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September 29, 2017

VIA ELECTRONIC MAIL
ORIGINAL BY HAND DELIVERY

Mark D. Marini, Secretary
Department of Public Utilities
One South Station, 5th Floor
Boston, MA 02110

Re: *D.P.U. 17-05, Phase II / Petition of NSTAR Electric Company and Western Massachusetts Electric Company, each d/b/a Eversource Energy, for Approval of General Increases in Base Distribution Rates for Electric Service and a Performance Based Ratemaking Mechanism.*

Dear Secretary Marini:

Enclosed for filing please find the Cape Light Compact JPE's (the "Compact") Phase II Initial Brief in the above-referenced matter. Also enclosed is a Certificate of Service.

Thank you for your attention to this matter. If you require further information or have any questions, please do not hesitate to contact me.

Sincerely,

Rebecca F. Zachas

Rebecca F. Zachas

RFZ/drb
Enclosures

cc: Marc J. Tassone, Hearing Officer (via email and hand delivery)
Cheryl M. Kimball, Esq. (via email and first class mail)
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COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF PUBLIC UTILITIES

Petition of NSTAR Electric Company and Western Massachusetts Electric Company, each d/b/a Eversource Energy for Approval of an Increase in Base Distribution Rates for Electric Service Pursuant to G.L. c. 164, §94 and 220 C.M.R. §5.00	)	D.P.U. 17-05, Phase II

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document(s) upon Secretary Mark D. Marini and Hearing Officer Marc J. Tassone via electronic mail and hand delivery, upon Cheryl M. Kimball, Esq. and Joseph W. Rogers, Esq. via electronic mail and first class mail delivery and upon the remaining Service List via electronic mail only in this matter.

Dated this 29th day of September, 2017.

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INITIAL BRIEF OF THE

CAPE LIGHT COMPACT JPE

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INITIAL BRIEF OF THE CAPE LIGHT COMPACT JPE

Pursuant to the briefing schedule established by the Department of Public Utilities ("Department") on September 15, 2017, the towns of Aquinnah, Barnstable, Bourne, Brewster, Chatham, Chilmark, Dennis, Eastham, Edgartown, Falmouth, Harwich, Mashpee, Oak Bluffs, Orleans, Provincetown, Sandwich, Tisbury, Truro, Wellfleet, West Tisbury, and Yarmouth, and Dukes County, organized and operating collectively as the Cape Light Compact JPE, a joint powers entity organized pursuant to G.L. c. 40, §4A ½ and G.L. c. 164, §134 (the "Compact"),[1] submit this initial brief for the second phase ("Phase II" or "Rate Design Track") of the above-captioned proceeding (the "Proceeding").

On January 17, 2017, NSTAR Electric Company ("NSTAR Electric") and Western Massachusetts Electric Company ("WMECo"), each doing business as Eversource Energy ("Eversource" or the "Company") filed a petition (the "Initial Filing") for a general increase in base distribution rates for electric service and approval of a performance-based ratemaking ("PBR") plan. The Department docketed the petition as D.P.U. 17-05.

[1] As of July 1, 2017, the Compact is a joint powers entity organized pursuant to G.L. c. 40, §4A ½ and G.L. c. 164, §134. It was originally formed as a governmental aggregator under G.L. c. 164, §134 and organized through a formal Inter-Governmental Agreement signed by all the towns, as well as Barnstable and Dukes counties, pursuant to G.L. c. 40, §4A.

The Department suspended the effective date of any rate increase until December 1, 2017 to investigate the propriety of Eversource's request. Suspension Order at 1 (January 19, 2017). The Department also phased the Proceeding such that rate design issues would be considered in Phase II, which is the subject of this Initial Brief.[2] Interlocutory Order on Attorney General's Motion to Protect Intervenors' Due Process Rights at 13 (June 9, 2017) ("Interlocutory Order").

I. STATEMENT OF THE CASE

The Compact is the energy efficiency Program Administrator and an approved opt-out municipal aggregator offering renewably sourced power supply to customers in its communities. The Compact is located on Cape Cod and Martha's Vineyard in Eastern Massachusetts, which was formerly served by the Commonwealth Electric Company and is now one of three service areas within NSTAR Electric. In this Phase II of the Proceeding, the Compact seeks to ensure that distribution rates will not unfairly burden ratepayers in the communities on Cape Cod and Martha's Vineyard, will promote all cost-effective energy efficiency to a maximum extent, will empower customers to understand and control their bill, and will promote investment in renewable and distributed energy resources throughout Massachusetts.

The Compact is focused on four aspects of Eversource's proposals that impact the Compact and its customers locally on Cape Cod and Martha's Vineyard. First, the Compact is opposed to the unjustified, ill-conceived proposal to shift $33.3 million in distribution, reconciling rate, and transmission cost incurred to serve Western Massachusetts solely onto residential customers in Eastern Massachusetts. Second, the Compact is opposed to Eversource's proposal to sharply increase fixed customer charges for residential customers in Eastern Massachusetts, which reduces incentives for efficient energy consumption and

[2] The Compact filed its Phase I Initial Brief on July 21, 2017, and Reply Brief on August 18, 2017.

disproportionately harms low-usage residential customers. Third, the Compact is opposed to Eversource's proposal to impose a demand charge and an even higher customer charge for residential and commercial customers who install new distributed generation ("DG") facilities and wish to participate in the Commonwealth's net-metering incentive. These charges are wholly unsupported, unduly discriminatory, and harmful to the successful development of energy efficiency and DG. Fourth, the Compact is concerned about customers who would face sudden, severe bill impacts due to multiple rate design changes and reclassifications of customers being implemented all at once, and about the lack of sufficient mitigation available for many of them.

A theme among these concerns is that Eversource in multiple instances failed to substantiate its claims about its proposals by performing required analyses – e.g., failing to support assertions of cost shifting, to back up arguments that its rates send correct price signals, to demonstrate impacts on energy efficiency programs, or to address the full range of bill impacts. Similarly, Eversource repeatedly filed major late-stage changes and redesigns, which were not thoroughly developed and would have unintended, detrimental consequences for certain rate classes.

Another theme is the lack of customer empowerment. Absent from the rate design proposals are tools to help residential and small business customers understand and control their bills, make decisions about whether to install DG or enroll in net-metering, and prepare for the impact of the significant rate changes. For example, Eversource has not developed a detailed plan for educating customers about the rate changes or means for customers to estimate their bill impact. Still viewing customer billing like a bundled service, Eversource assumes its customers

have no interest in their bills or willingness to parse out the separate fixed, demand-based, and volumetric charges on their monthly billing statements.

In its grid modernization proceeding earlier this summer, Eversource insisted that very few customers have discretionary load to shift and that time-varying rates would not achieve meaningful demand response even if customers had near-real time interval data, two-way communications, direct load control, and other functionalities. Yet somehow Eversource expects residential and small commercial customers to navigate new demand charges without providing them any tools for monitoring their demand.

Without tools for success, these rates will disempower customers. Instead, customers should be encouraged to take control of their energy consumption and to join in the collective effort to reduce greenhouse gas emissions in the Commonwealth. The Compact appreciates the Department's consideration of these important goals and respectfully requests the relief summarized in Section V herein.

II. BACKGROUND

Eversource currently serves four electric retail distribution territories in Massachusetts. In addition to WMECo's territory, the NSTAR Electric subsidiary serves three territories, which were previously served by Cambridge Electric Light Company (the "CAMB" territory), Boston Edison Company (the "BECO" territory), and Commonwealth Electric Company (the "COM" territory). These four territories have separate billing and maintain distinct rate classes. Att. AG-4-2(d) at 3-4. NSTAR Electric's 2012 settlement did not allow the combination of rates for CAMB, BECO, and COM. *Id.* at 3.

This proceeding is the first fully litigated rate case since 1986 for NSTAR Electric (see D.T.E. 03-121 at 56 (July 23, 2004) (dissenting opinion)) and since 2010 for WMECo. In the most recent NSTAR Electric rate settlement agreements in 2012, the Department authorized a four-year base distribution rate freeze and one-time $21 million rate credit as part of the NSTAR Electric/Northeast Utilities merger proceeding. D.P.U. 10-170-B, Order at 2, 68 (2012). In 2012, the General Court amended G.L. c. 164, §94 to require utilities to file rate tariffs on a five-year schedule.

A. <u>The Rate Case Petition</u>.

In this Proceeding, Eversource claims a revenue deficiency of $60.2 million for NSTAR Electric and $35.7 million for WMECo, which would result in an increase of approximately 7 percent in total distribution revenues for NSTAR Electric and 26 percent for WMECo. Apart from cost allocation and rate design changes, Eversource requested: (1) to increase its revenue requirement; (2) an authorized return on equity of 10.5%; (3) a revenue decoupling mechanism; (4) a PBR formula for increasing its revenue requirements annually, known as the Performance Based Ratemaking Mechanism ("PBRM"); and (5) approval to tie the PBRM to a $400 million spending commitment (the Grid Modernization Base Commitment ("GMBC")) allocated to six categories of capital investments intended to advance grid modernization as described in the Grid Wise Performance Plan (the "GWPP").[3]

In Phase I of the Proceeding, the Department heard evidence on these and several other issues. This Phase II involves review of allocated cost of service ("ACOS") studies ("ACOSS"), and marginal cost of service ("MCOS") studies ("MCOSS"), proposals for redefining and

[3] Most of the GMBC investments were originally proposed in Eversource's petition for approval of a grid modernization plan in D.P.U. 15-122, the filing and compliance requirements of which were mandated by the Department in Modernization of the Electric Grid, Order 12-76-B (June 12, 2014).

consolidating existing rate classes in different service areas, a minimum monthly reliability contribution ("MMRC") for new net-metered customers, increased customer charges, and other rate design issues. See D.P.U. 17-05, Interlocutory Order on Intervenors' Due Process Rights at 13 n.6 (June 9, 2017).

Eversource seeks to consolidate revenues between CAMB, BECO, and COM rate classes within a single Eastern Massachusetts territory ("EMA"), with WMECo known as the Western Massachusetts territory ("WMA"). Exh. ES-RDP-1 at 5-6. On top of that consolidation, Eversource proposes to align the 55 existing rate class definitions of the four service areas such that EMA and WMA will have a common set of "Eversource MA rate classes" with separate EMA and WMA rates. See *id.* at 6, 9-10, 20. Eversource proposes ten default rate classes and one optional time-of-use ("TOU") rate class for qualifying general service customers as follows: R-1 Residential, R-2 Residential Low Income, R-3 Residential Heating, R-4 Residential Heating Low Income, G-1 Small General Service, G-2 Medium General Service, G-3 Large General Service, G-4 Extra Large General Service, S-1 Street and Security Lighting, S-2 Street and Security Lighting – Customer Owned, and G-5 Optional TOU Small General Service. *Id.*

Initially, Eversource filed one set of rate proposals (the "Original Rate Design") based on separate revenue requirements for each operating company. Exh. ES-RDP-1 at 6-8. Six months into the Proceeding, on June 1, 2017, Eversource filed a set of alternative proposals (the "Alternative Rate Design"), characterized as a supplemental discovery response to DPU-56-9, which combined the revenue requirements for NSTAR Electric and WMECo. The Alternative Rate Design precipitated the bifurcation of the Proceeding into two phases.

Under the Original Rate Design, rate class consolidation within NSTAR Electric would be effected immediately for residential and street lighting customers on January 1, 2018 but

would be deferred for a one-year period from January 1, 2018 until January 1, 2019 (the "Transition Year") for general service customers. Exh. ES-RDP-1 at 48-50. Under the Alternative Rate Design, Eversource proposes to consolidate its revenue requirements for NSTAR Electric and WMECo for rates effective January 1, 2018 and January 1, 2019, while maintaining the CAMB, BECO, and COM territories during the Transition Year for all rate classes. DPU-56-9 (Supplemental) at 1, 7-8.

In the Initial Filing, Eversource proposed to mitigate bill impacts for commercial and industrial ("C&I") rate classes primarily by (1) capping the total proposed revenue increase at 10% for each rate class, (2) introducing the G-5 Optional TOU rate for qualifying small general service customers, and (3) working with customers to evaluate options for energy efficiency. Exh. ES-RDP-1 at 17, 39, 49.

On July 25, 2017, Eversource filed a supplemental response to DPU-63-6, along with numerous attachments purporting to represent its mitigation plan, bill impacts, and revised consolidated tariffs for C&I rate classes associated with their revised rate design proposal. Hearing Officer Memorandum, Procedural Schedule – Rate Design Track (July 28, 2017). This filing led to a one-week extension of intervenors' discovery deadline, but the deadlines for pre-filed testimony did not change. *Id.*

B. Procedural Background.

The Department allowed the Compact to intervene as a full party after finding that it is substantially and specifically affected by this Proceeding, given its role as the energy efficiency Program Administrator for all ratepayers on Cape Cod and Martha's Vineyard and an opt-out municipal aggregator of competitively supplied electric power. See Hearing Officer Ruling on

Petitions to Intervene (March 13, 2017); Petition for Leave to Intervene of the Cape Light Compact (February 24, 2017).

Shortly after submitting its Initial Filing in this Proceeding, Eversource withdrew its grid facing investments from D.P.U. 15-122, and the Office of the Attorney General ("Attorney General" or "AGO") objected to the consideration of grid modernization investments outside of D.P.U. 15-122. D.P.U. 15-122, Incremental Grid Modernization Plan (February 3, 2017). In that same filing, for the first time, the Attorney General requested that the Department phase the Proceeding. AGO Motion at 3 (February 8, 2017). The Department rejected the Attorney General's requests, finding that the GMBC and PBRM are related to such an extent that they should be adjudicated together and phasing was not necessary. See D.P.U. 17-05, Interlocutory Order on Motion to Phase and Bifurcate at 11, 14 (February 23, 2017).

On June 1, 2017, at approximately 5:25 p.m., Eversource submitted the Alternative Rate Design, leaving the parties a single business day to review significant changes prior to the start of the evidentiary hearings. See D.P.U. 17-05, Memorandum on Evidentiary Hearing Schedule at 1-2 (June 2, 2017). The Alternative Rate Design proposed to consolidate rates for residential customers and to shift significant revenues from WMECo onto NSTAR Electric consumers. Interlocutory Order on Intervenors' Due Process Rights at 6 (June 9, 2017).

The Department allowed Eversource to amend its pleading but this time ruled that a phased schedule was necessary to avoid violations of intervenors' due process rights at that late stage in the Proceeding. See *id.* at 12. As a result of that ruling, the Alternative Rate Design is now under review as an alternative to the Original Rate Design and both proposals are currently before the Department in this Proceeding. The Department issued a separate procedural schedule

to provide public notice and afford the parties time for consideration of the Alternative Rate Design. *Id.* at 14.

Under the Phase II schedule, Eversource posted notice of the Alternative Rate Design and held additional public hearings in the municipalities. Intervenors were permitted to file additional discovery requests and to supplement their testimony on issues impacted by the Alternative Rate Design. Rate design testimony now includes that filed on or about April 27, 2017 (addressing issues in the Original Rate Design) and on or about August 15, 2017 (addressing rate design issues in the Alternative Rate Design). The August testimony supplements but does not replace that filed in April.

Between the April and August filings, the following intervenors have offered testimony on rate design issues: the Compact, the Attorney General, Acadia Center, Federal Executive Agencies, Retail Energy Supply Association, Sunrun Inc. and the Energy Freedom Coalition of America, LLC ("Sunrun/EFCA"), The Energy Consortium, University of Massachusetts, Vote Solar, Cape and Vineyard Electric Cooperative, Inc., City of Cambridge, City of Newton, Town of Arlington, Town of Barnstable, and Town of Lexington.

The Department held evidentiary hearings in September 2017 on all Phase II rate design issues.

III. ARGUMENTS AND AUTHORITIES

The Compact's argument below includes: (A) the Department's standards for cost-allocation and rate design; (B) opposition to unjustified cost-shifts onto EMA residential customers; (C) opposition to the high fixed residential customer charge and the MMRC; and (D)

discussion of factors driving high bill impacts for COM customers and the lack of adequate mitigation.

A. Standard of Review.

The Department reviews Eversource's Petition pursuant to G.L. c. 164, §94, which requires the Department to "make an investigation as to the propriety of" any proposed general increase in rates, prices and charges. G.L. c. 164, §94. Under this authority, the Department ensures that all rates are "just and reasonable" and not unjustly discriminatory or unduly preferential. *See Attorney General v. Department of Pub. Utils*., 390 Mass. 208, 234 (1983) ("*AG v. DPU*"); *American Hoechest Corp. v. Department of Pub. Utils*., 379 Mass. 408, 411 (1980). The Department has wide discretion in ordering an approach to rate regulation. *Attorney General v. Department of Pub. Utils*., 392 Mass. 262, 268-269 (1984); *AG v. DPU*, 390 Mass. at 233; *Massachusetts Elec. Co. v. Department of Pub. Utils.*, 376 Mass. 294, 302 (1978). A company submitting a rate case filing before the Department has the affirmative burden of proof on all issues relevant to its rate filing. *Bay State Gas*, D.P.U. 12-25 at 153 (November 1, 2012) ("D.P.U. 12-25"); *National Grid Petition for Approval of Electric Rates and a Revenue Decoupling Mechanism,* D.P.U. 09-39 at 294 (November 30, 2009) ("D.P.U. 09-39").

