 also references that the Privacy Policy notes when Eversource can share customer data with a third party
- DER: Regarding data for DER, Eversource states [Page 49 of Exh. ES-AMI-2 – AMI Plan]:

The Company will make AMI data available for other systems. The Company's 2021-2025 Grid Modernization Plan describes the use of AMI data to enhance system planning analyses relative to DER analysis. Analytical tools can use AMI data to uncover valuable insights into grid operations. For example, AMI voltage data can help engineers understand the effects of DER penetration with much greater levels of data granularity relative to current tools. The Company can use AMI data in systems like the DMS or DERMS to enhance or enable advanced functions. For example, the DMS can use granular AMI load data to improve and verify the load flow model, a critical function of the DMS. The DERMS can utilize AMI data to identify the peak load for each feeder. The Company can potentially use this information to identify the locational value of DERs in an individual feeder and utilize demand response, energy efficiency programs or other use cases, potentially reducing the need for traditional distribution system upgrades.

- EMF/Model AMI Opt-out Tariff – would allow customers to opt out if they do not want AMI. The tariff includes the following fees:
 Removal of Advanced Meter/Installation of Non-Advanced Meter \$42.00
 Monthly Meter Reading \$34.00

Re-installation of Advanced Meter \$42.00

- The filing includes various separate plans:
 - Implementation
 - Customer Engagement**
 - Cybersecurity**
 - Business Case
 - Industry Assessment

**Note, This summary has not included summaries on cybersecurity or customer engagement, which can be added as needed.

GRID-FACING INVESTMENT

Eversource's proposed 2022-2025 GMP is intended to continue grid modernization advancements that have been achieved the last four years and add some new investments. The proposed grid-facing investments are:

- (1) Advanced Distribution Management System ("ADMS") – complete implementation of the Distribution Management System project;*
- (2) Communications – improvements to the field area network and data transmission infrastructure;*
- (3) Monitoring and Control - substation relay upgrades and power quality monitoring;
- (4) Volt VAR Optimization ("VVO") – expand existing VVO program in WMA and add advanced inverter control;*
- (5) Advanced Load Flow - interconnection automation, probabilistic power flow modeling and foundational investments in data analytics;*
- (6) Distributed Energy Management System ("DERMS") - technology capable of dispatching DER based on real time conditions as modeled by the DMS;
- (7) FERC Order 2222 – increase capabilities required to implement new responsibilities associated with enabling participation of aggregated DER in the wholesale market; and
- (8) Measurement, Verification and Support - on-going operational system support and maintenance, program management, and third-party measurement and verification.*

*These include continuing investments from the previous GMP term. Eversource is requesting streamlined review and approval of these investments by December 2021 so they can be seamlessly maintained (e.g., no loss of contract labor).

Investments that were completed in the first GMP term: Distribution Line SCADA, Automated Feeder Reconfiguration, and Urban Underground Automation.

The filing includes a revised Grid Modernization Factor and revisions to the GMF Tariff that look to primarily add the second authorization term.

2022-2025 GMP Summary

Table 2 provides a summary of the 2022-2025 GMP by investment category and investment type.

Table 2: 2022-2025 Budget by Investment Type

INVESTMENT CATEGORY	INVESTMENT TYPE	2022 Continuing	2022 New	2023	2024	2025	Total
ADMS	DMS	6,500	-	10,500	-	-	17,000
Communications	Wireless Communications Improvements	6,000	-	6,000	6,000	6,000	24,000
Monitoring & Control	Substation Automation	15,000	-	15,000	16,000	15,000	61,000
Monitoring & Control	PQ Monitoring	1,200	-	1,200	1,200	1,200	4,800
VVO	VVO	8,700	-	9,900	10,900	10,500	40,000
Measurement, Verification and Support	Program Management and M&V	900	-	900	900	900	3,600
Advanced Load Flow	Analytics Platform	-	500	2,000	1,500	1,000	5,000
Advanced Load Flow	Interconnection Automation	-	1,000	2,000	-	-	3,000
Advanced Load Flow	Probabilistic Power Flow Modeling	-	-	500	1,000	500	2,000
Communications	Communications System Modernization	-	2,000	4,000	4,000	4,000	14,000
DERMS	Dynamic DER Interface	-	800	1,300	1,900	2,000	6,000
DERMS	DERMS	-	1,000	2,500	3,500	3,000	10,000
Measurement, Verification and Support	Systems Support and Maintenance	-	200	1,400	1,400	1,400	4,400
Order 2222	Congestion Management	-	500	500	1,500	1,500	4,000
TOTAL		38,300	6,000	57,700	49,800	47,000	198,800

Please let us know if you want more detail on the project description and project need for any or all of these investments.

METRICS

Eversource has proposed the following new metrics, in addition to some revisions to its current infrastructure and performance metrics (adopted in D.P.U. 15-122). Revisions to current metrics focus mainly on VVO. The new metrics are:

Proposed Statewide Performance Metrics

Distributed Energy Resource Management System (“DERMS”) Demonstration:

Monitor the number and percentage of DER sites enrolled in each Company’s DERMS system and the associated dispatched kilowatts (“kW”).