There are two steps in determining rate structure: cost allocation and rate design. *National Grid Petition for Approval of Electric Base Distribution Rates,* D.P.U. 15-155 at 384 (September 30, 2016) ("D.P.U. 15-155"). Cost allocation assigns a portion of a company's total costs to each rate class through an embedded ACOSS. D.P.U. 15-155 at 384. The ACOS represents the cost of serving each rate class at equalized rates of return given the company's level of total costs. *Id.* at 384.

Cost allocation, in short, involves classifying distribution costs according to factors underlying their causation in order to determine the total costs of serving each rate class at equalized rates of return. See D.P.U. 15-122 at 384-85. In addition, the Department is required to design base distribution rates using a cost-allocation method that is based on equalized rates of return for each customer class as long as the resulting impact for any one customer class is not more than ten percent. See G.L. c. 164, §94I.

The second step in determining the rate structure is rate design. D.P.U. 15-122 at 386. The level of the revenues to be generated by a given rate structure is governed by the cost allocated to each rate class in the cost allocation process. *Id.* The pattern of prices in the rate structure, which produces the given level of revenues, is a function of the rate design. *Id.* "Rate design is particularly important with respect to the goals of achieving efficiency in customer consumption decisions." D.P.U. 09-39 at 404.

In order to reach fair decisions that encourage efficient utility and consumer actions, the Department's rate structure goals must balance the often divergent interests of various customer classes and work to decrease inter-class subsidies unless a clear record exists to support – or statute requires – such subsidies. D.P.U. 09-39 at 404.

For rate design, "[t]he overarching requirement . . . is that a given rate class should produce sufficient revenues to cover the cost of serving the given rate class . . . ." D.P.U. 15-155 at 386. After that, the Department applies five goals: "to achieve efficiency and simplicity as well as to ensure continuity of rates, fairness between rate classes, and corporate earnings stability." *Id*. at 383-84.

B. Cost Allocation: The Department Should Reject Eversource's Unjustified Alternative Proposal to Shift $33.3 Million onto EMA Residential Customers.

The Department should require base distribution, reconciling rate, and transmission revenues to be allocated to EMA and WMA as proposed in the Initial Filing.

1. Standard for cost allocation

Cost allocation is the first step in determining the propriety of a proposed rate structure. *See* D.P.U. 15-155 at 384. Cost allocation assigns a portion of a company's total costs to each rate class through an embedded ACOSS. *Id.* The ACOSS represents the cost of serving each rate class at equalized rates of return given the company's level of total costs. *Id.* The procedure for cost allocation is well established:

> There are four steps to develop an [ACOSS]. The first step is to functionalize costs. In this step, costs are associated with the production, transmission, or distribution function of providing service. The second step is to classify expenses in each functional category according to the factors underlying their causation. Thus, the expenses are classified as demand-, energy-, or customer-related. The third step is to identify an allocator that is most appropriate for costs in each classification within each function. The fourth step is to allocate all of a company's costs to each rate class based on the cost groupings and allocators chosen and then to sum for each rate class the costs allocated in order to determine the total costs of serving each rate class at equalized rates of return. . . .
>
> The results of the [ACOSS] are compared to the revenues collected from each rate class in the test year. If these amounts are reasonably comparable, then the revenue increase or decrease may be allocated among the rate classes so as to equalize the rates of the return and ensure that each rate class pays the cost of serving it. If, however, the differences between the allocated costs and the test year revenues are significant, then, for reasons of continuity, the revenue increase or decrease may be allocated so as to reduce the difference in rates of return, but not to equalize the rates of return in a single step. . . .

Id. at 384-85 (citations omitted).

To reach fair decisions that encourage efficient utility and consumer actions, the Department must balance the often divergent interests of various customer classes and prevent any class from subsidizing another class unless a clear record exists to support such subsidies — or unless such subsidies are required by statute.

2. The Alternative Rate Design proposal for recovery of base distribution costs results in an unjustified and inequitable cost shift of $17.2 million

The Department should reject Eversource's proposal to consolidate NSTAR Electric and WMECo's base distribution revenue requirements because it would result in an unjustified and inequitable cost shift onto EMA residential customers. The proposal would also result in a dramatic change in rate structure, violating principles of continuity and gradualism.

a. Eversource's base distribution cost recovery proposals

According to Eversource's Rate Design Panel, base distribution rates are "a function of the distribution company's cost of providing service to a rate class and the design of rates calculated to cover that cost." Exh. ES-RDP-1 at 11, lines 5-7.

Under the Original Rate Design, Eversource proposed to maintain separate revenue requirements for EMA and WMA and filed separately calculated revenue requirements for NSTAR Electric and WMECo. *Id*. at 6-8. Eversource forecasted 2018 test-year revenue requirements and revenue deficiencies separately for EMA and WMA and then allocated the revenue deficiencies to rate classes in each region based on the results of separate cost of service studies for each region. Exh. CLC-JFW-Supplemental-1 at 4-5.

Eversource noted in its Initial Filing that it is able to "produce cost-based rates separately for WMECo and NSTAR Electric," since the Company continues to separately track costs for the two operating companies. Exh. ES-RDP-1 at 7, lines 17-20; Tr. Vol. 16 at 3234, lines 11-16.

Eversource retained David Heintz, who was initially responsible for developing two separate ACOSS for NSTAR Electric and for WMECo. Exh. ES-ACOS-1 at 2, lines 8-10. Mr. Heintz testified that "[t]he concept of cost causation is the fundamental and underlying philosophy applicable to all cost studies performed for the purpose of allocating costs to customer groups." *Id*. at 3, lines 15-17. To this end, he explained:

> . . . it is necessary to establish a linkage between a utility's customers and the particular costs incurred by the utility in serving those customers. The essential element in the selection and development of a reasonable cost of service study allocation methodology is the establishment of relationships between customer requirements, load profiles, and usage characteristics on the one hand and the costs incurred by the utility in serving those requirements on the other hand. For example, providing service to a residential customer can have much different cost implications for the utility than service to a large industrial customer.

Id. at 3, line 18 to 4, line 7. To achieve this "fundamental" purpose of developing a cost-based ACOSS, Mr. Heintz separately functionalized plant investment and operating expenses recorded for each operating company; classified costs as customer-, energy-, and demand-related; and assigned costs to rate classes separately within each territory. See Exhs. ES-ACOS-2 through ES-ACOS-9.

In its May 19, 2017 rebuttal testimony, Eversource introduced a major variation to its original cost allocation proposal. Eversource expressed concern that "rate alignment and consolidation is impactful to certain customer groups in WMA." ES-RDP-Rebuttal-1 at 14, lines 16-17 (May 19, 2017). To address this concern, Eversource proposed to mitigate WMA bill impacts by allowing "for costs to be spread across a much larger customer base thereby reducing residential rates for WMA customers as compared to the Company's initial filing." *Id*. at 17, lines 6-8. Eversource proposed for 2018 and 2019 "a fully consolidated revenue requirement where rates are constructed under fully consolidated residential rate classes, but general service rate classes remain separated between EMA and WMA." *Id*. at 15, lines 18-20. After

consolidating total-system revenue requirements across the WMA and EMA territories, Eversource would then allocate the consolidated Eversource system revenue requirements to the consolidated Eversource-wide residential rate class and the separate EMA and WMA non-residential rate classes.

The Compact's witness, Jonathan Wallach, testified against the Alternative Rate Design proposal for recovering base distribution revenue requirements because it would inappropriately and inequitably shift costs from WMA and EMA non-residential classes to EMA residential classes. Exh. CLC-JFW-Supplemental-1 at 6, line 6 to 9, line 12. EMA residential customers would have to bear costs that were incurred to serve WMA non-residential customers, contrary to basic ratemaking principles.

Mr. Wallach demonstrated the amount of distribution costs shifted under the Alternative Rate Design by computing the delta from the Original Rate Design to the Alternative Rate Design based on Company data tables. Exh. CLC-JFW-Supplemental-1 at 7, Table 1, line 1; Eversource Filing Letter to DPU-56-9 (Supplemental), Table 1; CLC-8-1. As shown below, the Alternative Rate Design would shift approximately **$17.2 million** per year of the base distribution revenue requirement onto EMA residential customers. Exh. CLC-JFW-Supplemental-1 at 6, lines 18-20 and 7 (Table 1) (reprinted below).

Table 1. Shift in Base Distribution Revenue Allocations (Initial to June 1 Filing)[4]

	EMA	WMA
Residential	$17,219,640	($5,909,437)
Non-Residential	($4,485,037)	($6,879,915)
Total	$12,734,603	($12,789,352)

[4] Based on data provided in Table 2 of the Alternative Rate Design and in Eversource's response to CLC-8-1.

b. the proposed recovery of base distribution costs in the Alternative Rate Design results in an unjustified and inequitable cost shift

The Department should reject the unjustified subsidization of WMA costs at the expense of EMA residential customers under the Alternative Rate Design. The Alternative Rate Design creates a base distribution cost shift (a) between the WMA and EMA territories and (b) between non-residential and residential rate classes. Specifically, the Alternative Rate Design would shift approximately $12.8 million per year off WMA and onto EMA. Exh. CLC-JFW-Supplemental-1 at 6, lines 6-9; see also *id.* at Table 1. Eversource admits that its Alternative Rate Design would shift cost from WMA to EMA, causing EMA customers to pay for costs incurred to serve WMA customers:

> Q. But in this description from that quote the costs are just from western Massachusetts.
>
> A. [CHIN] Yes.
>
> Q. But now eastern Massachusetts customers are paying for some of them, too.
>
> A. [CHIN] Yes, because the company is treating this as a single revenue requirement in that proposal. So we're saying that these costs belong to all customers and therefore we're going to allocate everyone as though they were within the single operating company.

Tr. Vol. 16 at 3300, line 23 to 3301, line 9.

This subsidy would not be borne evenly within all EMA rate classes. Rather, revenue consolidation would shift costs off both residential and non-residential customers in WMA and foist them entirely upon residential customers in EMA. See Exh. CLC-JFW-Supplemental-1 at 7, lines 3-6. Taking on more for EMA residential customers, the Alternative Rate Design would shift another $4.5 million per year ***within EMA***, from non-residential to residential customers. Exh. CLC-JFW-Supplemental-1 at 8, lines 9-14. Accordingly, Eversource's Alternative Rate

Design would favor non-residential EMA customers over residential EMA customers twice: first by not shifting any WMA costs to EMA non-residential customers and then again by shifting EMA costs from non-residential to residential EMA customers. *Id.* at lines 15-18.

These dual cost shifts onto EMA residential customers are arbitrary, inequitable, and contrary to long-standing Department procedure for producing cost-based rates. They should be rejected under the principles of cost-causation and fairness.

First, the allocation of distribution revenue under the Alternative Rate Design is not cost-based. NSTAR Electric and WMECo have been separate corporate entities with separate rate classes and tariff provisions, and both of their most recent distribution rate cases predated the merger in April 2012. Eversource currently tracks distribution costs separately for EMA and WMA. Tr. Vol. 16 at 3301, lines 15-18. In the Initial Filing, Eversource reported a higher revenue deficiency for WMECo, as a percentage of its total distribution revenue, than NSTAR Electric's revenue deficiency. Exh. ES-CAH-1 at 8, lines 16-18. These revenue deficiencies result from capital investment made by the operating companies on behalf of their customers. See *id.* at 9, lines 1-3. Specifically, WMECo's net plant-in service increased by almost twenty percent since its last rate case in 2010, which Eversource characterized as a substantial increase for a system of WMECo's size. *Id.* at 9, lines 5-7.

These costs were incurred directly to serve WMECo's customers. See *id.* at 9, lines 8-17 (citing reduced outages for WMA customers). In the Original Rate Design, Eversource allocated these costs to the customers they were plainly incurred to serve. Eversource testified that it "is able to produce cost-based rates separately for WMECo and NSTAR Electric in this case because the Company continues to record, track and report costs on a disaggregated basis, despite the operational consolidation of the two companies." Exh. ES-RDP-1 at 7, lines 17-20.

Revenue consolidation across EMA and WMA abandons this "fundamental" cost-causation purpose of performing an ACOSS, as described by Mr. Heintz. *C.f.*, Exh. ES-RDP-1 at 11, lines 15-16 (Rate Design Panel asserting that rates should be cost-based in relation to the goal of efficiency) (citing D.P.U. 16-64).

Second, the Alternative Rate Design is unfair to EMA residential customers. The Rate Design Panel testified that a fair rate structure should require no class of consumers to pay more than the costs of serving that rate class, *except in special, justified cases*. Exh. ES-RDP-1 at 11, lines 20-22. Yet Eversource has offered no rationale or justification for shifting costs from WMA residential and WMA non-residential customers entirely onto EMA residential customers. Exh. CLC-JFW-Supplemental 1 at 7, lines 7-10. Nor does Eversource offer any rationale or justification for revising the allocation of EMA test-year revenue requirements between non-residential and residential EMA customers proposed in the Initial Filing. *Id.* at 9, lines 1-5. Eversource's only noted explanation is that its WMA territory would be "better served" by fully consolidating residential rate classes, while leaving general service rate classes separated between EMA and WMA, with no mention of the detrimental impacts in EMA. See Exh. ES-RDP-Rebuttal-1 at 15, lines 18-21.

In fact, Eversource admitted that shifting base distribution costs entirely onto EMA residential customers was an unintended consequence. Tr. Vol. 16 at 3327, lines 7-18. Nor did Eversource mean to reallocate distribution costs within EMA, resulting in a second unintended cost shift onto EMA residential customers. *Id.* at 3329, lines 17-23. Even if EMA customers were forced to subsidize WMA costs, it is entirely unnecessary to shift any costs from EMA/WMA non-residential customers onto EMA residential customers. See Exh. CLC-JFW-Supplemental-1 at 9-11 (describing two alternative methods, which would still shift costs onto

EMA but without any cost-shifting from non-residential to residential rate classes). "There is simply no reason why WMA costs should be subsidized solely by EMA residential customers. Nor is there any reason why EMA residential customers should also subsidize EMA non-residential costs in the process." *Id.* at 9, lines 10-12. Forcing these costs entirely on residential customers in EMA is excessive and unjustified and results in unduly preferential treatment to "certain customer groups in WMA" at the expense of residential customers in EMA.

As Mr. Wallach concluded, the consolidation of base distribution revenue would result in rates that are neither efficient nor fair, and so the Department should approve the cost allocation method proposed in the Initial Filing to avoid subsidization of WMA costs by EMA customers. Exh. CLC-JFW-Supplemental-1 at 7, line 18 to 8, line 2, at 13, line 13 to 14, line 2. The excessive cost-shift onto EMA residential customers is an arbitrary and inequitable by-product of Eversource's proposed method for mitigating WMA bill impacts. Eversource cannot ignore that it has a duty to each of its rate classes and may not cut a sweetheart deal to one class at the expense of another. EMA residential customers should not be left to suffer the effects of WMECo's 27% operating deficiency despite its own much lower 7% deficiency. Exh. ES-RDP-Rebuttal-1 at 15, lines 8-11 and 17-21.

Accordingly, Eversource's Alternative Rate Design violates principles of cost-causation and fairness principle and should be rejected.

c. these cost shifts violate the Department's principle of gradualism

Any rate changes made by Eversource in relation to its consolidation should be made gradually in order to allow its customers rate continuity. Eversource has noted that the Department's principle of continuity requires that "rate changes should be made in a predictable

and gradual manner that allows customers reasonable time to adjust their consumption patterns in response to a change in structure." Exh. ES-RDP-1 at 11, lines 18-20.

Eversource has acknowledged that consolidation of WMA and EMA will have significant impacts on its customers. Specifically, Eversource stated in its Initial Filing that:

> the consolidation of NSTAR Electric and WMECO rates would be extraordinarily complex where the consolidation of BECO, CAMB, and COM rates is not yet complete and will be undertaken in this case. The Company recognized that the simultaneous consolidation of four sets of legacy rates has the potential to complicate (and exacerbate) bill impacts. By maintaining distinct rates between EMA and WMA in the near term, the Company is able to stage consolidation and better manage rate continuity. In its next base rate proceeding, the Company will seek to consolidate pricing for both EMA and WMA customers.

Exh. ES-RDP-1 at 8, lines 2-10.

The AGO's witness, Scott Rubin, also found that Eversource is proposing "dramatic changes to the rate structure, without a demonstration that either the cost of service or customer characteristics have changed significantly." Exh. AG-SJR-1 at 3, lines 24-27. Further, Mr. Rubin stated that "[a]ny proposed consolidation should be done gradually over more than two years in order to moderate bill impact." Exh. AG-SJR-1 at 4, lines 1-3. Specifically, Mr. Rubin testified that:

> generally rate consolidation is a lengthy process that must be sensitive to the impacts on customers (including potential rate shock), cost of service principles, and fundamental fairness. When I say it is a lengthy process, I mean that it may take decades to achieve consolidated rates, depending on the specific circumstances of the utility and its customer base.