FERC Order No. 2222 Customer Participation Metric:

The number of customers (customer count) and the corresponding total number of total kilowatts (kW) for customers participating in the ISO-New England wholesale market programs developed as a result of FERC Order 2222.

Proposed Eversource-Specific Performance Metrics

Eversource Load Forecasting – Milestone Completion:

Demonstrate progress towards establishing the full complement of load forecasting capabilities proposed by the Company from adoption propensity models to probabilistic scenario modelling.

Eversource Power Quality Monitoring:

Provide transparency regarding data acquired as a result of the power quality monitoring project and the classification of events recorded on the system. Equally as important is the need to communicate with impacted customers quickly, efficiently, and accurately to maintain a partnership and cooperation that will positively affect electric delivery.

Town	Dates	Confirmed	Customer Data needed from RISE	Save the Date Flyer Sent by	Letter Sent On
SPRING EFFORT					
Harwich	4/27-4/29	Yes	3/17/2021	3/26/2021	4/9/2021
Oak Bluffs	5/4-5/6	Yes	3/24/2021	4/2/2021	4/16/2021
Chilmark	5/4-5/6	Yes	3/24/2021	4/2/2021	4/16/2021
Aquinnah	5/4-5/6	Yes	3/24/2021	4/2/2021	4/16/2021
Yarmouth	5/11-5/13	Yes	3/31/2021	4/9/2021	4/23/2021
Dennis	5/18-5/20	Yes	4/7/2021	4/16/2021	4/30/2021
Sandwich	5/25-5/27	Yes	4/14/2021	4/23/2021	5/7/2021
Brewster	6/1-6/3	Yes	4/21/2021	4/30/2021	5/14/2021
Provincetown	6/8-6/10	Yes	4/28/2021	5/7/2021	5/21/2021
Truro	6/15-6/16	Yes	5/5/2021	5/14/2021	5/28/2021
Barnstable - Village TBD	postponed to fall		5/12/2021	5/21/2021	6/4/2021
FALL EFFORT					
Eastham	8/17-8/19	Yes	7/7/2021	7/16/2021	7/30/2021
Bourne	8/24-8/26	Yes	7/14/2021	7/23/2021	8/6/2021
Falmouth	8/31-9/2	Yes	7/21/2021	7/30/2021	8/13/2021
Orleans	9/7-9/9	Yes	7/28/2021	8/6/2021	8/20/2021
West Tisbury	9/14-9/16	Yes	8/4/2021	8/13/2021	8/27/2021
Edgartown	9/14-9/16	Yes	8/4/2021	8/13/2021	8/27/2021
Tisbury	9/14-9/16	Yes	8/4/2021	8/13/2021	8/27/2021
Chatham	9/21-9/23	Yes	8/11/2021	8/20/2021	9/3/2021
Wellfleet	9/28-9/30	Yes	8/18/2021	8/27/2021	9/10/2021
Osterville	10/5-10/7	Yes	8/25/2021	9/3/2021	9/17/2021
Mashpee	10/12-10/14	Yes	9/1/2021	9/10/2021	9/24/2021

2021 Operating Budget Expense Report 7/16/2021

ORG	OBJECT	ACCOUNT DESCRIPTION	ORIGINAL APPROP	REVISED BUDGET	YTD EXPENDED	AVAILABLE BUDGET	% USED
01001	5110	OP-SALARIES	\$ 102,000	\$ 102,000	\$ 51,281	\$ 50,719	50.30
01001	5119	OP-SALARY RESERVE	\$ 5,000	\$ 5,000	\$ -	\$ 5,000	0.00
01001	5171	OP-RETIREMENT	\$ 28,560	\$ 28,560	\$ -	\$ 28,560	0.00
01001	5173	OP-GROUP INSURANCE	\$ 14,250	\$ 14,250	\$ -	\$ 14,250	0.00
01001	5174	OP-MEDICARE/OTHER TAXES	\$ 775	\$ 775	\$ 698	\$ 77	90.10
01001	5175	STATE UNEMPLOYMENT INSURANCE	\$ 500	\$ 500	\$ 117	\$ 383	23.40
01001	5179	OP-MISC FRINGES	\$ 500	\$ 500	\$ -	\$ 500	0.00
01001	5180	OP-RETIREMENT LIABILITY	\$ 42,700	\$ 42,700	\$ -	\$ 42,700	0.00
01001	5181	OP-OPEB LIABILITY	\$ 15,000	\$ 15,000	\$ -	\$ 15,000	0.00
01001	5210	OP-UTILITIES	\$ 500	\$ 500	\$ 32	\$ 468	6.40
01001	5270	OP-MISC RENTALS	\$ 1,000	\$ 1,000	\$ 28	\$ 972	2.80
01001	5272	OP-RENT	\$ 22,500	\$ 22,500	\$ 13,125	\$ 9,375	58.30
01001	5290	OP-CUSTODIAL SERVICES	\$ 3,900	\$ 3,900	\$ 1,625	\$ 2,275	41.70
01001	5301	OP-ADVERTISING	\$ 75,000	\$ 75,000	\$ 29,561	\$ 45,439	39.40
01001	5302	OP-PUBLIC MARKETING SUPPORT	\$ -	\$ -	\$ 700	\$ (700)	100.00
01001	5309	OP-IT SERVICES	\$ 1,200	\$ 1,200	\$ 69	\$ 1,131	5.80
01001	5313	OP-STAFF PROFESSIONAL DEVELOP	\$ 5,000	\$ 5,000	\$ 101	\$ 4,899	2.00
01001	5314	OP-PAYROLL SERVICES	\$ 1,200	\$ 1,200	\$ 55	\$ 1,145	4.60
01001	5315	OP-LEGAL SERVICES	\$ 196,900	\$ 196,900	\$ 139,636	\$ 57,264	70.90
01001	5316	OP-AUDIT FEES	\$ 4,100	\$ 4,100	\$ 174	\$ 3,926	4.20
01001	5318	OP-TREASURY SERVICES	\$ 1,620	\$ 1,620	\$ 1,119	\$ 501	69.10
01001	5319	OP-CONTRACTUAL	\$ 25,000	\$ 25,000	\$ 52	\$ 24,948	0.20
01001	5320	OP-OUTREACH/MARKETING CONTRACT	\$ 103,000	\$ 103,000	\$ 7,960	\$ 95,040	7.70
01001	5341	OP-POSTAGE	\$ 10,000	\$ 10,000	\$ 3,679	\$ 6,321	36.80
01001	5343	OP-TELEPHONES	\$ 1,260	\$ 1,260	\$ 200	\$ 1,060	15.90
01001	5344	OP-INTERNET	\$ 4,000	\$ 4,000	\$ 308	\$ 3,692	7.70
01001	5345	OP-PRINTING	\$ 12,500	\$ 12,500	\$ 5,756	\$ 6,744	46.00
01001	5400	OP-SUPPLIES	\$ 1,500	\$ 1,500	\$ -	\$ 1,500	0.00
01001	5490	OP-FOOD SUPPLIES	\$ 500	\$ 500	\$ -	\$ 500	0.00
01001	5710	OP-TRAVEL IN STATE	\$ 5,000	\$ 5,000	\$ -	\$ 5,000	0.00
01001	5720	OP-TRAVEL OUT STATE	\$ 1,000	\$ 1,000	\$ 800	\$ 200	80.00
01001	5730	OP-SPONSORSHIPS	\$ 28,167	\$ 28,167	\$ 6,950	\$ 21,217	24.70
01001	5731	OP-SUBSCRIPTIONS	\$ 10,000	\$ 10,000	\$ 16,000	\$ (6,000)	160.00
01001	5732	OP-SOFTWARE LICENSES	\$ 1,140	\$ 1,140	\$ 851	\$ 289	74.60
01001	5741	OP-INSURANCE	\$ 14,844	\$ 14,844	\$ 3,194	\$ 11,650	21.50
01001	5789	OP-UNPAID BILLS	\$ 2,000	\$ 2,000	\$ -	\$ 2,000	0.00
01001	5850	OP-MISC EQUIPMENT	\$ 500	\$ 500	\$ 218	\$ 282	43.60
01001	5854	OP-FINANCIAL SOFTWARE SYSTEM	\$ 5,000	\$ 5,000	\$ -	\$ 5,000	0.00
01001	5855	OP-COMPUTER EQUIPMENT	\$ 3,000	\$ 3,000	\$ -	\$ 3,000	0.00
01001	5900	CONTINGENCY	\$ 185,000	\$ 185,000	\$ -	\$ 185,000	0.00
		Expense Total	\$ 935,616	\$ 935,616	\$ 284,288	\$ 651,328	30.40
		Mil Adder Revenue thru 6/30/2021	\$ 461,618.71				



Cape Light Compact JPE
261 Whites Path, Unit 4, South Yarmouth, MA 02664
Energy Efficiency 1.800.797.6699 | Power Supply 1.800.381.9192
Fax: 774.330.3018 | capelightcompact.org

June 22, 2021

Honorable Michael J. Barrett, Senate Chairman
General Court of the Commonwealth of Massachusetts
Joint Committee on Telecommunications, Utilities and Energy
State House, Room 109-D
Boston, MA 02133

Honorable Jeffrey N. Roy, Chairman
General Court of the Commonwealth of Massachusetts
Joint Committee on Telecommunications, Utilities and Energy
State House, Room 473-B
Boston, MA 02133

Re: House Bill 3360 – An Act Relative to Municipal Energy Plans

Dear Chairman Barrett, Chairman Roy and Members of the Committee:

My name is Martin Culik and I am the Chair of the Cape Light Compact Governing Board and a resident of the Town of Orleans. I am here to testify in support of House Bill 3360.