Id. at 21, lines 1-5.

Given the extreme changes made in and substantial impacts resulting from its Alternative Rate Design, Eversource has failed to demonstrate how its proposal meets the principle of

continuity. Quite the opposite, the Alternative Rate Design would result in rate shock for a significant number of its customers with changes proposed to be made in a radical manner. Specific bill impacts of concern for the Compact are addressed in Section III.D. below.

In sum, the Department should reject the proposal to shift distribution revenue onto EMA residential customers as it is inconsistent with the principles of efficiency, fairness and continuity. The Department should direct Eversource to allocate distribution revenue to EMA and WMA as proposed in the Initial Filing.

3. The Alternative Rate Design proposal for recovery of reconciling-rate revenues results is an unjustified and inequitable cost shift of $11 million

The Department should allocate reconciling-rate revenues as proposed in the Initial Filing.

a. Eversource's reconciling-rate recovery proposals

Under the Original Rate Design, effective January 1, 2019, Eversource proposed to consolidate four (the Long Term Renewable Contracts, Attorney General Consulting Expense, Solar Program Cost, and the Basic Service reconciliation factors) of its twelve reconciling-rate mechanisms across EMA and WMA. Exh. ES-RDP-1 at 28-29. Eversource did not consolidate the Pension, Storm Recovery, Municipal Property Tax, Transition, Energy Efficiency, Net-Metering, and Residential Assistance reconciliation factors. *Id.* For those reconciling rates, Eversource proposed to defer revenue-consolidation until the next base rate case or until the start of the next three-year energy efficiency plan (for the Energy Efficiency Reconciliation Factor) because of significant bill impacts and a cost basis for maintaining separate revenues. *Id*. at 28, lines 5-9 and 29, lines 2, 15-16.

Under the Alternative Rate Design, Eversource proposed to consolidate revenues for all reconciling-rate mechanisms effective January 1, 2019. DPU-56-9 (Supplemental) at 2; DPU-63-1. Eversource would allocate combined EMA and WMA regional revenues to each rate class (either an Eversource-wide residential or a regional non-residential rate class) based on each class's contribution to Eversource-wide base distribution revenues or Eversource-wide energy sales. Exh. CLC-JFW-Supplemental-1 at 15, lines 3-6.

Mr. Wallach determined that the Alternative Rate Design proposal:

> would shift reconciling-rate revenues from both EMA non-residential customers and WMA non-residential customers and onto EMA residential customers. Specifically, the proposed alternative treatment would reduce the allocation of reconciling-rate revenues to EMA non-residential and WMA non-residential customers by **about $11 million in total**, relative to the allocation in the Initial Filing. The proposed alternative treatment would increase the allocation to EMA residential customers to offset the reduction to non-residential customers.[5]

Exh. CLC-JFW-Supplemental-1 at 15, line 14 to 16, line 2. See also *id*. at 16, Table 3 (reprinted below).

Table 3. Shift in Reconciling-Rate Revenues (Initial to June 1 Filing)[6]

	EMA	WMA
Residential	$14,549,158	($351,397)
Non-Residential	($8,135,202)	($2,824,849)
Total	$6,413,956	($3,176,246)

[5] Mr. Wallach noted that: "As shown in Table 3, the proposed alternative treatment appears to increase the allocation to EMA customers in total by about $3.2 million more than the reduction in the allocation to WMA customers. This is due to a change in the accounting of reconciling-rate revenues in the Alternative Rate Design, as described in Eversource's response to Information Request DPU-63-1." Exh. CLC-JFW-Supplemental-1 at 16, n.11.

[6] Based on data provided in Eversource's responses to DPU-12-10 and DPU-63-1.

b. the Alternative Rate Design proposal to consolidate all reconciling-rate mechanisms results in an unjustified and inequitable cost shift

Eversource's proposal to consolidate all reconciling mechanisms under the Alternative Rate Design suffers from the same deficiencies as the consolidation of base distribution revenue. The Department should approve the Original Rate Design proposal, where there is a stated cost-basis for leaving eight mechanisms unconsolidated. Exh. ES-RDP-1 at 28, line 12 to 30, line 14. It naturally follows then that the Alternative Rate Design with all mechanisms consolidated cannot be cost-based. Eversource has simply failed to offer any rationale or justification for its proposal to consolidate all reconciling rates on January 1, 2019. Exh. CLC-JFW-Supplemental-1 at 16, lines 7-9.

Mr. Wallach presented clear evidence of the amount of cost shifting resulting from the Alternative Rate Design's change in reconciling-rate recovery (as compared to the Original Rate Design) based on data straight from Eversource's information request responses. Exh. CLC-JFW-Supplemental-1 at 16, Table 3. After writing a misleading response to Mr. Wallach's testimony on rebuttal (see Exh. ES-RDP-Rebuttal-1 at 14, lines 7-15 (August 22, 2017)), the Rate Design Panel eventually admitted that it does not dispute that approximately $11 million less in reconciling-rate revenue is collected from non-residential customers under the Alternative Rate Design as compared with the Original Rate Design. Tr. Vol. 16 at 3353, lines 6-13.

Here too, Eversource admitted that the shift in reconciling-rate revenue from WMA non-residential to EMA residential customers was not purposeful. Tr. Vol. 16 at 3329, lines 9-16. The resulting shift of reconciling-rate revenues from non-residential to residential customers is therefore arbitrary and inequitable. Exh. CLC-JFW-Supplemental-1 at 16, lines 11-14.

Lastly, under the principle of gradualism, deferring consolidation of the eight mechanisms until the next distribution rate case would be a reasonable outcome, given the significant changes that would result from rate class consolidation within NSTAR Electric.

For these reasons, the Department should reject Eversource's Alternative Rate Design proposal to consolidate revenues for all reconciling rates by January 1, 2019. Instead, the Department should approve the Original Rate Design where revenues would be consolidated solely for the four reconciling rates. For all other reconciling rates, revenue-consolidation should be deferred until the next base rate case. See Exh. CLC-JFW-Supplemental-1 at 14, 16-17.

4. The Alternative Rate Design proposal for recovery of transmission revenues results is an unjustified and inequitable cost shift of $5.1 million

In another effort to "enable a smaller allocation of costs to WMA customers," Exh. ES-RDP-Rebuttal-1 at 17, Eversource proposes to consolidate its transmission revenue requirement across its operating companies while only consolidating the residential rate classes for allocating transmission revenues, once again resulting in unjustified cost shifts under the Alternative Rate Design. This Alternative Rate Design proposal should be rejected.

a. Eversource's transmission revenue recovery proposals

Under the Original Rate Design, Eversource proposed to consolidate transmission revenues across EMA and WMA and then to consolidate each rate class across EMA and WMA for the purposes of allocating the consolidated transmission revenues. Exh. ES-RDP-1 at 31. That Original Rate Design proposal would already reduce the allocation of transmission revenues to EMA non-residential customers relative to current rates by about $23 million and place the bulk of those revenues onto EMA residential and WMA non-residential customers. Exh. CLC-

JFW-Supplemental-1 at 17, lines 10-14. Transmission revenues would increase for EMA residential customers under the Original Rate Design by $14.4 million. *Id.* at 17, Table 4.

Under the Alternative Rate Design, Eversource retained the proposal to consolidate transmission revenues across EMA and WMA, but alternatively proposes to consolidate only the residential rate classes across EMA and WMA for the purposes of allocating consolidated transmission revenues. DPU-56-9 (Supplemental). Non-residential customers would benefit from this alternative, with $1.3 million shifted off EMA non-residential customers and $4.9 million shifted off WMA non-residential customers. Exh. CLC-JFW-Supplemental-1 at 18, Table 5. The majority of this transmission revenue would be carried by residential customers in EMA, who would see an **additional $5.1 million** increase in transmission revenue allocated to them on top of the $14.4 million increase EMA residential customers would see under Original Rate Design. *Id.*

b. the Alternative Rate Design proposal for transmission revenues results in an unjustified and inequitable cost shift

In yet another effort to "enable a smaller allocation of costs to WMA customers" (Exh. ES-RDP-Rebuttal-1 at 17), Eversource proposes to consolidate transmission revenues across its operating companies, once again resulting in unjustified cost shifts under the Alternative Rate Design. Here the arbitrary and unintended consequence of the alternative treatment of transmission revenues would be to allocate less transmission revenue to EMA non-residential and WMA non-residential customers. Exh. CLC-JFW-Supplemental-1 at 18, lines 17-19; Tr. Vol. 16 at 3329, lines 9-16. "The decision appears arbitrary, since Eversource has not offered any justification based on considerations of cost of service or fairness for a proposed alternative treatment that would reduce costs to WMA non-residential customers but increase costs to WMA residential customers." *Id*. at 19, lines 3-6.

In the Initial Filing, Eversource justified consolidating transmission revenues for all rate classes in anticipation of the Federal Energy Regulatory Commission ("FERC") approving the NSTAR Electric/WMECo merger, after which Eversource would operate under a consolidated transmission revenue requirement and EMA and WMA customers would pay the same transmission rates. Exh. ES-RDP-1 at 31, lines 7-13. The Alternative Rate Design disavows this reasoning and separates the non-residential classes for cost-allocation purposes, purely to achieve a desired result for a particular group, i.e., non-residential customers. See DPU-56-9 (Supplemental) at 5 ("The reduction to WMA C&I customers was achieved through two changes in approach: (1) a different cost-allocation approach; and (2) a revision of the transmission cost allocation."). In the event the Department approves Eversource's proposal to consolidate transmission revenues across EMA and WMA, at a minimum, all rate classes should be consolidated for the purposes of allocating consolidated transmission revenues, as in the Original Rate Design.

The Compact is especially concerned about excessive transmission rates for Rate G-7 and G-7S customers resulting from the Alternative Rate Design. Eversource's Alternative Rate Design proposal would result in higher transmission charges for COM Rate G-7 (large C&I with optional TOU rates) and Rate G-7S (large C&I seasonal with optional TOU rates) customers. Specifically, those Rate COM G-7 and G-7S customers with low load factors would see percentage increases in total bills over 10%. This impact is driven by the change in the allocation of transmission costs in the Alternative Rate Design proposal where Rate G-1 and Rate G-7 were consolidated, which produced a much larger transmission rate for both Rate G-7 and G-7S customers than under the Initial Filing. CLC-7-2 at 1-2.

In CLC-7-2, Eversource recognized severe impacts to Rate G-7 and G-7S customers:

> Exhibit ES-RDP-3 (ALT1), Schedule RDP-3 (East) shows that larger low load factor customers in Rate G-7 in the former Commonwealth territory would see percentage increases over 10%. This impact is driven by the change in the allocation of transmission costs in the alternate proposal where Rate G-1 and Rate G-7 were consolidated. This produced a much larger transmission rate for both Rate G-7 and G-7S than under the initial filing.

Eversource further stated that "[t]his consequence was unintended as the Company was only aligning the allocation of transmission costs with the rate class groupings used in the legacy cost of service." CLC-7-2. Such unintended consequences only highlight the arbitrary and inequitable nature of the Alternative Rate Design. However, in discovery, Eversource agreed to revise its recovery of transmission costs for Rates G-1, G-7 and G-7S Alternative Rate Design, if approved, to reduce the bill impacts to those customers. DPU-63-13; CLC-7-2. Noting the "large change" in these customers' transmission rates, Eversource found that "the customers in both Rate G-7 and Rate G-7S would be better served through a separate allocation of transmission costs which would lower the bill impact." CLC-7-2. Eversource produced a "revised calculation of the transmission rates that separate transmission costs for Rate G-1, Rate G-7, and Rate G-7S" (*id.*) and agreed "to replace the transmission allocation filed on June 1, 2017 with the revised allocation submitted in response to [the Compact]." DPU-63-13.

As Mr. Wallach recommended, the Department should direct Eversource to recover transmission revenues in the same fashion as in the Initial Filing. Exh. CLC-JFW-Supplemental-1 at 22, lines 13-15. However, in the event the Department prefers to treat transmission revenues as proposed in the Alternative Rate Design, the modification Eversource produced in CLC-7-2 would be an improvement over the Alternative Rate Design for Rate G-7 and G-7S transmission rates and the Compact would support it. Otherwise the Alternative Rate Design would be excessively burdensome for Rate G-7 and G-7S customers. With that said, arbitrarily shifting

$5.1 million in transmission revenue from non-residential customers onto residential customers is unjustified and should be denied.

5. Cost allocation request for relief

In sum, Eversource's ill-conceived Alternative Rate Design would unfairly burden EMA residential customers with higher distribution, reconciling, and transmission rates. The Department should therefore:

1. Allocate base distribution revenues as proposed in the Initial Filing with separate revenue requirements for NSTAR Electric and WMECo.

2. In the event that the Department orders modifications to the cost allocation proposed in the Initial Filing in any way, reject any variation which would allow Eversource to shift costs from WMA solely onto EMA residential customers.

3. Approve consolidation of only the four reconciling rates as in the Original Rate Design and defer consolidation of all other reconciling-rate revenues until the next base rate proceeding.

4. Allocate transmission revenues as proposed in the Initial Filing, provided the Department finds that Eversource provided reasonable support for its assumption that EMA and WMA customers will operate under a single transmission revenue requirement for EMA and WMA, with consistent unit transmission rates in EMA and WMA.

    a. In the event that the Department prefers the treatment of transmission revenues in the Alternative Rate Design, then the Department should at minimum require Eversource to separate transmission costs for Rate G-1, Rate G-7, and Rate G-7S.

C. <u>Rate Design: The Department Should Reduce Residential Customer Charge in EMA and Reject the MMRC.</u>

The Compact addresses the following components of Eversource's Original and Alternative Rate Design proposals: (1) the customer charge for residential customers in EMA; and (2) the MMRC.

1. Residential customer charge in EMA[7]

a. Eversource's residential customer charge proposal

The customer charge is a fixed charge that is assessed on a per-month basis and does not vary with usage. Exh. ES-RDP-1 at 12, lines 5-6. Customers cannot reduce or avoid this portion of their bills through energy efficiency, conservation, load shifting, or other efficient or beneficial behaviors. In addition, increasing the customer charge burdens low-usage customers and benefits high-usage customers, as Eversource acknowledges:

> Since flat charges result in a constant charge irrespective of usage, increase to flat charges can have an adverse bill impact on customers with low usage. . . . On the flipside, higher customer charges benefit high volume users because a higher customer charge means that fewer dollars need to be collected on a volumetric basis.

Id. at 3, lines 1-12. Existing residential customer charges currently "range from a low of $3.73 in the legacy COM territory to a high of $9.99 for optional TOU customers in the legacy BECO territory." *Id*. at 42, lines 18-20.

Under both the Original and Alternative Rate Design, Eversource proposes to set the customer charge to $8.00 per month for all residential customers in EMA and WMA who are not new net-metered customers. *Id*. at 42. For COM, this change would more than double the current rate ($3.73 per month) for residential customers without space heating and would represent a decrease (from $10.03 per month) for those with space heating. Exh. CLC-JFW-1 at 5, line 16 to 6, line 2. On average, customer charges would increase for residential customers who are not new net-metering customers in EMA under this proposal.

For new net-metering residential customers in EMA, Eversource proposes under the Original Rate Design to increase the customer charge to $10.38 per month for residential

[7] This section focuses on EMA because that it is where the Compact is located.

customers without space heating ("R-1/R-2") and to $11.43 per month for residential customers with space heating ("R-3/R-4"). Exh. ES-RDP-6, Sch. RDP-1 (East). Under the Alternative Rate Design, as a result of consolidating EMA and WMA base distribution revenue requirements, Eversource proposes to further increase the residential customer charge for new net-metering customers in EMA to $10.88 for R-1/R-2 and $13.88 for R-3/R-4. Exh. ES-RDP-6 (ALT1), Schedule RDP-1. The proposed customer charge for new net-metered customers is based on the same Eversource calculation of customer costs for the residential R-1 rate class. DOER-2-1. However, for customers who are not new net-metered customers, Eversource proposes for a portion of these customer costs to be recovered through volumetric rates, whereas for new net-metered customers Eversource proposes to set the customer charge at the full unit customer cost. *Id.*

Eversource asserts that it is necessary to move the customer charge closer to the "fully allocated cost of approximately $10 to $15 per bill per month calculated by Mr. Heintz." See Exh. ES-RDP-1 at 42, lines 14-17 and at 43, lines 1-2. Specifically, Eversource argues that its customer charge proposal would move the residential customer charge closer to the fully allocated embedded cost of service for customer-related costs,[8] as indicated by the results of Eversource's ACOSS for the NSTAR Electric (East) service territory. *Id*. at 42. The ACOS (East) estimates a customer-related cost of $10.38 per customer per month for R-1/R-2 customers and $11.43 per customer per month for R-3/R-4 customers. Exh. ES-ACOS-2 (East) at 3. The proposed residential customer charge would therefore recover: (i) between 70% and 77% of the embedded costs classified as customer-related and allocated to the residential rate classes in the

[8] Based on the ACOS (East), customer-related costs include the embedded costs of meters, service drops, meter reading, billing, collections, other customer services, uncollectible costs, and an allocation of overhead costs.