The Cape Light Compact JPE (Compact) is a municipal aggregator consisting of the 21 Cape Cod and Martha's Vineyard towns and is organized as a Joint Powers Entity under G.L. c. 40, §4A ½. The Compact was organized in 1997 as a result of the passage of the Electric Restructuring Act and has been administering rate-payer funded energy efficiency programs on the Cape and Vineyard since 2001, reinvesting approximately \$350 million dollars in rate-payer funds back into our towns and saving approximately 5.18 billion kilowatt hours.

For twenty years, the Compact towns have embraced the spirit and intent of the objectives in both the Electric Restructuring Act and the Green Communities Act in the development of energy efficiency investment plans. The Compact's plans are developed with significant local stakeholder involvement and our energy efficiency programs reflect the unique needs of the Cape and Vineyard communities. It was by engaging and listening to our residents, businesses, and municipal officials that the Compact was able to determine barriers to program participation and the best ways to address these barriers. As a result, the Compact was able to pioneer the following cost-effective energy efficiency offerings, some of which have been adopted statewide:

Working Together Toward A Smarter Energy Future

Aquinnah | Barnstable | Bourne | Brewster | Chatham | Chilmark | Dennis | Dukes County | Eastham | Edgartown | Falmouth
Harwich | Mashpee | Oak Bluffs | Orleans | Provincetown | Sandwich | Tisbury | Truro | Wellfleet | West Tisbury | Yarmouth

- **Municipal Incentives:** Up to 100 percent incentives for all cost-effective measures for municipalities. This resulted in all Cape and Vineyard municipalities being the first to change their municipal owned streetlights to high efficiency LED streetlights.
- **Moderate Income Customers:** Offering 100 percent incentives for all cost-effective measures for moderate income residential customers.
- **In-house Income Verification:** Enables eligible customers not on a utility discount rate to participate in the Compact's low-income energy efficiency programs.
- **Commercial & Industrial Renter Incentive:** Up to 95 percent incentive for all cost-effective measures for commercial customers who rent/lease their workspace.
- **Non-profit Initiative:** Up to 100 percent incentive for all cost-effective measures.
- **Fuel Blind:** Provide weatherization measures to all commercial and industrial electric customers (e.g. oil and propane) regardless of how they heat their business.

The Compact's ability to pioneer these programs originates in the legislature's express authority granted to municipalities in chapter 164, section 134(b) to develop and offer energy efficiency plans that go beyond and are more comprehensive than, or which cover additional subject areas than other statewide/utility plans. The Compact would like to continue to offer cost-effective energy efficiency program enhancements to our residents and businesses that comply with the laws of the Commonwealth while reflecting the needs of the Cape and Vineyard as determined by our twenty-one member municipalities. House Bill 3360 would preserve this authority by harmonizing the laws governing administration of municipal energy efficiency plans – the Electric Restructuring Act of 1997 and the Green Communities Act of 2008 and would also support the recently enacted Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy.

Thank you for your time and consideration today. I appreciate the opportunity to testify and to offer the Compact's strong support for House Bill 3360.

Sincerely,

Martin Culik

Martin Culik, Chair
Cape Light Compact Governing Board

cc: Cape Light Compact JPE Governing Board

HOUSE No. 3360

By Ms. Peake of Provincetown, a petition (accompanied by bill, House, No. 3360) of Sarah K. Peake and others for legislation to enhance certified municipal energy plans. Telecommunications, Utilities and Energy.

[SIMILAR MATTER FILED IN PREVIOUS SESSION
SEE HOUSE, NO. 4261 OF 2019-2020.]

The Commonwealth of Massachusetts

**In the One Hundred and Ninety-Second General Court
(2021-2022)**

An Act relative to municipal energy plans.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1 SECTION 1. Section 134(b) of chapter 164 of the General Laws, as as appearing in the
2 2018 official edition, is hereby amended by striking out the first sentence in lines 101-104 of the
3 second paragraph and inserting in place thereof the following:

4 Notwithstanding any other general or special law to the contrary, the municipality or
5 group of municipalities with a certified energy plan shall not be prohibited from proposing an
6 energy efficiency investment plan that contains enhancements which are more specific, detailed
7 or comprehensive or which cover additional subject areas than those contained in a jointly
8 prepared energy efficiency investment plan submitted in accordance with section 21(b)(1) of
9 chapter 25. Such enhancements may be funded by any funding source authorized by section
10 19(a) of chapter 25. In no event shall the department withhold approval of such enhancements

- 11 due to considerations of cost efficiency or ratepayer impact if such enhancements are cost
- 12 effective in accordance with the department's cost effectiveness screening.



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental
Affairs

100 Cambridge Street, Suite 900
Boston, MA 02114

Charles D. Baker
GOVERNOR

Karyn E. Polito
LIEUTENANT GOVERNOR

Kathleen A. Theoharides
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1081
<http://www.mass.gov/eea>

July 15, 2021

RE: Greenhouse Gas Emissions Reduction Goal for Mass Save

Dear Mass Save Program Administrators,

On March 26, 2021, Governor Baker signed comprehensive legislation that codifies the Baker-Polito Administration's commitment to achieve Net Zero emissions in 2050 and furthers the Commonwealth's nation-leading efforts to combat climate change and protect vulnerable communities. An Act Creating A Next-Generation Roadmap For Massachusetts Climate Policy (the Climate Act) builds upon the framework established in the Administration's 2050 Decarbonization Roadmap (2050 Roadmap) and 2030 Interim Clean Energy and Climate Plan (2030 Interim CECP) and requires the Commonwealth to pursue ambitious emissions reduction goals in a cost-effective and equitable manner while creating jobs and opportunities for economic development throughout Massachusetts.

The Climate Act made significant changes to the Global Warming Solutions Act (the GWSA). Among other requirements, the Climate Act requires the Secretary of Energy and Environmental Affairs to set a goal, expressed in tons of carbon dioxide equivalent, every three years for the succeeding Mass Save Energy Efficiency Plans' necessary contribution to meeting each statewide greenhouse gas (GHG) limit and sublimit adopted under the GWSA. Our Mass Save programs will be a key policy driver to meeting our GHG emissions reduction requirements and the programs must reflect this imperative.

Section 106 of the Climate Act requires me to establish the first goal for the Mass Save Energy Efficiency Plans no later than July 15, 2021. Since this deadline precedes the finalization of the statewide GHG emissions limits and sublimits to be adopted under the GWSA, as amended by the Climate Act, these first Mass Save goals are informed by the 2050 Roadmap and

2030 Interim CECP, both released in 2020.¹ By this letter, I set the following GHG emissions reduction goals for the 2022–2024 Energy Efficiency Plans, which are currently being reviewed by the Energy Efficiency Advisory Council (EEAC), pursuant to the Green Communities Act, G.L. c. 25, § 21(c), and which you must submit by October 31, 2021, to the Department of Public Utilities (DPU) for a decision, pursuant to G.L. c. 25, § 21(d).

The Green Communities Act requires that:

Every 3 years, on or before April 30, the electric distribution companies and municipal aggregators with certified efficiency plans shall jointly prepare an energy efficiency investment plan [the statewide electric energy efficiency plan] and the natural gas distribution companies shall jointly prepare a natural gas efficiency investment plan [the statewide natural gas energy efficiency plan].

Greenhouse Gas Emissions Reduction Goals

Below in Table 1, I set goals for the statewide electric energy efficiency plan and the statewide natural gas energy efficiency plan for 2022–2024. These goals represent the aggregate GHG emissions reductions to be achieved with energy efficiency measures implemented in 2022–2024 and are expressed as aggregate metric tons of carbon dioxide equivalent, to be measured at the conclusion of the three-year plan period. As required by section 3B of chapter 21N, these goals were selected with a view towards their necessary contribution to meeting the limits and sublimits that will be adopted under the GWSA. The detailed methodology and assumptions supporting the goals may be found in Appendix 1.

Because these GHG emission limits and sublimits will be in place every five years beginning in 2025 and ending in 2050, in order to count towards meeting the goal, a GHG emissions reduction achieved by the plan must be sufficiently long-lasting so that it will “contribut[e] to meeting” those future limits and sublimits. G.L. c. 21N, § 3B. In order to resolve the disconnect between the three-year time period for the plans and the 5 year time period between successive limits (and sublimits) under the GWSA, I have decided that an emissions reduction measure must be sufficiently permanent to contribute to meeting, at a minimum, the next two statewide goals adopted pursuant to M.G.L. c. 25, § 21(d)(5) in order to count towards achieving the goals set forth in Table 1 below.² I have set these goals for the Energy Efficiency Plans with that limitation in mind. Therefore, I expect that, when the DPU

¹ I note that the 2030 Interim CECP was designed to achieve a reduction of 45% below 1990 levels in 2030, prior to the Climate Act requiring that I adopt a more stringent 2030 limit of at least 50% below 1990 levels.

² The Plans for 2046–2048 will, of course, need to contribute only to the 2050 goal. The legislature may wish to consider amending the law before the 2049–2051 plans are established, as any goal set in 2048 will not be realized until after the 2050 limit is achieved. Alternatively, the legislature might consider changing the Energy Efficiency Plans to five-year terms and synchronize with the GWSA limits and sublimits.

issues its “statement . . . indicating the degree to which the activities undertaken pursuant to the performance of each plan met the goal for the plan set by the secretary pursuant to section 3B of chapter 21N” that the DPU will not consider emissions reductions that will no longer be effective in 2030. M.G.L. c. 25, § 21(d)(5). Therefore, the goals below are expressed in cumulative annual metric tons of CO₂e reductions expected in 2030, directly associated with the measures implemented in 2022–2024.