ACOS (East); and (ii) 100% of those same costs for new net-metering customers. See Exh. CLC-JFW-1 at 6 lines 13-17.

Pointing to the Department's rate design goals of "efficiency" and "fairness" (Exh. ES-RDP-1 at 43, lines 1-9), Eversource apparently believes that moving the customer charge closer to embedded cost of service (i.e., the average embedded cost per customer) would improve price signals for promoting economically efficient behavior by residential customers and would be consistent with the Department's "efficiency" goal. Exh. ES-RDP-1 at 43. Eversource also claims that moving the residential customer charge closer to embedded cost of service would yield a fairer rate design, since it would reduce the potential for cost-shifting from the residential class to other rate classes due to annual reconciliation under the proposed decoupling mechanism. *Id*. at 43.

Intervenors' experts testified, to the contrary, that higher monthly customer charges dampen price signals for efficient consumption and unfairly shift cost responsibility onto the lowest usage customers. Exhs. CLC-JFW-1 at 4, line 5-8; CLC-KFG-1 at 21, lines 12-14; AC-ML-1 at 19, lines 26-29; SREF-TW/MW-1 at 6, line 7 to 7, line 3; VS-NP-1 at 13, lines 1-17. The Compact's witness Jonathan Wallach, an expert in economic and utility regulatory policy (see Exh. CLC-JFW-1 at 1, lines 13-20), specifically responded to Eversource's argument that decoupling would warrant bringing the customer charge closer to the embedded cost of service in order to avoid cost shifting. Exh. CLC-JFW-1 at 7, line 16 to 8, line 2. Mr. Wallach indicated that Eversource's argument is flawed since "increasing the residential customer charge would do nothing to alleviate the potential for cost-shifting from other rate classes onto the residential rate class," thus being more favorable to other rate classes but not fairer overall. *Id.*

Mr. Wallach also testified that certain customer costs should be excluded from the customer charge to cover only those incremental costs incurred to serve one very small customer. *Id*. at 9, lines 4-13. Mr. Wallach estimated the minimum cost to connect an EMA residential customer and found that the low-end estimate is comparable to the current average customer charge of $5.61 for EMA for R-1/R-2 customers in BECO, CAMB, and COM. *Id.* at 9, line 14 to 10, line 10. Mr. Wallach recommended that the Department set the customer charge for EMA to this current average if it approves consolidation of rates across EMA.[9] *Id.* at 11, lines 7-14.

b. the increased residential customer charges are inconsistent with the Department's rate design principles of efficiency, fairness, and continuity

The Department should reject Eversource's proposals with respect to the customer charge for EMA residential customers for three reasons. First, increasing fixed charges and decreasing volumetric rates would send improper signals to customers, leading to greater energy consumption and harm to the Commonwealth's energy efficiency efforts, contrary to the Department's goal of efficiency. Second, Eversource's customer charge proposals improperly cause small customers to pay more than their fair share of usage related costs, contrary to the Department's goal of fairness. Third, for R-1/R-2 customers in the COM territory, the proposal would represent a sharp increase in the customer charge, contrary to the Department's goal of continuity. On the other hand, Eversource has not put forth a compelling justification for its customer charge proposal and did not oppose Mr. Wallach's recommendations. For these reasons, as more fully discussed below, the Department should reject Eversource's proposal and adopt Mr. Wallach's recommendation to set the customer charge for EMA at the current average residential customer charge among BECO, CAMB, and COM.

[9] In the alternative, if consolidation is not approved across EMA, Mr. Wallach recommended that the customer charge be set to current rates for BECO, CAMB, and COM.

In evaluating the customer charge proposal, "[t]he Department must determine, on a rate class by rate class basis, the proper level at which to set the customer charge and delivery charges for each rate class, based on a balancing of our rate design goals." *WMECo*, D.P.U. 10-70 at 328 (January 31, 2011). In WMECo's last rate case, the Department evaluated various proposals to increase the customer charge for all but two[10] rate classes. *Id.* at 301. The Department focused on the continuity in shifts between fixed and volumetric pricing, on fairness in allocating usage costs between low-use and high-use customers, and placed a special emphasis on sending strong price signals for energy efficiency.

> Regarding the proposed increases to the customer charges for all rate classes . . . the Department has examined the bill impacts that will result from these proposed increases. In addition, the Department has reviewed the evidence regarding the unitized revenue requirement or customer-related costs for each rate class. The Department is also mindful of the goal of balancing economic efficiency with the goal of sending the proper price signals for end-use efficiency. The Department must consider as well the impacts that changes to the customer charge will have on low-use customers. Based on the evidence and the balancing of these goals, the Department finds that the Company's proposed customer charges are not reasonable and are hereby rejected. In this case. the Department finds that lowering the customer charge so that more revenues will be recovered through the volumetric charges best balances our rate design goals. . . .
>
> In D.P.U. 08-35, at 249, the Department found that the design of distribution rates should be aligned with important state, regional, and national goals to promote the most efficient use of society's resources and to lower customers' bills through increased end-use efficiency. To best meet these goals, the Department has found that rates should have an inclining block rate structure and any resulting loss in revenues from declining sales should be recovered through a decoupling mechanism as discussed in D.P.U. 07-50-A at 59-60. . . .

[10] The only two exceptions were Rate T-2 (a TOU rate for C&I customers with monthly demand at or above 350 kW up to 2,500 kW) and Rate T-5 (C&I customers with monthly demand at or above 2,500 kW). WMECo's proposal included increased customer charges for all other rate classes, including the residential rate classes. The Department evaluated the proposal to increase customer charges on a class-by-class basis.

Id. at 329-30.

In that case, one of WMECo's objectives was to "design[] distribution rates that reflect, to the extent possible, the fixed nature of distribution costs." *Id.* at 297. WMECo proposed to increase the customer charges for all rate classes (except for the T-2 and T-5 rate classes). *Id.* at 301. The Department rejected WMECo's proposal to set the customer charge to $9.00 for non-space heating residential customers (R-1) and to $9.50 for spacing heating residential customers (R-3). *Id.* at 338-40. Instead the Department directed WMECo to set the customer charge to $6.00 for both the R-1 and R-3 residential rate classes. *Id.* at 340. The Department also approved a full decoupling mechanism for WMECo in that proceeding, which was modified to include a reconciliation charge based on kilowatt ("kW") hours ("kWh") for all customer classes. *Id.* at 46.

(i) efficiency

Eversource's proposed customer charges for EMA residential customers are contrary to the Department's efficiency goal. As Eversource acknowledged in the Initial Filing, the Department's goal of efficiency "means that the rate structure should reflect the cost of providing distribution service and provide an accurate basis for consumer decisions on the optimum means for fulfilling their requirements." Exh. ES-RDP-1 at 43; see also, e.g., *Bay State Gas*, D.P.U. 12-25 at 444-45 (November 1, 2012). "Thus, efficiency in rate structure means setting cost-based rates that recover the cost to society of the consumption of resources used to produce the utility service." D.P.U. 12-25 at 445. "In practice, meeting the goal of efficiency should involve rate structures that provide strong signals to consumers to decrease energy consumption in consideration of price and non-price social, resource, and environmental factors." *Id.*

Eversource has failed to satisfy its burden of proving that its customer charge proposal is efficient. Eversource provides no reasonable explanation as to how its customer charge proposal sends correct price signals for consumer decisions. See Exh. ES-RDP-1 at 43.

Further, Eversource's proposal contains two significant errors. First, Eversource unreasonably asserts that the customer charge should reflect the embedded cost of service when it should instead reflect the MCOS. From a strict efficiency perspective, Mr. Wallach testified that customer charges should reflect marginal, not embedded costs. Exh. CLC-JFW-1 at 8, lines 5-6. Prices will only be efficient when "they reflect the future cost to add one customer, not the average historic or 'sunk' cost to serve one customer." *Id*. at 8, lines 6-8; Alfred Kahn, *Economic Principles of Rate Making* at 66 (1988) (economic efficiency requires prices equal to marginal cost). As a result, Eversource's attempt to move the customer charge closer to embedded per-customer costs is inefficient to the extent that it moves customers farther from the marginal connection cost, which dampens price signals for customers to behave in an economically efficient manner. Exh. CLC-JFW-1 at 8, lines 8-10.

Second, Eversource erroneously included all customer-related embedded costs for the average residential customer in its design of the proposed customer charge. However, the customer charge should be designed to reflect only the "minimum connection costs," meaning the cost to connect a customer who uses very little or zero energy to the distribution system. *Id*. at 9, lines 4-13. "Minimum connection costs" generally mean "plant and maintenance costs for a service drop and meter, along with meter-reading, billing, and other customer-service expenses not recovered through energy charges." *Id.* at 9, lines 8-13.[11] By failing to design its customer

[11] Costs that do not vary with the number of customers, such as administrative and general overhead costs other than pensions and benefits, are reasonably excluded from the minimum connection costs. Exh. CLC-JFW-1 at 9, lines 11-13.

charge in this way, Eversource overstates its customer charges and reduces its customers' incentives to maximize their energy efficiency.

In his testimony, Mr. Wallach properly estimated the minimum cost to connect an EMA residential customer to the distribution system. Mr. Wallach found that:

> Based on the allocation of customer-related costs in the ACOS (East), I find that the incremental connection cost for R-1/R-2 customers could be as little as $6.60 per customer per month where the connection does not require a service drop and as much as $8.10 for a connection with a dedicated service drop. For R-3/R-4 customers, my estimate of minimum connection cost ranges from about $7.40 to about $9.00 per customer per month.
>
> My low-end estimate of minimum connection cost is comparable to the current average customer charge of $5.61 for NSTAR Electric R-1/R-2 customers. If the current customer charge reasonably reflects minimum connection costs, Eversource's proposal to increase the residential customer charge would shift costs to the customer charge that are more appropriately recovered through the energy charge. Such a cost shift would dampen price signals and discourage economically efficient conservation by residential customers, contrary to the Department's economic efficiency goal.

Exh. CLC-JFW-1 at 9, line 16 to 10, line 10 (footnotes omitted); see Attachment DPU-1-3 (ACOS (East) spreadsheet model used by Mr. Wallach to derive estimates of minimum connection cost). Eversource did not contest any of these estimates in its rebuttal testimony. See generally, Exh. ES-RDP-Rebuttal-1 (May 19, 2017) (not responding to Mr. Wallach's direct testimony).

Contrary to Eversource's testimony, high customer charges jeopardize the Commonwealth's energy efficiency efforts by sending improper signals to customers that they should consume more electricity. Similar to WMECo in D.P.U. 10-70, Eversource argues that "conceptually, distribution rates should be based entirely on customer and demand elements as Eversource's investment in the distribution system is not predicated on the volume of use." Exh.

ES-RDP-1 at 12, lines 10-12. This argument fails here, as it did for WMECo, due to the Department's concern about the impact for low-use, low-income customers and the need to send stronger price signals for end-use efficiency to residential ratepayers. D.P.U. 10-70 at 340.

Reduced customer control over bills is of particular concern for those low-usage customers on fixed incomes who do not qualify for assistance programs. See Exh. CLC-KFG-1 at 12, lines 16-18 (expressing concern about this problem for residents of Cape Cod and Martha's Vineyard). For residential customers with low volumetric usage to date, often by virtue of diligent budgeting and conservation efforts in the past, the increased customer charge would comprise a much greater portion of their bill compared to the high-volume customers. Rather than dampening opportunities for such customers and limiting their ability to control their bills, the Department should maximize opportunities for these customers to benefit from cost-effective energy efficiency. See also Exh. CLC-KFG-1 at 21, lines 12-14 ("The recovery of greater costs from fixed components removes the usage-based cost motivator for customers to advance the desirable public policy goals of implementing greater cost-effective energy efficiency measures.").

High customer charges, however, send the exact opposite signal, as many experts in this proceeding agree. For instance, Tim Woolf and Melissa Whited of Synapse Energy Economics, on behalf of Sunrun/EFCA, testified:

> [A] higher customer charge serves to reduce the distribution charge, which lessens the value of investments in energy efficiency or [DG], and reduces the incentive to conserve. Thus, higher fixed charges will tend to lead to greater energy consumption and more demand placed on the distribution system, eventually resulting in higher system costs.

Exh. SREF-TW/MW-1 at 37, lines 4-8.

Similarly, Acadia Center's Mark LeBel noted that, while monthly customer charges should be no higher than the connection costs, they may be kept lower based on public policy considerations. Exh. AC-MB-1 at 19, lines 23-26. Ultimately, Eversource's proposals to increase residential customer charges and to reduce volumetric rates would dampen price signals for energy efficiency, weaken customers' control of their bills, and promote inefficient behavior. See Exh. CLC-JFW-1 at 18, lines 9-16.

Accordingly, the Department should reject the customer charge proposal. Eversource has not met its burden of demonstrating that its customer charge meets the Department's goal of efficiency, failed to explain how higher customer charges send correct price signals, failed to rebut Mr. Wallach's testimony and recommendations as to the appropriate customer-related costs to be included in a customer charge, and failed to disprove that the fixed charges reduce incentives for energy efficiency, which is critically important for residential rate classes.

(ii) fairness

Eversource's proposed customer charges for EMA residential customers also violate the Department's fairness principle, which means that "no class of consumers should pay more than the costs of serving that class." D.P.U. 15-155 at 384. As Mr. Wallach testified, Eversource's proposal would shift recovery of usage-related costs from the energy charge to the customer charge. Exh. CLC-JFW-1 at 10, lines 13-14. In doing so, volumetric costs would be improperly recovered through the customer charge, causing low-usage residential customers to contribute a larger share toward recovery of volumetric costs than a high-usage customer. See *id*. at 14-17. Eversource's inclusion of costs beyond incremental connection costs would thus over-allocate usage-related distribution system costs to low-usage customers and under-allocate such usage-related costs to high-usage customers. This unfair cost shift would result in smaller customers

"paying for more than their fair share of usage-related costs," which directly contravenes the Department's fairness principle from an intra-class perspective. Exh. CLC-JFW-1 at 10, lines 13-19; compare D.P.U. 15-155 at 459 (finding tiered customer charge proposal may "unfairly impose higher costs on certain customers").

Without any evidence, Eversource also argues that energy efficiency creates cost shifts under decoupling because unrecovered costs from successful energy savings would be pushed into the decoupling reconciliation mechanism, which is collected from all customers. Tr. Vol. 17 at 3437, lines 1-8 ("[W]hen you allow customers to move that easily within that particular window and shift a significant amount of load, then you're pushing those costs onto other customers, because those costs would ultimately be recovered through the decoupling mechanism."). Eversource's argument contradicts the very purpose of decoupling, which is to promote energy efficiency.

In its decoupling order, D.P.U. 07-50-A, the Department pronounced that ". . . promoting the implementation of all cost-effective demand resources is a top priority for the Department and the primacy of this goal guides our consideration of the issues raised in this proceeding." *Efficient Deployment of Demand Resources*, D.P.U. 07-50-A at 24 (July 16, 2008). In that generic investigation, some utilities vied for increased customer charges, contending that full decoupling did not go far enough. See *id*. at 21 (comments of the Berkshire Gas Company). However, the Department saw an abrupt departure from volumetric pricing as harmful to its conservation goals and to customers:

> [A]ny attempt to move quickly to full cost-based rates, in which a greater portion of distribution costs would be recovered through fixed rates, could have significant impacts on low usage customers, violating the principle of rate continuity, and in the short run reduce the incentive for customers to reduce their energy consumption.

Id. at 28.

Eversource has not proven that a cost shift would result from a lower customer charge after decoupling and has failed to consider whether decoupling would result in cost-shifting from other classes to residential customers. Decoupling will be a huge benefit to Eversource's shareholders; if they are so concerned about unverified cost shifting among rate classes as the result of successful customer savings then they need not pursue a decoupling mechanism. This argument that high fixed charges are needed because of decoupling is baseless and insincere. The record does show, however, that Eversource's residential customer charge proposal includes costs above the minimum cost to connect customers to the grid, in violation of the principle of fairness.

(iii) continuity

Lastly, Eversource's proposed residential customer charges would violate the Department's continuity principle. The rate design goal of continuity means that "changes to rate structure should be gradual to allow consumers to adjust their consumption patterns in response to a change in structure."[12]

Contrary to this goal, Eversource's proposed customer charges would mark a sharp change for EMA residential customers. "For R-1/R-2 customers in the COM service territory, Eversource's proposal would more than double the customer charge and then increase the rate by an additional 30% for new net-metering customers. By no stretch of the imagination could such sharp increases be considered gradual." Exh. CLC-JFW-1 at 11, lines 2-6 (emphasis added). While COM residential customers with space heating would see a reduction of about 20% from the current rate of $10.03 per month under the proposal, if those space-heat customers became

[12] *National Grid Petition for Approval of Gas Distribution Rates, a Targeted Infrastructure Recovery Factor, and a Revenue Decoupling Mechanism*, D.P.U. 10-55, Final Order at 536 (November 2, 2010).

net-metering customers after January 1, 2018, their customer charge would then increase dramatically by about 43% to a rate that exceeds their current charge by about 14%. *Id*. at 6, lines 1-5.

Such swings in these fixed charges cannot reasonably be considered gradual. See also Exh. CLC-KFG-1 at 6 (comparing the much higher increase for residential customers on the South Shore, Cape Cod, and Martha's Vineyard (114%) to the increase for residential customers in Boston (24%) and Cambridge (16%)); Exh. SREF-TW/MW-1 at 7, lines 1-3 and n.6, and 37, lines 1-9 (significant increases in the customer charge would violate the principle of gradualism); Exh. AG-SJR-1 at 4 ("Any proposed consolidation should be done gradually over more than two years in order [to] moderate bill impacts.").

Abrupt rate design changes, such as the proposed customer charge increase, are discouraged because they do not allow customers sufficient time to adjust their consumption patterns. Eversource's customer charge proposal runs afoul of this consumer protection and is therefore inconsistent with the Department's continuity goal.

c. the Department should set the residential customer charge to the current average for EMA residential rate classes

Because Eversource's high fixed customer charges violate the rate design goals of efficiency, fairness, and continuity, the Department should reject these proposals and adopt the recommendation of Mr. Wallach. Specifically, the Department should adopt Mr. Wallach's recommendation to set the customer charge for EMA residential customers at: (1) the current average rate for each rate class if the Department approves the consolidation of rates across EMA; or (2) the current rates for each of the BECO, CAMB, and COM service territories of NSTAR Electric if not. Exh. CLC-JFW-1 at 11, lines 9-14. In addition, the Department should

reject Eversource's proposal to impose a higher customer charge for new net-metering residential customers. *Id.* at 11, lines 15-16. As Mr. Wallach testified, the minimum cost to connect such customers is no different than that to connect other customers in their rate class. *Id.* at 11, lines 16-18. These customers should therefore pay the same customer charge as all other customers in their rate class. *Id*. at 11, lines 18-19.

Eversource has neither objected to nor opposed these revisions recommended by Mr. Wallach, despite having the opportunity to do so in its rebuttal testimony. Nor did Eversource exercise its right to cross-examine Mr. Wallach, despite having had the opportunity to do so at the rate design hearings. Mr. Wallach's recommendations would send more appropriate price signals to customers to adopt energy efficiency and conserve, would not unfairly shift usage-related costs onto low-usage customers, and would avoid sharp increases. Therefore, the Compact respectfully requests that the Department adopt Mr. Wallach's recommendations, as they would better satisfy the Department's rate design principles.

2. MMRC

Eversource's MMRC proposal suffers from serious deficiencies. Eversource has not bothered to provide evidence of a cost-shift or to equip customers with tools to understand the MMRC or reduce their charges. The MMRC is adverse to the development of energy efficiency and clean, local energy generation. The Department should reject the MMRC, as it is unsupported by evidence, poorly designed, and unjust as discussed in depth below.

a. Eversource's MMRC proposal

Eversource is requesting to charge an MMRC to residential and general service customers who install new DG facilities and elect to enroll in net-metering services under the provisions of G.L. c. 164, §§138-140 and 220 C.M.R. §18.00 *et seq*. The MMRC would apply to

prospective DG facilities. Exh. ES-RDP-1 at 96, lines 8-9. Under the proposal, a customer who installs DG would have the option of not receiving net-metering service. TEC-1-21. If the customer elected not to receive net-metering service, the MMRC would not apply. *Id.* If the customer did elect net-metering service, three rate design changes would be applied to that customer's billed usage: (1) a higher fixed customer charge; (2) a demand charge; and (3) a reduced volumetric kWh rate. See Exh. ES-RDP-1 at 85, lines 11-13.

The demand charge under the Original Rate Design would be billed at a rate of $2.12/kW for EMA R-1/R-2 customers and $2.97/kW for EMA R-3/R-4 customers. Exh. ES-RDP-6, Sch. RDP-1 (East). Under the Alternative Rate Design, the demand rates would increase to $2.26/kW for EMA R-1/R-2 and to $3.01/kW for EMA R-3/R-4. Exh. ES-RDP-6 (ALT1), Sch. RDP-1. This demand charge would be applied to the customer's individual maximum demand during a given month, regardless of when that maximum demand occurs or whether it has any relation to the Company's system or local peaks. Tr. Vol. 16 at 3259, lines 1-16; AG-48-2.

The volumetric rate would be reduced to accommodate the customer and demand charges. See Exh. ES-RDP-1 at 86, lines 17-19. In EMA, the MMRC would lower the distribution rate by 45% for R-1 customers and by 74% for small commercial G-1 customers. Exh. SREF-TW/MW-1 at 23, lines 12-14. By reducing the volumetric kWh rate, the value of net-metering credits for each unit of excess generation would in turn be reduced. Exh. ES-RDP-1 at 94, line 20 to 95, line 2; see also i*d*. at 98, Figure 7 (illustrating reduction of volumetric portion of recovery).

Eversource proposes to delay implementation of the MMRC for DG that comes online after January 1, 2019.[13] See DPU-10-8; Exh. ES-RDP-Rebuttal-1 at 20, lines 8-10. Eversource

[13] The proposed one-year deferral now encompasses both residential and general service customers.

states that a delay is needed to educate residential customers about the MMRC. Exh. ES-RDP-Rebuttal-1 at 15, line 1. Eversource also requires time to make changes to its two billing systems and to test the implementation of a demand charge for residential customers. Tr. Vol. 16 at 3347, line 17 to 3348, line 14.

Eversource did not perform a separate cost allocated study for DG customers. Tr. Vol. 17 at 3507, line 14 to 3508, line 1. For MMRC customers only, the customer charge was set to the full unit customer cost that Eversource computed in its ACOSS. This higher rate is not based on any estimate of higher customer costs for customers with DG. See DOER-2-1. Eversource derived the demand charge by calculating the hypothetical cost of a minimum size distribution system (using minimum size poles, conduits, conductors, and transformers) and allocating them to all rate classes based on class contribution to peak demand. Exh. ES-RDP-1 at 94.

The 15-minute monthly maximum demand charge is not based on coincident peak demand. This design appears to have been largely due to various limitations of Eversource's billing and information systems, which prevent Eversource from communicating relevant system peaks to customers in time for them to respond and from applying coincident peak demand charges to bills for the month in which the charge is incurred. See DPU-60-3. For example, "[a]ttempting to bill all customers on the basis of coincident peak demand would have serious implications for the Company's existing billing systems which are not designed to accommodate such a structure." *Id.*

As reflected in the ACOSS for EMA, distribution equipment costs are driven primarily by the coincident peak load for all customers sharing the equipment. Exh. CLC-JFW-1 at 16, lines 7-9. Eversource's MCOS witness found that capacity-related distribution system investments or capacity-related distribution operation and maintenance ("O&M") expenses were

statistically related to Eversource's system coincident peak demand. AG-13-12 at 2(c). Eversource's Manager of Rates Richard Chin admitted that "[c]onstraining peaks at a local level could reduce costs for customers over time." Tr. Vol. 16 at 3258, lines 23-34. Sunrun/EFCA's witness Melissa Whited testified that:

> demand charges may not be an accurate representation of cost causation, and therefore they can lead to cost shifting among customers within a class. This may be particularly true for non-coincident demand charges, where a customer's demand charge is based on their demand during an off-peak period, and it has little correlation, then, to actual costs being imposed by that customer on the system.

Tr. Vol. 19 at 3631, line 16 to 3632, line 1. She also asserted that "[w]e've also seen that demand charges tend to increase bills for low-usage customers and reduce bills for high-usage customers." *Id*. at 2632, lines 2-4.

For the vast majority of residential and small C&I customer accounts, there is no record of historical 15-minute maximum demand data that customers could reference, even with some kind of bill calculator from the Company. The MMRC would require demand meters for customers, which most of Eversource's residential and small commercial customers currently do not have. AG-48-6(e); Att. AG-1-1(f); Att. AG-1-1(l). Zero residential customers and few small commercial customers are currently billed for demand. AG-48-6(e); SREF-1-32. In EMA, approximately 72% of Eversource's small commercial customers do not currently have demand meters.[14] See AC-1-16 (tally of small C&I customers without demand meters by territory); Att. DPU-15-1(a) (at 3) (NSTAR Electric's customer counts in each rate class by year).[15] For those

[14] NSTAR Electric and WMECo each previously determined that demand meters were not cost-justified for small general service customers with very low demand. *Id.*

[15] AC-1-16 indicates that a total of 89,480 small C&I customers in BECO (52,960), CAMB (5,443), and COM (31,077) are without demand meters. According to Att. DPU-15-1(a) at 3, there were 124,075 customers in the corresponding rate classes in 2016. BECO G-1 (72,915), CAMB G-0 (5,384), CAMB G-5 (58), CAMB G-6 (3), COM G-1 (44,940), COM G-5 (769), COM G-6 (6). See also Att. AG-10-3 (customer counts by rate class in the test year).

small C&I customers who do have demand meters, the meters cannot measure maximum demand in different periods. DPU-18-3. For each demand meter deployed in connection with the MMRC, Eversource estimates a cost of $150 per meter plus $50 in labor. DPU-10-15.

b. Eversource failed to demonstrate how the MMRC complies with threshold and statutory requirements and the Department's rate design principles

The Department should reject the MMRC for six reasons.[16]

(i) Eversource has not substantiated its cost-shift premise.

(ii) The MMRC is inconsistent with the four statutorily directed elements of Chapter 75 of the Acts of 2016, An Act Relative to Solar Energy (April 11, 2016) (the "Solar Act").

(iii) Eversource has not presented evidence of the impact of the MMRC on its energy efficiency programs, as required for the Department's review under G.L. c. 164, §141 ("Section 141").

(iv) The MMRC is inconsistent with the Department's rate design goal of efficiency.

(v) The MMRC is inconsistent with the Department's rate design goal of simplicity.[17]

(vi) The MMRC creates undue discrimination in rate relationships.

(i) Eversource failed to demonstrate a cost shift

As a threshold matter, Eversource has not met its burden to prove a cost shift from Eversource's DG to non-DG customers.[18] Exh. ES-RDP-1 at 95, lines 15-16. The Department

[16] The Compact is also concerned that changing the volumetric rate for MMRC customers to accommodate a demand charge would violate the net-metering law, G.L. c. 164, §139(a)-(b ½). The net-metering credit value is statutorily defined in direct relation to volumetric rates for non-DG customers in the same rate class. Eversource's MMRC proposal reduces kWh rates only for MMRC customers, undercutting the fundamental structure of the law, in which the net-metering credit value is indexed to the kWh rates for all customers in the rate class. Eversource's MMRC would sever the link between the net-metering credit and just and reasonable kWh rates established for distribution, transmission, Basic Service, and transition. Distribution companies cannot be allowed to alter the MMRC credit value at their leisure.

[17] The MMRC proposal is also inconsistent with the rate design goals of continuity and fairness for reasons discussed in Section III.C.1 (customer charge) and identified by several expert witnesses. See Exhs. SREF-TW/MW-1 at 27-30; AC-ML-1 at 4, lines 7-12. Silence with respect to the goals of fairness and continuity in this Section III.C.2 should not be construed as an admission that the MMRC proposal satisfies those goals. With respect to corporate earnings stability, if the Company's revenue decoupling mechanism is approved in Phase I of this Proceeding, the Company's earnings stability would not be a relevant rate design consideration in Phase II.

has said that an electric distribution company must "substantiate its cost-shift assumption with reasonable analysis and quantitative record evidence." D.P.U. 15-155 at 457-58. Eversource has failed to support such a claim, and thus the MMRC should be rejected.

The Department recently confirmed the threshold evidentiary requirements for approving rate proposals designed to mitigate alleged cost shifts from DG to non-DG customers. Specifically, the Department made clear that a cost-shift cannot be shown by only quantifying net-metering credits and citing to current rate design. D.P.U. 15-122 at 458. In that case, the Department could not conclude that a cost shift did in fact exist, since the distribution company had quantified neither the amount of costs specifically attributable to DG customers nor the distribution system benefits associated with DG in its service territory. *Id*. at 457-58.

In the generic MMRC investigation, D.P.U. 16-64, the electric distribution companies jointly argued that "increasing net-metering recovery surcharges and revenue decoupling mechanisms" were evidence that net-metering customers do not pay their fair share of distribution costs. D.P.U. 16-64-E at 10-11. However, in response to concerns raised by stakeholders, the Department directed the electric distribution companies to consider additional data to support their proposals, including: (1) an analysis of the impact of market net-metering credits on the need for an MMRC; (2) a bill impact analysis, including sensitivities, for various types of customers, not just residential customers; (3) cost of service studies supporting the allocation between fixed and variable charges; and (4) an analysis justifying the need for an MMRC, to the extent necessary to support a proposed MMRC. *Id.* at 20-21.

[18] An electric distribution company that chooses to file an MMRC must substantiate all claims and provide complete and detailed documentation to support its MMRC proposal. *Scope of Minimum Monthly Reliability Contribution Proposal*, D.P.U. 16-64-E at 21 (January 13, 2017).

In this case, Eversource did not heed these instructions and based its alleged cost shift only on two pieces of evidence: (1) displaced revenue from net-metering incentives and revenue decoupling (without accounting for any DG benefits) as well as (2) bill impact analyses. In addition, Eversource stated that it does not have experience with the type of analysis required to meet the Department's other threshold evidentiary requirements.

Neither the displaced revenue analysis nor the bill impact analysis reasonably support Eversource's allegation of a cost shift. According to two experts in economic and technical assessments of demand-side and supply-side energy resources, Tim Woolf and Melissa Whited who testified for Sunrun/EFCA, these figures do not amount to a cost-shift analysis. Exh. SREF-TW/MW-1 at 1, lines 10-11, at 14, lines 10-12. Mr. Woolf and Ms. Whited testified that "displaced revenues alone cannot be used as an indicator of a cost-shift." *Id*. at 15, line 12. Those displaced revenues are offset by benefits provided by net-metering, which mitigate the cost shifting. *Id*. at 14, lines 14-15; see also Exh. VS-NP-1 at 19, lines 13-17 (displaced revenue does not demonstrate that net-metering customers fail to contribute to the costs of the distribution system); AC-ML-1 at 33, lines 23-29 (Eversource's evidence is far short of the necessary analysis of the long-run benefits and costs of DG necessary to prove a cost shift).

Indeed, the Rate Design Panel admitted that it did not evaluate the benefits of DG, the same problem that led the Department to reject National Grid's tiered customer charge proposal in D.P.U. 15-155. *See, e.g.*, Tr. Vol. 16 at 3409, lines 1-4 (the MMRC does not reflect the benefit provided by DG customers).

In fact, DG benefits all ratepayers. Various parties have testified about the benefits of DG that can lower costs for Eversource and directly impact ratepayers. See e.g., Tr. Vol. 19 at 3628, lines 5-8; Exh. AC-ML-1 at 33, lines 26-29; CLC-JFW-1 at 17, lines 12-20. For example,

DG can reduce rates for non-DG customers by avoiding the need to make additional utility investments to serve additional load (Tr. Vol. 19 at 3629, lines 4-12), reducing energy and capacity purchases (Tr. Vol. 19 at 3629, line 13-17), and reducing the cost of compliance with the Global Warming Solutions Act, St. 2008, c. 298 ("GWSA") (Tr. Vol. 19 at 3628, lines 14-22). Without an analysis of the benefits, it is not possible to conclude there is a cost shift in either direction – to or from solar customers. Tr. Vol. 19 at 3634, line 19 to 3635, line 10. In effect, "[t]o completely ignore the benefits provided by certain customers would skew the determination of what is fair, and would discriminate against those customers who provide benefits to the system." Exh. SREF-TW/MW-1 at 17, lines 1-3.

Further, it is well recognized, as experts testified in this Proceeding, that incremental DG can reduce distribution system costs in numerous ways and that these impacts can benefit other ratepayers. See Tr. Vol. 19 at 3629, lines 8-17. The benefits of customer-provided clean energy are likely to be quite significant in light of Eversource's annually increasing compliance costs under the recently adopted Clean Energy Standard ("CES"), 310 C.M.R. §7.75, which implements declining carbon dioxide emission limits under the GWSA.[19] To alter the incentives for installing these resources would deprive ratepayers of such benefits and could have other adverse impacts (e.g., the loss of local clean energy jobs).

Likewise, bill impact analyses fail to support Eversource's allegation of a cost shift. Such analyses do not address the long-term costs or benefits of DG on the distribution system.

[19] The CES establishes a minimum percentage of electricity sales that electric utilities and competitive suppliers must procure from clean energy sources, beginning at 16% in 2018 and increasing 2% annually to 80% in 2050. The final CES was adopted on August 11, 2017. A proposed version was noticed prior to Eversource initiating this Proceeding. See also *Kain v. Department of Environmental Protection*, 474 Mass. 278 (2016) (requiring the Department of Environmental Protection to set enforceable annually declining emission limits on greenhouse gas emissions).

Eversource cannot meet its burden to prove that an MMRC is needed simply based on impact to customers' bills.