The Climate Act requires that every three years a new goal to be established for the succeeding plans’ contribution to future GHG emission limits and sublimits. Each successive goal will incrementally build upon the reductions to GHG emissions achieved under prior plans.

Table 1: Greenhouse Gas Emissions Reduction Goal

	2022–2024 Joint Statewide Energy Efficiency Plan (electric)	2022–2024 Joint Statewide Gas Efficiency Plan (gas)
Emissions Reductions in metric tons of CO ₂ e	504,000	341,000

As the Climate Act requires both economy-wide and sector limits, I recommend that the plans include emissions reductions in the following individual sectors:

Table 2: Sector-Specific Goals

	Residential and Income Eligible Electric Energy Efficiency	Residential and Income Eligible Gas Efficiency	Commercial and Industrial Electric Energy Efficiency	Commercial and Industrial Gas Efficiency
2025 Cumulative Annual Emissions Reduction (metric tons of CO ₂ e)	392,000	252,000 <i>680,000</i>	296,000	156,000
2030 Cumulative Annual Emissions Reduction (metric tons of CO ₂ e)	351,000	191,000 <i>504,000</i>	153,000	150,000

Priorities

Meeting the Climate Act’s 2050 Net Zero limit and 2030 limit of at least 50% GHG emissions reductions relative to 1990 levels will require a significant increase in the scope and scale of building retrofits, through a focus on envelope improvements and efficient electrification. Consistent with the EEAC Resolution of March 24, 2021,³ I expect the Mass Save Program Administrators to achieve the GHG goals established above through:

³ https://ma-eeac.org/wp-content/uploads/FINAL-EEAC-Priorities-Resolution_Adopted-3.24.2021.pdf

- Equitable program investments that ensure weatherization and electrification of homes and businesses in environmental justice communities and low-moderate income households;
- Significantly increasing the number of buildings retrofitted and weatherized each year;
- Significantly ramping up electrification of existing buildings through heat pump goals that set the Commonwealth on a path to achieving one million homes and 300–400 million square feet of commercial buildings using electric heat pump for space heating by 2030;
- Eliminating measures that increase the use of natural gas for space heating, including those associated with combined heat and power or fuel cells, since they are not consistent with the GHG emission reduction goals;
- Prioritizing measures consistent with the 2050 Roadmap and 2030 Interim CECP, such as insulation and heat pumps, and reduce support for measures like lighting and fossil-fuel heating incentives;
- Committing to phase out fossil fuel incentives aligned with the Interim 2030 CECP policy recommendations; and
- Significantly increasing workforce development investments through coordination with the Massachusetts Clean Energy Center, to increase diversity and expand the workforce necessary to achieve our GHG goals and provide economic opportunities.

Conclusion

As set forth above, the final 2022–2024 Energy Efficiency Plans filed with the DPU in October of this year must be designed to realize the GHG goal set forth above and should focus on programs that accelerate market transformation needed to achieve Net Zero in 2050. Consistent with the Climate Act, each Plan should “be constructed to meet or exceed the [respective] goal” set forth above. M.G.L. c. 25, § 21(d)(4). I encourage the Mass Save Program Administrators and the EEAC to prioritize energy efficiency investments that reduce GHG emissions and are aligned with the state’s 2050 Roadmap.

I look forward to the collaborative work of the Program Administrators and the EEAC to continue and enhance Massachusetts’s national leadership on energy efficiency while boldly combatting climate change and ensuring these programs are accessible to low- and moderate-income residents and environmental justice communities.

Sincerely,



Kathleen Theoharides
Secretary of Energy and Environmental Affairs

APPENDIX 1
ASSUMPTIONS AND METHODOLOGY

Greenhouse Gas Emissions Reduction Requirement for Mass Save® - Methodology

Interim Clean Energy & Climate Plan for 2030

The primary actions in the Interim Clean Energy & Climate Plan (CECP) for 2030 relevant to the Mass Save® plans⁴ include retirement and replacement of space heating and cooling equipment, domestic hot water equipment, and key components that comprise a building's envelope, such as windows and insulation. The sum of these changes to equipment and envelope stock in any given year in the full CECP (2021 – 2030) over time results in a net change in annual energy consumption, which, through the emissions factors described below, results in a projection of net change in annual greenhouse gas (GHG) emissions.

The aggregation of the equipment turnover modeled in 2022, 2023, and 2024, and the resulting year-over-year changes in energy consumption, correspond to the measures and annual energy savings comprising the 2022–2024 Mass Save plans. Since Mass Save only covers the service territories of the Commonwealth's investor-owned gas and electric utilities, for the purposes of this computation, a portion of the changes to statewide energy savings (reflecting an estimate of built square feet serviced by municipal-owned utilities) are excluded from the Mass Save GHG reduction requirement. The resulting annual energy savings from each of the three years are summed to produce a cumulative annual energy savings representing the impact of all relevant measures installed from January 1, 2022 through December 31, 2024. Since the actions described in the CECP reflect long-lived building components, no degradation by 2030 is assumed.

In the CECP, cumulative annual energy savings are simply multiplied by the average emission factors noted below to arrive at the cumulative annual GHG emission reduction that the 2022–2024 Mass Save plans should achieve in order to align with the reductions specified in the CECP. Because the emissions limits and sublimits specified in M.G.L. Ch. 21(N) reflect emissions in 2025 and 2030, separate quantifications of GHG emission reductions are estimated, anticipating future deployment of non-emitting electricity resources.

Mass Save Plans by Fuels

The Mass Save® programs are established every three years and require two joint statewide plans; an energy efficiency plan funded through electric ratepayers, and a gas efficiency plan funded through gas ratepayers. The joint statewide energy efficiency plan includes electric, heating oil, and propane energy efficiency measures, including fuel switching from delivered

⁴ Mass Save refers to the joint effort of the Massachusetts electric and gas program administrators to implement energy efficiency measures pursuant to G.L. c. 25, sec. 21.

fuels to electricity and active demand management programs. The joint statewide gas efficiency plan includes measures that apply to natural gas usage. The net change in use of these fuels (electricity, gas, heating oil, and propane) is the source of GHG emissions reductions achieved through the Mass Save program.

Sectors

The budgeting and implementation of these two statewide plans is conducted on a sector basis, with funding provided by residential ratepayers for residential and income-eligible programs, and by commercial ratepayers for commercial and industrial programs.

Measures

The Mass Save plans are implemented through investments that result in a reduction and/or shift in fuel or energy use in buildings over time. These fuel-use and energy-saving quantities are calculated in the benefit-cost models during the development of each of the three-year plans. The plans include a budget and target energy-savings level for each program, initiative, and measure to be implemented over the three-year term. Each measure also has an expected measure life, calculated based on independent monitoring and evaluation studies. The “measure life” is a forecast of the average expected time that a measure is predicted to perform above and beyond what would otherwise have occurred absent the Mass Save program. These energy savings by fuel and the evaluated timespan of these measures were used to calculate GHG emissions reductions. Measure lives are rounded to the nearest 6 months and range from 1 year to 25 years, depending on the durability of the measure.

Timing of GHG Emission Reductions

For the 2022–2024 Mass Save plans (2022–2024 Plans), investments begin on January 1, 2022, and continue until December 31, 2024. As a result, the first full year during which the maximum energy reductions for the 2022–2024 investments will occur is calendar year 2025. Due to the long measure lives of many Mass Save investments, the majority of GHG emission reductions from investments made during the 2022–2024 Plan are expected to continue in 2030, with a smaller proportion in 2040, and have little quantifiable emissions impact in 2050.

Historically, the Mass Save programs have reported GHG emissions on both an annual basis, and over the full lifetime of a measure or set of measures. Both metrics take a single year in isolation and ignore the emissions reductions of preceding and subsequent years, the gradual decay of the emissions reductions over time, or changes to the emissions impacts of a unit of energy conserved (see electricity emission factors below). This approach does not allow for alignment and comparison between the historical Mass Save program reporting and the annual statewide

inventory of Mass DEP⁵ and the GHG reporting requirements of the Commonwealth. Accordingly, the Mass Save GHG emissions reduction goals are being set, and will be required to be reported on, as the aggregate GHG emissions reductions to be achieved with energy efficiency measures implemented in 2022–2024 and are expressed as aggregate metric tons of carbon dioxide equivalent, to be measured at the conclusion of the three-year plan period.

Evaluated Measure lives

Because evaluated measure lives can be changed by future evaluation studies, DOER and the Mass Save program administrators will use the measure lives as currently calculated effective July 1, 2021 and anticipated for the 2022–2024 plans as the basis for setting and assessing achievement towards this GHG emissions reduction goal.

Part Year Measure Application

For a subset of measures, their expected measure life results in the end of life part-way through either 2025 or 2030. For example, measures with a measure life of 7 years installed in the 3rd quarter of 2023 would be modeled to end their expected energy savings and corresponding GHG emissions reduction in the 3rd quarter of 2030. In the real world, there will be a gradual decay in measure emission reductions over a much wider time horizon, averaging 7 years in this example. For simplicity of calculation, DOER and the Program Administrators will assume that all measures installed at any time during a plan year, for example in 2023 with a 7-year measure life, will count as having 50% of their annual GHG emissions reduction in calendar year 2030, and so forth for other measure lives that end during calendar year 2025 or 2030.

Adjusted Gross Savings

The Mass Save programs conduct evaluation studies to assess the extent to which supported measures would have been otherwise installed absent their intervention. Based on these evaluation studies, they apply net-to-gross adjustment factors that generally reduce claimable ‘net’ savings from the adjusted gross savings achieved by the measures installed. Net savings are the best way of showing the economic benefit of the Mass Save program investments. However, adjusted gross savings are the more applicable metric for the purpose of quantifying GHG emission reductions. Accordingly, the adjusted gross savings are used to set and assess progress towards achieving the Mass Save GHG reduction goal.