In addition, Mr. Davis said that he personally lacked experience "with those kinds of analyses," referring to the benefits of deferred infrastructure investments from DG. Tr. Vol. 16 at 3403, line 17 to 3404, line 18.[20] This purported inexperience with benefits calculations does not excuse Eversource from presenting the required analysis. This benefits analysis is not an impossible exercise, but one that Eversource performs all of the time in the course of operating as a regulated utility in Massachusetts. See Tr. Vol. 19 at 3632, lines 11-23. Eversource simply made no effort to quantify the benefits of DG to the grid. See Tr. Vol. 17 at 3508, line 13 to 3509, line 8.

Mr. Chin claimed that these benefits are uncertain. *Id*. at 3508, lines 17-19. However, intervenors' experts counter that there is sufficient certainty to develop reasonable estimates of these costs and benefits. In fact, "these types of costs and benefits are estimated for all kinds of programs and investments by the company." Tr. Vol. 19 at 3632, line 21 to 3633, line 1.

The Department should rely on the credible testimony in this case that concluded that Eversource failed to demonstrate the required cost shift. Exhs. AC-ML-1 at 5, lines 3-4; SREF-TW/MW-1 at 5, lines 9-14; VS-NP/RG-1 at 21, lines 13-17. Without that demonstration, the MMRC proposal is simply a solution in search of a problem. For this reason alone the MMRC should be rejected.

[20] Mr. Davis conceded that it is "possible" for DG to defer traditional infrastructure investments. Tr. Vol. 16 at 3403, line 17 to 3404, line 18.

(ii) the MMRC does not satisfy the elements of the Solar Act

The MMRC proposal also fails to meet the requirements of the Solar Act. Once the predicate cost-shift has been shown, an MMRC proposal must satisfy four criteria. An MMRC may be approved only if:

> [the proposal] (1) equitably allocates the fixed costs of the electric distribution system not caused by volumetric consumption; (2) does not excessively burden ratepayers; (3) does not unreasonably inhibit the development of Class I, Class II, and Class III Net Metering Facilities; and (4) is dedicated to offsetting reasonably and prudently incurred costs necessary to maintain the reliability, proper maintenance, and safety of the electric distribution system.

G.L. c. 164, §139(j); St. 2016, c. 75, §9. Eversource has not met its burden of proof on any of these elements.

First, Eversource has not shown that its MMRC equitably allocates fixed costs of the electric distribution system not caused by volumetric consumption. Eversource's methodology for calculating the MMRC demand charge makes no attempt to identify costs that are not caused by volumetric consumption. "[F]rom the longer-term perspective of cost-causation and economic efficiency, distribution plant and O&M costs are variable with respect to customer usage and therefore avoidable by reducing customer usage." Exh. CLC-JFW-1 at 14, lines 6-8.

While Eversource specifically targets demand-related costs, Eversource classifies all of these costs as "fixed" simply because they were incurred in the past. Exh. ES-RDP-1 at 89, lines 4-7 and 93, lines 19-23. This blanket classification fails to account for the relationship between consumption and distribution reliability spending, even though Eversource admits that future distribution capacity costs can be avoided through shaving peak demand. Tr. Vol. 16 at 3394, lines 5-6; 3394, line 23 to 3395, line 4. See also *id.* at 3258, lines 23-24 (admitting that constraining peaks at a local level could reduce costs for customers over time).

A minimum size analysis is typically used to classify costs as customer-related and demand-related in an ACOSS. See Exh. CLC-JFW-1 at 14, lines 21-23. Appropriation of this methodology to develop a demand charge is problematic since Eversource has already classified its customer-related costs in its ACOSS and developed a customer charge for each rate class. In effect, Eversource's minimum size methodology simply takes costs that have been classified as demand-related and shifts recovery of a portion of them from volumetric rates to a demand charge for new net-metered customers. See *id*. at 14, line 13 to 15, line 10 (explaining the minimum size method). The MMRC demand charge also fails to equitably allocate these costs. Eversource allocates these costs based on each rate class's contribution to peak demand but does not perform a separate cost allocation study for DG customers within those rate classes. Tr. Vol. 17 at 3507, line 14 to 3508, line 1. Thus, the MMRC proposal neither identifies costs not caused by volumetric consumption nor equitably allocates costs.

Second, Eversource has not shown that the MMRC does not excessively burden ratepayers. The MMRC may excessively burden ratepayers in several ways. Most directly, imposing a demand charge on residential customers without providing them any tools for monitoring their demand or controlling their bills creates an excessive burden. To control monthly demand costs, a customer would need to have detailed information about the customer's 15-minute load profile for each day of the month as well as an in-depth understanding of which combination of appliances gives rise to monthly maximum demands. Exh. CLC-JFW-1 at 15, line 18 to 16, line 2.

Eversource agrees that customers will need tools to understand how the MMRC will operate but has not presented a proposal for providing them.[21] This design is highly burdensome, since a single failure to control load during the month would result in the same demand charge as if the same demand had been reached in every hour of the month. Exh. CLC-JFW-1 at 16, lines 3-5. In the long run, all ratepayers will be burdened by the reduced incentives for energy efficiency and conservation resulting from this design. Since Eversource has not analyzed the impact on energy efficiency of its proposed demand charge, it is impossible to conclude that these unexploited savings will not excessively burden all ratepayers.

Finally, Eversource has not comprehensively presented the costs of administering the MMRC demand charge. Eversource intends to pass the costs associated with implementing the MMRC onto ratepayers in its next distribution rate case, including new demand meter purchases, installation fees, customer education, recoding and testing its billing system, training call center representatives, and any other costs. Eversource has alluded to serious problems with its billing systems, delaying implementation for a full year while testing the demand charge with its billing systems.[22] Yet nowhere in its filings is there even an order of magnitude estimate of the billing-related costs. See CLC-12-1; ES-RDP2-Rebuttal-1 (August 22, 2017) at 10-11; Tr. Vol. 16 at 3344, line 8 to 3347, line 9. These costs will eventually add to ratepayers' burden, but the Department lacks any basis to determine if that burden will be excessive. Thus, Eversource has not shown that the MMRC will not excessively burden ratepayers.

[21] See Tr. Vol. 16 at 3341, line 20 to 3342, line 18 (stating the Company would have to provide tools for customers to perform their own bill impact analysis, forecasting their average monthly consumption and maximum monthly demand).

[22] To implement the MMRC, a billing system change is required for both NSTAR Electric's CIS and WMECo's C2. Exh. ES-RDP-1 at 98, lines 11-13; SREF-1-35; Tr. Vol. 16 at 3347, line 17 to 3348, line 14. The billing system modifications will take a full year. Tr. Vol. 16 at 3346, lines 24 to 3347, line 1.

Third, Eversource has not shown that the MMRC will not unreasonably inhibit the development of net-metering facilities. Eversource did not conduct any study to determine whether the levels of decreased savings resulting from the MMRC would act as a disincentive to investing in future Class I, Class II, or Class III facilities. Tr. Vol. 17 at 3515, line 14 to 3518, line 23. Eversource's own bill analysis of its average R-1 customer in EMA shows that customers with smaller facilities sized at 50% or 100% of demand will be worse off if they take net-metering.[23] Without being able to forecast their usage and individual monthly peak demand, customers will have no way of knowing whether to take net-metering. Not being able to know if they will be better off with or without net-metering is likely to deter some customers from installing DG. See Tr. Vol. 16 at 3341, line 14 to 3342, line 4. Thus, there is a substantial likelihood of harm to the development of new net-metering facilities under the MMRC proposal.

Fourth, Eversource has not shown that the MMRC is dedicated to offsetting reasonably and prudently incurred costs necessary to maintain the reliability, proper maintenance, and safety of the electric distribution system. Eversource apparently views this element as a rate design issue, arguing that "[a] demand charge quantifies and provides a signal to customers about the capacity requirements needed to provide service to them through their actual metered demand on the system each month." Exh. ES-RDP-1 at 95, lines 9-12. However, the MMRC is not designed to mirror reasonably and prudently incurred capacity costs, as alleged, because Eversource does not build its distribution system to serve the sum of all its customers' individual

[23] See Att. DPU-5-1(o), Sheet Entitled "Eastern Massachusetts Territory R-1 MMRC Bill Impact Analysis - 50% of Demand" (on tab labeled Exh. 6. Sch. RDP-4 East R-1 Half) and Sheet Entitled "Eastern Massachusetts Territory R-1 MMRC Bill Impact Analysis - 100% of Demand" (on tab labeled Exh. 6. Sch. RDP-4 East R-1 Full).; Exh. ES-RDP-6, Sch. RDP-4 (East) (Revised) (calculating monthly bills for the R-1 MMRC customer); Att. DPU-10-19 at line 21 (calculating monthly bills for the R-1 customer who installs DG and elects not to take net-metering); Exhs. CLC-4 and CLC-5 (showing the difference in monthly bills with and without net-metering); Tr. Vol. 16 at 3333, line 20 to 3341, line 14.

non-coincident maximum demands.[24] Exh. UMASS-RS-1 at 16, lines 14-20. The residential demand charge is a flawed rate design as discussed below. See *infra* Sections III.C.2.b.iv (efficiency), III.C.2.b.v (simplicity).

Moreover, the MMRC is not dedicated to offsetting reasonably and prudently incurred costs because it was designed such that Eversource is likely to over-collect its revenue target at the direct expense of new net-metered customers. By allocating costs based on hourly demand data and then billing based on the higher 15-minute demand (see Tr. Vol. 16 at 3255, line 12 to 3258, line 4), Eversource will likely overshoot its revenue target. Thus, the MMRC is not dedicated to offsetting reasonably and prudently incurred costs.

On all four elements, Eversource's MMRC proposal does not meet the requirements of the Solar Act.

(iii) Eversource failed to evaluate the impact of the MMRC on energy efficiency

Eversource has also failed to present evidence of the impact of the MMRC on the Commonwealth's energy efficiency programs in order to permit the Department to consider these impacts as required by Section 141. The General Court placed successful development of energy efficiency and DG at the forefront of all rate design decision-making by requiring: "[i]n all decisions or actions regarding rate designs, the [D]epartment shall consider the impacts of such actions, including the impact of new financial incentives on the successful development of energy efficiency and on-site generation." G.L. c. 164, §141.

[24] It appears that this design flaw is due to the fact that Eversource lacks a modern billing system and TOU meters. *See, e.g.*, DPU-18-3. However, Eversource's failure to roll out advanced metering functionality in compliance with D.P.U. Order 12-76-B is not a compelling reason to burden residential rate ratepayers with a non-coincident peak demand charge.

Applying this statute in another case, the Department rejected a proposal to move towards demand-based pricing and away from volumetric per-kWh recovery where the electric distribution company "failed to provide evidence regarding the impact of its [proposal] on energy efficiency, compliance with the three-year energy efficiency plan, and incentives to lower demand." D.P.U. 15-155 at 458-59.

In this case, Eversource plainly failed to provide sufficient evidence for the Department to approve the MMRC under Section 141. Mr. Chin admitted that Eversource did not undertake any study to determine whether the MMRC would create disincentives for energy efficiency.[25] Tr. Vol. 17 at 3517, line 23 to 3518, line 23. Nor did Eversource study the impact on the development of DG. *Id*. at 3515, line 14 to 3517, line 16.

During discovery, Eversource was asked directly whether and how certain alternative designs would impact signals to invest in energy efficiency and DG. LI-1-19. Eversource responded vaguely, noting that its rate proposals "may result in an increase or decrease to a customer's bill, depending on usage." *Id*. Eversource clearly understands that reduction in volumetric charges impacts price signals for energy efficiency but argues that the price signal it selected is appropriate. See generally *id*. Despite this understanding, Eversource provided zero analysis or evidence of how these price signal changes would affect efficiency programs and distributed generation, when given a clear chance to do so in discovery.

The MMRC would negatively impact price signals for energy efficiency, and the Department must be able to consider the extent of these effects under Section 141 and the

[25] When asked how MMRC customers could work to lower their demand charge (Tr. Vol. 16 at 3307, lines 3-7), Mr. Chin surmised without any support, "I think that customer has basically made a decision that they don't want to monitor their bill really on their usage." Tr. Vol. 16 at 3309, lines 7-9. However, there is nothing to prevent a customer with installed solar panels from participating in cost-effective energy efficiency programs. Tr. Vol. 19 at 3635, line 24 to 3636, line 4.

Commonwealth's all cost-effective energy efficiency mandate.[26] G.L. c. 25, §21(b)(1). Eversource failed to offer evidence of impacts to energy efficiency, compliance with the three-year energy efficiency plan, and incentives to lower demand resulting from the MMRC, and so its proposal should be denied.[27]

(iv) the MMRC is inconsistent with the Department's goal of price efficiency

In addition, the MMRC should be rejected because it weakens price signals for efficient consumption. Even if an MMRC proposal were to satisfy all elements of the Solar Act, the Department would still need to evaluate the propriety of the MMRC under its standards for rate design – efficiency, simplicity, continuity, fairness, and corporate earnings stability. See D.P.U. 15-155 at 383. There is no requirement under the Solar Act that the Department must approve a MMRC regardless of whether it would conflict with other rate design goals. See G.L. c. 164, §139(j) (the department *may* approve a MMRC).

Of paramount concern for the Compact, the MMRC would diminish volumetric recovery from new net-metered customers, which is adverse to the Department's efficiency goal.

> Efficiency means that the rate structure should allow a company to recover the cost of providing the service and should provide an accurate basis for consumers' decisions about how to best fulfill their needs. The lowest-cost method of fulfilling consumers' needs should also be the lowest cost means for society as a whole. Thus, efficiency in rate structure means that it is cost based and recovers the cost to society of the consumption of resources to produce the utility service. . . . In practice, meeting the goal of efficiency should involve rate structures that provide strong signals to consumers to decrease energy consumption in consideration of price and non-price social, resource, and environmental factors.

[26] Rather than comply with this clear statutory mandate, again the Rate Design Panel assumed that DG customers would be unable or unwilling to participate in energy efficiency programs. See Tr. Vol. 17 at 3518, lines 4-12 ("DG customers are making a decision between using -- making an energy efficiency investment to reduce your bills or to invest in DG to lower your bills…[sic]"). That assumption is baseless. See Tr. Vol. 19 at 3635, line 24 to 3636, line 4.

[27] The MMRC could impede electric vehicle adoption for customers with DG and net-metering, since charging electric vehicles, even during off-peak hours, would increase individual maximum monthly demand. Eversource has not presented evidence of these impacts either.

Fitchburg Gas and Electric Light Company, D.P.U. 15-80/15-81 at 295 (April 29, 2016) ("D.P.U. 15-80/15-81") (citations omitted).

The Department has acknowledged the application of Massachusetts climate legislation in connection with this rate design goal. "Effective use of energy resources means reducing the total amount of energy consumed without compromising service reliability through the use of more efficient technologies and practices, with clear and timely pricing information, as part of a sustainable energy policy." D.P.U. 15-80/D.P.U. 15-81 at 295 n.152 (citing An Act Relative to Green Communities, St. 2008, c. 169 ("GCA") and the GWSA). In approving WMECo's decoupling mechanism, the Department stated:

> A primary rate principle for the Department is to provide customers with the appropriate incentive to consume electricity as efficiently as possible.
>
> In addition, while there is certainly an amount of distribution costs that is fixed, it is clear that not all distribution costs are fixed, because some distribution costs are driven by peak demand on circuits. Although pricing distribution service on demand usage may support the cost-to-serve principle, it is not the best rate structure to promote energy efficiency.

D.P.U. 10-70 at 332.

Eversource's MMRC proposal violates this core rate design principle because the demand charge, the higher fixed customer charge, and the reduced volumetric charge weaken signals to consumers to decrease energy consumption and to participate in energy efficiency programs. The MMRC represents a major shift away from volumetric recovery for new net-metered residential customers. Eversource illustrated this effect for an "average" residential customer in the Initial Filing, showing that the MMRC alone would reduce the volumetric portion from 76% of the bill (proposed for non-net-metered residential customer) to 46% of the bill (proposed for net-metered residential customer). See Exh. ES-RDP-1 at 98, Figure 7. The lower volumetric rate weakens incentives for customers to reduce their energy consumption and

would perversely encourage increased energy consumption. Exh. CLC-JFW-1 at 16, lines 18-21; see Exh. SREF-TW/MW-1 at 22, lines 2-4. This signal could cause some customers to shift consumption to system peak periods, which would increase costs for all ratepayers. *Id.* at 22, lines 4-8.

In addition, contrary to Eversource's assertion (see Exh. ES-RDP-1 at 90, lines 13-21), the demand charge component would not provide an actionable price signal since residential customers lack the tools necessary to monitor, control, and respond to such price signals. Residential customers currently lack detailed information about their 15-minute demand profiles and would therefore be handicapped in monitoring and controlling their demand charge. See Exh. CLC-JFW-1 at 15, line 15 to 16, line 2. Without in-home displays showing their metered demand, customers will be unable to learn about the power levels of their appliances through trial and error. Retroactive monthly billing for demand means that customers will be unable to receive and respond to the signal Eversource wants to send them in any meaningful way. Without being able to connect their combination of appliance- or equipment-usage to timely information about their demand, it is unrealistic to expect customers to optimize their demand for societal benefits. Even with some education, it would be difficult for residential customers to reduce demand charges based on monthly individual peaks, since even a single failure to control load during the month would result in the same demand charge as if the same demand had been reached in every day or every hour. Exh. CLC-JFW-1 at 16, lines 2-5.