⁵ <https://www.mass.gov/lists/massdep-emissions-inventories>

Emission Factors

To set a transparent and fair GHG emissions reduction requirement, the emission factors used to set the GHG reduction goal should also be used to report and assess progress towards achieving the Mass Save GHG reduction goal. This consistency across multiple years argues for simplicity and transparency in selecting the emission factors, while accounting for predictable changes in these factors over time.

Electric Sector GHG Emission Factors

For the purposes of developing the CECP for 2030⁶ and the Massachusetts Decarbonization Roadmap for 2050,⁷ the Executive Office of Energy and Environmental Affairs (EEA) produced a forecast of emission factors from the electric generation sector for each 5-year increment from 2020 to 2050 and an interpolation for each year in between. The 2030 CECP is still under development, so the emission factors listed below, while fixed for this Mass Save GHG emission reduction goal, are subject to change in the final 2030 CECP, pending additional policies that impact gross load, deployment of non-emitting electricity sources, or settlement of clean energy attributes. This use of the current EEA forecast of average electric emission factors, shown in Table 3 below, allows for a consistent basis for both planning and evaluating the 2022–2024 plans' achievement of their GHG emissions reduction goals. Based on the broad mix of Mass Save program measures and the years-long time horizon for evaluating them, the average annual emissions factor, rather than more granular marginal emission factor will be applied to all measures.

Table 3. Average Electric Emission Factors by Year for Massachusetts in 2025 and 2030

Year	Metric Tons of Emissions per MWh (metric tons of CO ₂ e)
2025	0.1869
2030	0.1065

On-Site Fuel GHG Emission Factors

The emission factors of fossil fuels relevant to the Mass Save programs, natural gas, #2 heating oil, propane, are much more stable over time than the average emission factor for electricity utilized by buildings in Massachusetts over the course of a calendar year. While the carbon content and GHG emissions of these fuels vary over time, for ease of transparency and simplicity, the Program Administrators should hold emission factors constant, based on carbon dioxide emissions from combustion of these fuels, using currently reported national values from the US Energy Information Administration (EIA)⁸ and reproduced below with units of metric tons of CO₂e per million BTU in Table 4:

⁶ <https://www.mass.gov/info-details/massachusetts-clean-energy-and-climate-plan-for-2030>

⁷ <https://www.mass.gov/info-details/ma-decarbonization-roadmap>

⁸ https://www.eia.gov/environment/emissions/co2_vol_mass.php accessed on July 1, 2021

Table 4: EIA Carbon Dioxide Emissions Coefficients by Fuel

Year	Natural Gas (metric tons of CO ₂ e/MMBtu)	Heating Oil (metric tons of CO ₂ e/MMBtu)	Propane (metric tons of CO ₂ e/MMBtu)
2025	0.05307	0.07879	0.06307
2030	0.05307	0.07879	0.06307

In holding these emission factors constant, this assumption does not include upstream emissions, such as from methane leaks in the natural gas distribution network or leakage of SF₆ in the electric transmission and distribution grid. Equally this assumption ignores the potential for renewable fuel blending such as bio-fuels and renewable natural gas or green hydrogen being introduced into these fuels in the 2025 and 2030 time horizon, which would reduce the GHG emissions reductions from energy efficiency measures. This assumption of unchanged fuel emissions factors assists in the avoidance of double-counting between Mass Save investments and other potential policy actions that might change the carbon content in the supply of these fuels. It allows Mass Save to compare investing in a measure to a counterfactual of not doing so.

Other Unanticipated Variables

In the event of unforeseen and unanticipated variables leading to notable changes between the 2022–2024 plan forecast and the 2025 and 2030 reporting years, the Mass Save Program Administrators and the Massachusetts Department of Energy Resources will endeavor to follow the principles of transparency and simplicity in quantifying any modifications needed and agreed to by both parties in reporting the results of the 2022–2024 plans.

Reporting on the Mass Save GHG Emissions Reduction Goal

To provide a fair evaluation of the Mass Save program implementation results, the final set of energy savings and resulting GHG emission reductions need to use a consistent set of assumptions to the set that were used to calculate the requirement initially. However, by 2025 and 2030 there will be updated information related to savings, measure lives, emissions factors and so on, that if applied would change the results. In recognition of this inevitable outcome, the reporting on the success of each the plan’s achievement of its GHG emissions reduction goal will be done in two separate sets of calculations. The first is an ‘apple-to-apples’ calculation using the available information in July 2021 to evaluate the Mass Save plan results using the same set of assumptions used to set this goal. The second is a ‘best-available-data’ calculation using updated assumptions on emissions factors, measure effectiveness, measure lives, and other variables that incorporate updated data at the time of reporting. The former ‘apples-to-apples’ calculation is intended to provide a fair benchmark to evaluate the success of the plans in meeting this goal.

The 'best-available-data' calculation is intended separately to inform progress towards the Commonwealth's GWSA limits and sublimits.