Even with perfect information about their individual usage, the 15-minute monthly peak sends a bad price signal because it is not tied to any relevant peak period. The demand charge would only provide an incentive to a net-metering customer to control load when the customer reaches maximum demand, which would allow customers to reduce demand charges by shifting

part of their loads from their own peak to the peak hour on the local distribution system, thereby *increasing* their contribution to maximum or critical loads on the local distribution system. Exh. CLC-JFW-1 at 16, lines 6-17. In effect, the MMRC demand charge would also provide little or no incentive to take actions that reduce distribution-system costs and would create perverse incentives that might elevate distribution system costs. *Id*. at 16, lines 6-7, 16, line 18 to 17, line 2.

In sum, the MMRC demand charge would "dampen price signals for conservation, promote inefficient customer behavior, and would undermine net-metering customers' ability to control electricity costs." *Id*. at 15, lines 13-15. The Department should therefore reject the MMRC since it would not promote efficient behavior.

(v) the MMRC is inconsistent with the Department's goal of simplicity

The Compact is also gravely concerned about the lack of information, education, and tools for residential customers to understand the MMRC and to make informed decisions about whether or not to install DG and to enroll in net-metering. For those who do become net-metered customers, the Compact is concerned that they will be unable to understand and control their bills.

Because of these deficiencies, the MMRC violates the goal of simplicity. A rate structure achieves the goal of simplicity if it is easily understood by consumers. *Id.* As recently as last year, the Department held that a proposal to transition toward mandatory demand charges for residential and small C&I customers through its tiered customer charge violated this goal. See D.P.U. 15-155 at 459-61. In reaching this conclusion, the Department stressed the inability of customers to easily monitor and respond to billing determinants and the lack of tools provided by the company to assist customers in doing so. The Department found that:

1. the company failed to establish that demand charges are understandable by residential and small C&I customers;

2. although the company planned to implement an outreach and education plan, by the close of the record it had not developed a detailed customer outreach and education plan;

3. the company had not determined its customers' tolerance and acceptance of a significant change in rate design, and therefore, has not presented adequate strategies to ensure that its customers would understand the tiered customer charge proposal;

4. under the proposal, customers lacked the ability to monitor their electricity consumption throughout the month in real time;

5. customers would not be able to ascertain when their usage would be high enough to be billed at the tail block rate; and

6. customers would experience a lag between actual consumption and the availability of the data and resulting charge tier.

Id. at 459-60.

Eversource's MMRC fails on nearly identical facts. Like in D.P.U. 15-155, Eversource has not shown that residential customers will be able to tolerate such a sharp change in rate design. To the contrary, surveys and focus groups identified by Sunrun/EFCA indicate that demand charges are not well understood and frequently raise concerns from customers. Exh. SREF-TW/MW-1 at 24, lines 10-12. Eversource's residential customers have never had demand charges. See Exh. ES-RDP-1 at 90, lines 4-5 (acknowledging that for residential customers the MMRC represents a significant change from current rates). Yet, Eversource places the burden on customers and the marketplace to monitor demand.[28]

[28] Eversource simultaneously seeks **to restrict** customers from finding their own solutions to the lack of demand monitors. Eversource proposes in this Proceeding that customers and competitive suppliers would no longer be allowed to attach any type of external device to any Company meter. See Compact Phase I Initial Brief at 69-70 (urging the Department to maintain customers' existing right to connect their own metering equipment to Eversource's devices, as a workaround way to gain some improved understanding of their usage in the absence of full AMF.)

The MMRC would hinder customers in understanding, monitoring, and responding to prices. Splitting the MMRC into three components – a higher fixed customer charge, a demand charged and a reduced volumetric rate – is unnecessarily complicated. Even compared to inclining block kWh pricing, Eversource admits that "a flat, volumetric rate is much easier to understand for customers." Exh. ES-RDP-1 at 14, lines 7-8. For residential customers, demand charges are even more foreign than kWh blocks. Moreover, the MMRC impedes customers in understanding whether or not they will see a net benefit on their bills from taking net-metering credits for their excess generation.[29]

Residential customers currently lack the ability to monitor their demand throughout the month in real time and Eversource will not provide demand monitors. Tr. Vol. 16 at 3305, line 1 to 3306, line 9. Instead, Eversource places full responsibility on customers to seek out devices in "the marketplace" if they are interested in monitoring the specific usage in their homes. Tr. Vol. 16 at 3307, line 23 to 3308, line 2. Customers will also have to wait until the end of their billing cycle to receive limited feedback on their consumption. Tr. Vol. 16 at 3305, lines 8-9 (customers will only be informed at the end of the month what their maximum metered demand was for that month, without a time and date stamp indicating when the maximum occurred). As in D.P.U. 15-155, the Department should reject the residential demand charge since Eversource proposes no way for customers to monitor their demand in real time and since customers will experience a lag between their actual consumption and the availability of data resulting in a demand charge.

[29] To predict the impact of the MMRC, prospective net-metering customers would be required to perform their own bill impact analysis using a forecast of the average monthly consumption and maximum monthly demand. At the rate design hearings, Mr. Chin testified that Eversource would be required to provide tools for customers to perform this analysis. Tr. Vol. 16 at 3341, line 20 to 3342, line 18.

In a complete reversal of Eversource's stance in its grid modernization proceeding,[30] in which Mr. Chin was a witness, the Rate Design Panel now apparently believes that residential customers *can* reduce their demand, even without demand monitors or near-real-time pricing and usage information. Eversource argues that residential customers could reduce their maximum demand by identifying household appliances that use the most power and then taking steps to be sure that these appliances are not used simultaneously. DPU-46-15. However, Eversource identified a list of appliances that could contribute to maximum demand for an average residential customer, and the two with the highest wattage were a clothes dryer and electric water heater. *Id.*; Att. DPU-46-15. At the rate design hearings, Mr. Chin agreed it could be difficult for customers to ensure that a clothes dryer and an electric water heater are not operating simultaneously. Tr. Vol. 16 at 3355, lines 8-11. The fact that appliances like electric water heaters may cycle on and off automatically, *see id*. at 3354, line 10 to 3355, line 7, makes it all the more important for customers to have real-time information about their usage and a complete understanding of how their usage is impacting their bill.[31]

In addition, Eversource has not presented meaningful customer education strategies. Eversource has alluded to a forthcoming plan to educate customers, but like National Grid, Eversource has not developed a detailed education and outreach plan at this time. At a minimum, no MMRC should be implemented:

> . . . until such times that residential customers considering installation of distributed renewable generation can be fully educated on the impact of the MMRC on project paybacks, the economic implications of taking net-metering service with an MMRC, and the impact of the MMRC on customer bills. For example customers will need to understand the bill impacts from a higher

[30] *See, e.g.*, D.P.U. 15-122, Eversource Reply Brief at 21 (August 18, 2017) ("most residential customers do not have the discretionary load to shift"), *citing* D.P.U. 15-122, Tr. Vol. 2 at 343-44.

[31] Mr. Chin believes DG customers do not want to think about their bills or monitor anything; they just want to make a fixed payment. Tr. Vol. 16 at 3309, lines 9-10; *id*. at 3310, lines 8-10.

> customer charge and a lower net-metering credit when deciding whether to take net-metering service.

Exh. CLC-JFW-Supplemental-1 at 20, lines 9-15. Yet no amount of customer education will overcome the MMRC's design flaws. See JFW-Supplemental-1 at 21, lines 1-6 (explaining that once customers do understand the price signals, they will be more likely to engage in inefficient behavior).

Based on Eversource's own illustrative bill calculation[32] for a typical R-1 customer in EMA, customers considering installing a system, either sized equal to the customer's peak demand or at half of the customer's peak demand, would be better off not enrolling in net-metering service with either of these system sizes. Tr. Vol. 16 at 3341, lines 14-19. Eversource understands that customer education and analytical tools would be necessary for customers to understand how the MMRC would impact them and whether they would be better off with or without net-metering. *See, e.g.*, Tr. Vol. 16 at 3341, line 13 to 3344, line 1. The Rate Design Panel mentioned for the first time at the evidentiary hearings that the Company would have to launch an effort, should its MMRC be approved, to provide tools for customers so that the customers could perform bill impact analyses, forecast their monthly usage and demand, and make informed decisions about whether to take net-metering. See Tr. Vol. 16 at 3341, line 20 to 3342, line 18. When questioned as to whether this tool was described in Eversource's filings, Mr. Chin indicated that the Company has not developed "a full-blown customer education plan" and has only "had discussions internally about the type of tools that we would need to make

[32] Eversource provided "illustrative bill impacts" for a hypothetical prospective DG customer in each rate class using "an average monthly load profile and a representative net metering profile." Exh. ES-RDP-1 at 96, line 9 to 97, line 2. Each profile included two scenarios: one in which the customer sized its system with a nameplate capacity rating equal to the customer's peak demand (100% of demand) and the other at half of the customer's peak demand (50% of demand). Exh. ES-RDP-1 at 2-6. The hypothetical R-1 customer with a 50% of demand system is not to be expected to have net exports in any month of the year, whereas the hypothetical R-1 customer with a 100% of demand system is expected to have net exports in April, May, and June. Att. DPU-5-1(o), Exh. ES-RDP-6, Sch. RDP-4 (East) (Revised); Tr. Vol. 16 at 3336, lines 4-6 and 3341, lines 4-6.

available to customers." Tr. Vol. 17 at 3448, lines 3-12. Just as the Department held in D.P.U. 15-155, understandability cannot be based on a mere promise to develop necessary education tools after the fact. Thus, the MMRC proposal lacks adequate strategies to ensure customers understand the MMRC.

In sum, the MMRC is overly complex for residential customers. It would be difficult for residential customers to understand and respond to the MMRC, and the MMRC would impair residential customers' ability to make informed decisions about whether installing DG or taking net-metering credits would be in the best interest of their household. Thus, the MMRC should be rejected because it violates the principle of simplicity.

(vi) the MMRC is unduly discriminatory

Lastly, the MMRC unduly discriminates against customers installing new DG. It is a longstanding tenet of public utility ratemaking and in the Commonwealth that regulators should avoid undue discrimination in rate relationships. See *Investigation on Efficient Deployment of Demand Resources*, D.P.U. 07-50, Order Opening Investigation at 6 (June 22, 2007) (cost-causation principles are meant "to avoid unreasonable price discrimination . . ."); *Attorney General v. Department of Pub. Utils.*, 390 Mass. 208, 234 (1983) (cautioning against "unduly or irrationally discriminatory" rate classifications resulting from differential treatment absent "a reasonable justification . . . perhaps based on differences in usage or on public policy considerations"); *American Hoechest Corp. v. Department of Pub. Utils.*, 379 Mass. 408, 411 (1980) (customer classes may be treated differently if "reasonably classified"); *New England Telephone and Telegraph Co. v. Department of Pub Utils.*, 372 Mass. 678, 687 (1977) (affirming Department's disapproval of rates as unjustly discriminatory and unduly preferential); James C. Bonbright, et al., Principles of Public Utility Ratemaking 291 (1961); National Association of

Regulatory Utility Commissioners, NARUC Manual on Distributed Energy Resources Rate Design and Compensation at 21 (November 2016) (filed in this proceeding at Exh. CLC-6). While some discriminatory rate relationships are valid and permissible, "undue" discrimination becomes a problem when different customers are charged different rates for substantially the same service. See Bonbright, et al., at 370.

Eversource's MMRC proposal should be rejected on the basis of undue discrimination because it treats customers with similar use of the grid differently without justification. The MMRC is not being proposed for customers who reduce their usage through energy efficiency and conservation. Tr. Vol. 17 at 3506, lines 17-21. Customers who reduce their load through DG will be charged higher rates than customers who reduced their load to the same level through conservation and efficiency. In addition, setting a higher customer charge for MMRC customers is discriminatory because the incremental cost to connect MMRC customers is no higher than that for other customers. This design violates the prohibition against undue discrimination in rate relationships and should be rejected.

3. Rate design request for relief

In sum, Eversource has not justified its MMRC proposal. The alleged cost-shift from net-metering is unsubstantiated, the elements of the Solar Act have not been met, and Eversource has not provided evidence to allow the Department to consider the impacts of the MMRC on the successful development of energy efficiency programs and on-site generation. The MMRC distorts and dampens price signals for efficient consumption and leaves customers with little ability to understand and control their bills. Lastly, the MMRC unduly discriminates against customers installing DG.

For each of these reasons, the Department should:

1. Reject the MMRC.

2. Hold that demand charges are inappropriate for residential and small commercial customers in the absence of AMF.

3. Set the customer charge no higher than the incremental connection costs for all customers, regardless of whether or not they have DG.

4. Direct Eversource to estimate the price and non-price benefits of DG in any future MMRC proposals it may wish to file.[33]

5. Direct Eversource to fully evaluate the impact of the MMRC on the successful development of energy efficiency and on-site generation, including evidence regarding the impact on energy efficiency, compliance with the three-year energy efficiency plan, and incentives to lower demand.

D. <u>Bill Impacts and Mitigation for COM Customers</u>.

Eversource's rate designs would cause adverse bill impacts to COM customers facing multiple changes simultaneously. As discussed below, the proposals would result in:

- high total bill impacts that are inconsistent with the goal of continuity;
- reclassification of customers, consolidation and elimination of rates for purely administrative reasons without a reasonable cost basis, contrary to the goal of fairness; and
- higher fixed charges, which would be inconsistent with the goals of efficiency for smaller customers (along with new or increased demand charges under the Original Rate Design, contrary to the goals of efficiency and simplicity).

Eversource has recognized that aligning and consolidating rate classes across BECO, CAMB, COM, and WMECo would result in significant bill impacts for certain customers. See Exh. ES-RDP-1 at 10, lines 10-12. The Compact's bill impact expert Kevin Galligan analyzed

[33] See D.P.U. 15-155 at 383-84 (consideration of price and non-price social, resource, and environmental factors in meeting the goal of efficiency); Exh. CLC-JFW-1 at 19, lines 6-8 (recommending Eversource be directed to estimate a net metering credit based on an explicit valuation of the price and non-price benefits attributable to excess generation).

the total bill impacts for customers on the South Shore, Cape Cod, and Martha's Vineyard (i.e., COM service area) resulting from Eversource's multifaceted rate design proposals.

He found that the worst impacts result from combinations of Eversource's proposals: to increase recovery through fixed charges, to reassign commercial customers to new rate classes by changes to rate class definitions, to eliminate seasonal rates, and (under the Original Rate Design) to reallocate transmission costs through a consolidated demand charge based on class contribution to Eversource's Massachusetts-wide system peak. See Exh. CLC-KFG-1 at 4, lines 12-17, *id*. at 10, lines 9-20, *id*. at 17, lines 7-9. The customers on Cape Cod and Martha's Vineyard who will be harmed most by the proposed rate designs fall into two categories: (1) commercial customers with seasonal high peak demand and low annual usage; and (2) commercial customers being moved from a non-demand or a low-demand rate class to a demand class or a higher demand class. Exh. CLC-KFG-1 at 13, lines 17-20.

1. Standards applicable to bill impacts

These impacts can be evaluated under the statutory restrictions of G.L. c. 164, §94I ("Section 94I"), as well as the Department's rate design goals. First, in 2012 the General Court enacted a law governing cost allocation in distribution rate proceedings:

> In each base distribution rate proceeding conducted by the department under section 94, the department shall design base distribution rates using a cost-allocation method that is based on equalized rates of return for each customer class; provided, however, that if the resulting impact of employing this cost-allocation method for any 1 customer class would be more than 10 per cent, the department shall phase in the elimination of any cross subsidies between rate classes on a revenue neutral basis phased in over a reasonable period as determined by the department.

G.L. c. 164, §94I.

The method Eversource used to apply Section 94I is inconsistent with the plain language of the statute, which is of particular concern given the unique circumstances of this proceeding and the many rate changes proposed. This statute regulates the allocation of base distribution revenue in a base distribution rate proceeding. Read logically, the maximum "resulting impact" permitted by Section 94I would directly limit base distribution rate increases to no more than 10% for each rate class.

Instead, Eversource applied a 10% cap to the total revenue increase for each rate class, including consolidated base distribution revenue, pro forma reconciling revenue, and Basic Service revenue. See Exh. ES-RDP-1 at 39. This method allows Eversource to accommodate larger distribution rate increases before hitting the 10% caps. For example, in the Original Rate Design Eversource proposed to increase distribution rates for R-1/R-2 residential customers in EMA by 14.5%, and this increase climbs to 19.0% in the Alternative Rate Design. Exhs. ES-RDP-2, Sch. RDP-4 (East); ES-RDP-2 (ALT1), Sch. RDP-4 (East).

As a result, capping distribution rates as a percentage of total revenue can allow the degree of cross-subsidization and distribution rate increases permitted under Section 94I to vary substantially in different proceedings and among different companies depending on the amount of forecasted reconciling and Basic Service revenue. The Department has had the opportunity to consider Section 94I in several other rate proceedings and has previously approved of the method Eversource proposes. See D.P.U. 13-90 at 246-48.

Nevertheless, the Compact respectfully submits that allowing the distribution rate cap to rise and fall with the size of reconciling revenue and Basic Service revenue is inconsistent with the plain language of Section 94I and undermines the General Court's inclusion of an explicit

numerical cap. In prior cases, the Department has considered the particular circumstances in evaluating whether a proposal complies with Section 94I. See D.P.U. 14-150 at 396-99.

With the number of new factors at play in this Proceeding affecting distribution and reconciling revenue – decoupling, incentive regulation, the length of time since Eversource's last litigated distribution rate case, rate class consolidation and alignment – the Department should reevaluate whether applying a 10% total revenue cap would result in rates that are just and reasonable and would satisfy Section 94I in these circumstances. The Compact submits that it would not and requests that the Department cap distribution revenue increases at 10%.

However the 10% cap is defined, Eversource should not be able to avoid the cap for any groups of customers who were assigned to new rate classes based on changes to rate class definitions. Otherwise it would invite electric distribution companies to arbitrarily define classes around the revenue increases they may permit, instead of focusing on more appropriate criteria. Therefore, the Department should apply a 10% cap to each group of customers moving from one class to another. To the extent necessary, the Compact supports mitigation discounts for such customer groups, if the Department finds that rate class reassignment is otherwise just and reasonable. (Eversource's mitigation plan is discussed in Section III.D.3 below.)

In addition, the Department does not determine rates based solely on the results of an ACOSS; the Department also explicitly considers the effect of its rate structure decisions on the amount customers are billed. D.P.U. 15-155 at 385. For instance, the pace at which fully cost-based rates are implemented depends, in part, on the effect of the changes on customers. *Id.* The Department has made clear that even if a proposed rate design passes Section 94I, it must also pass a second test, based on a traditional balancing of fairness and continuity. See D.P.U. 14-150 at 398 (applying an "additional cap" specific to the facts of that case); see also D.P.U. 15-

155 at 392-95 (finding Rate R-4 and street lighting classes could increase rate at 10% of total revenue but imposing a separate limit on R-4 distribution rate increases to avoid violating the continuity goal).

In light of these standards and the unique circumstances here, the Compact urges the Department to closely scrutinize those of Eversource's proposals, which would result in high bill impacts for COM customers.

2. Eversource's multiple simultaneous rate changes would cause adverse bill impacts for COM customers

Apart from the concerns for residential customers in EMA discussed in Sections III.B and III.C[34], there are three primary factors causing adverse bill impacts for COM commercial customers. These factors include: (a) high customer and demand charges for small customers; (b) reassignment of customers to new rate classes based on changes to the determination of demand; and (c) elimination of seasonal rates.

a. high customer charges and demand charges for smaller commercial customers

Businesses in Cape Cod and Martha's Vineyard will be impacted by greater recovery of costs through fixed charges, and potentially new or increased demand-based transmission rates for smaller customers under the Original Rate Design. These current Rate G-1 customers would be subject to a demand charge for the first time for transmission rates under the Original Rate Design, a proposal which Eversource appears to have modified under the Alternative Rate

[34] Indeed, Mr. Galligan found higher adverse impacts on lower usage R-1 customers on the South Shore, Cape Cod, and Martha's Vineyard, as shown in Eversource's Bill Impact by Strata tables. Exh. CLC-KFG-Supplemental-1 at 6, lines 3-4, 13, *citing* Exhs. ES-RDP-8 (ALT1), RDP-12 (East); ES-RDP-8, RDP-12 (East).

Design. DPU-56-9 (Supplemental) at 5. The Compact is strongly opposed to demand charges for small businesses and agrees that these demand rates should be abandoned.[35]

High fixed charges and non-coincident demand charges are wrong for small businesses – for the same reasons discussed in Section III.C.2.b relative to residential customers – because they violate principles of efficiency and simplicity. Those issues were fully analyzed and are not restated here because the evidence is straightforward: Eversource has not done any analysis to determine small C&I customers' ability to understand and adapt to demand charges; Eversource has no education plan detailing the impact of demand charges; and Eversource provided no data on small C&I monthly energy and demand usage, even when it was directly requested in discovery. Tr. Vol. 17 at 3510, line 22 to 3513, line 9. The majority of C&I customers on Cape Cod and Martha's Vineyard are small businesses consuming the same amount of energy or less annually than large residential customers. See Exh. CLC-KFG-Supplemental-1 at 10 n.6. These higher customer charges and new demand charges would be punitive, especially to customers with low annual kWh usage and occasional high demand. Similar to residential customers, higher customer charges and new and increased demand charges weaken customers' control of their bills, promote inefficient behavior, and disproportionately burden Eversource's lowest-usage customers. See Exh. CLC-JFW-1 at 18, lines 11-16. These rate design changes should be rejected.

[35] Specifically, Eversource's original proposal to bill small general service customers for transmission through a demand charge based on the class contribution to the Company's coincident system peak (see Exh. ES-RDP-1 at 32, lines 5-11) would be inconsistent with the goal of fairness. The COM service area experiences a non-coincident peak due to its higher penetration of DG. See Exh. CLC-KFG-1 at 15, lines 20-23. It violates the goal of fairness to burden customers with transmission costs that do not reflect their contribution to such costs. See Exh. CLC-KFG-1 at 21, lines 14-17.

b. determination of demand under new rate class definitions

Commercial customers on Cape Cod and Martha's Vineyard are also adversely affected by Eversource's change in the determination of demand for the purpose of classifying customers. In defining new rate classes, Eversource sought to "simplify rate administration." Exh. ES-RDP-1 at 6, line 12. Eversource proposes to determine demand for assigning customers to rate classes based on a demand over three consecutive months. Exh. ES-RDP-1 at 24, line 17. This three-month demand threshold was meant to strike a "middle ground" between the one-month threshold currently used by WMECo and the twelve-month threshold used by COM. *Id.* at 24, line 18.

A longer threshold would be more fair for the purpose of classifying customers as large or small. A longer threshold appropriately characterizes customers by their size and rewards customers who manage to reduce their demand most of the time. On the other hand, the shorter threshold punishes a customer all year long based on as few as three days of the year, regardless of the season or the time of month in which the demand occurred.

Eversource did not present analysis showing that a three-month threshold is more representative of a customer's size and contribution to relevant coincident demand peaks. By not factoring in the time of day and day of the year, Eversource's three-month demand threshold would place some customers in a higher demand tier, even if the classification might not result in cost-based, fair rate treatment. For example, a school account, predictably closed during hot summer peaks and often closed during the harshest winter weather should not automatically be placed in a higher tier all year. *See, e.g.,* Att. CLC-7-1(a), lines 5 and 9.[36] Since there is no analysis showing that the three-month threshold is correlated with higher contribution to system

[36] These two examples, both schools, are among the 23 accounts having total bill impacts greater than 10% and mapped from the current COM G-1 rate class to the new G-2 rate class.

costs, Eversource has failed to sufficiently justify its "middle ground" method for its determination of demand.

The proposed change in the demand threshold would be a major bill impact factor for the most highly impacted customers on Cape Cod and Martha's Vineyard. Exh. CLC-KFG-1 at 14, lines 6-8. The majority of these customers appear to be small businesses with seasonal peak demand and overall low annual usage who are being moved from the G-1 to G-2 rate class. *Id.* at 14, lines 8-11. Eversource did not show that these customers' three-month peaks coincide with the Massachusetts or Eversource system peak demand. *Id.* at 14, lines 11-12. This single change would even result in some customers being moved from the G-1 rate class all the way to the G-3 rate class, which would subject them to much higher rates, including a higher customer charge and demand charges, than they currently pay. See Exh. CLC-KFG-1 at 14, lines 15-20.

Such customers would face bill increases up to $15,000-$25,000 per year. See *id.* at 14, lines 17-20. A number of customers currently in the COM G-3 rate class and being assigned to the new G-3 rate class would also see high total bill impacts ranging from $65,000/year (15%) to $150,000/year (over 100%). *Id.* at 14, line 22 to 15, line 4. Under the Alternative Rate Design, despite efforts by Eversource to mitigate adverse impacts, a number of customers would still see high total bill impacts, including: 109 Legacy-COMM G-5 customers mapped to New Rate Structure G-1 Demand, 336 Legacy-COMM G-1 customers mapped to New Rate Structure G-2 Demand, 5 Legacy-COMM G-1 customers mapped to New Rate Structure G-3 Demand, 107 Legacy-COMM G-2 customers mapped to New Rate Structure G-3 Demand, and 9 Legacy-COMM G-3 customers mapped to New Rate Structure G-4 Demand. See Exh. CLC-KFG-Supplemental-2, Tables 1, 2, 3-1, 3-2 and 4. These sudden impacts resulting from the change in rate class definitions would be inconsistent with the goal continuity, in addition to fairness.

c. elimination of seasonal rates

Cape Cod and Martha's Vineyard customers would also be adversely affected by the elimination of seasonal rates. Eversource proposes to eliminate all optional and mandatory seasonal rate structures which currently exist in the South Shore, Cape Cod, and Martha's Vineyard territory to "simplify its rate offerings." AC-1-15. The intention is to create homogenous rate classes, thereby treating the South Shore, Cape Cod, and Martha's Vineyard territory as if equivalent to other areas of Massachusetts with different seasonal and year-round economies. See *id*. Eversource argues that seasonal rates were problematic for year-round residents and businesses (*id.*) but neglected to address those customers who would be harmed by the elimination of seasonal rates. Eliminating seasonal rates and other time-varying rate options is a step in the wrong direction, away from rates that are more directly cost-based, promote efficient usage, and can bring more pricing options to consumers. See Exh. AC-ML-1 at 4, lines 16-29 (describing Eversource's proposals for seasonal and time-varying rates as "a clear step backwards").

The South Shore, Cape Cod, and Martha's Vineyard region has a seasonal tourist economy and part-time residents who will be harmed by the elimination of seasonal rates. Exh. CLC-KFG-1 at 12, lines 9-12. The population of some towns can double or triple in the summer. *Id.* at 12, line 13.[37] This seasonality often creates economic challenges for the region.[38] Mr.

[37] Estimates produced by the Cape Cod Commission using survey data on second homes indicate that the seasonal population on Cape Cod, when averaged over a full year, is equivalent to 68,856 full-time residents in addition to the 215,888 counted in 2010 by the U.S. Census Bureau. Exh. CLC-KFG-4 at 26. Based on these figures, it could be said that roughly a quarter of the community is "seasonal."

[38] For example, the loss of young adult job seekers and declining population, a growing elderly full-time population, high rents due to tourism, above-average unemployment and below-average wages compared to Massachusetts overall. See Exhs. CLC-KFG-4 at 17 (population is shrinking), at 32 (larger share of elderly residents); CLC-KFG-5 at 10 (increasing population of seniors in Town of Barnstable), at 49 (most common fear among older residents is affording of basic living expenses in Cape Cod as they age), at 91 (seasonal rents can squeeze out residents who would prefer to stay on Cape Cod year round); CLC-KFG-Supplemental-4 at 24 (higher unemployment and lower wages); Exh. CLC-KFG-Supplemental-5 at 7 (Cape Cod is seasonal).

Galligan found that small seasonal businesses with high peaks and low overall annual usage would face some of the highest bill impacts from the proposed rate design changes among COM customers. See Exh. KFG-1 at 13, line 14 to 14, line 12. Eversource's bill impacts analysis showed hundreds of COM customers on the G-1S Rate who would see adverse bill impacts after being reassigned to the new G-1 Non-Demand Rate. Exh. ES-RDP-4 (East), Sch. RDP-3.[39] The Department should ensure that the rates approved in this Proceeding will not result in sudden adverse bill impacts for these seasonal customers.

3. Eversource's late-filed mitigation plan is inadequate

Eversource failed to propose an effective plan to educate customers about their bill impacts and has not proposed sufficient rate relief to avoid excessive bill impacts. See Exhs. CLC-KFG-1 at 4, lines 17-19; CLC-KFG-Supplemental-1 at 12, line 17 to 14, line 8. The Department should: (1) direct Eversource to cooperate with the Compact on mitigation measures for customers in the COM territory; (2) mandate much more gradual rate changes; and (3) require a meaningful education plan.

As of July 5, 2017, Eversource had not completed its mitigation plans. DPU-63-8. Initially, Eversource indicated its outreach and education plan was still in the early stages of development. CLC-3-5(a); DPU-12-12. Eversource indicated that mitigation would be limited primarily to working with customers to evaluate energy efficiency measures or changes in load profiles and an optional TOU rate with restricted eligibility (i.e., not open to many impacted COM customers). Exh. ES-RDP-1 at 49, lines 4-5, *id*. at 18, lines 8-12. For COM customers being moved from Rate G-1 to Rate G-2 or Rate G-3, the only mitigation measure would be energy efficiency through the Compact. Mr. Galligan concluded that these measures would be

[39] Eversource also failed to analyze the impacts for seasonal customers with twelve months of billing data. CLC-3-2.

inadequate since Eversource did not elaborate on how impacted customers would be identified and targeted, whether they would have to self-identify, how and when they would be contacted, what options they would be presented with, and how Eversource customers in the Compact's territory would be identified and referred to the Compact. Exh. CLC-KFG-1 at 11, lines 6-8, *id.* at 8, line 14 to 9, line 7.

Eversource then filed a mitigation plan on July 25, 2017, as a supplemental discovery response in connection with the proposal to shift costs onto EMA residential customers. See DPU-63-6 (Supplemental). Eversource acknowledged that it is necessary to provide relief to COM customers impacted by multiple rate design changes at once, including new rate class definitions. See *id*. at 6 (COM G-1, G-1S, G-4 and G-7S customer moving to the new G-1 demand rate impacted by a combination of unique circumstances). For such customers, the mitigation plan would provide: (1) a declining discount for customers in EMA who would be moving to one of the Consolidated/Aligned rate classes and would face bill impacts in excess of fifteen percent (the "Legacy Discount"); and (2) an optional two-part rate for existing COM customers on Rates G-1, G-1S, G-4, and G-7S. See DPU-63-6 (Supplemental-1) at 4-7.

Despite these additional efforts, Mr. Galligan found that serious bill impacts would still result for a number of Cape Cod and Martha's Vineyard customers. Exh. CLC-KFG-Supplemental-1 at 12, line 19 to 13, line 2. For example, for 109 Legacy-COM G-5 customers mapped to New Rate Structure G-1 Demand, their bills would increase by approximately 10% **every year** for the five years from Transition Year 2018 to Mitigated Year 2024. *See, e.g.*, Exh. CLC-KFG-Supplemental-2 at Table 1 (discount column showing a proposed five-year bill reduction rate of 99.3%, 79.44%, 59.58%, 39.72% and 19.86%). A ten percent increase every

year is far too accelerated to be considered gradual. The Department should require Eversource to mitigate these significant impacts with much more gradual rate changes.

In addition, Eversource still does not have a detailed education plan, which should be actively used to provide customers with tools tailored to individual accounts to help them prepare and budget for the rate increases, such as an online bill impact calculator as Mr. Galligan recommended. Exh. CLC-KFG-1 at 20, lines 9-11. The Department should require Eversource to submit a detailed education plan that allows sufficient time for customers to be meaningfully educated about the rate changes in time to budget for them and/or install energy efficiency solutions.

The Department should also include a directive in its Order that Eversource must work with the Compact on mitigation measures and in particular share bill impact data necessary to effectively identify potential customers and to develop an outreach and education plan to offer energy efficiency mitigation for impacted customers. Eversource stated during the hearings that it is open to a proactive and collaborative effort to work with the Compact to identify customers affected by high bill impacts. Tr. Vol. 16 at 3322, lines 20-24. Eversource has data that would help the Compact to target its energy efficiency efforts to serve highly impacted customers and is willing to provide it to the Compact. *Id.* at 3323, line 19 to 3324, line 2.

In addition, the Compact would be hindered by any dampening of price signals through higher fixed charges and new non-coincident demand charges for small C&I customers. See Exh. CLC-KFG-Supplemental-1 at 15, lines 3-6. The Department should reduce fixed charges to improve options for customers to mitigate their bill impacts by participating in energy efficiency programs and should direct Eversource to provide the requested data (described *infra* at 81 (requested relief) and in Exh. CLC-KFG-1 at 20, line 22 to 21, line 6).

4. Bill impacts and mitigation request for relief

The Department should grant the following relief to address the bill impacts for COM customers and the lack of sufficient mitigation proposed by Eversource:

1. For each group of customers reassigned to new rate classes, determine if the cost allocation complies with the Section 94I 10% cap for that customer group if they were a separate rate class.

2. For each group of customers reassigned to new rate classes, determine if the change in rate class definitions would result in rates that are not cost-based for the affected customers.

3. Lower customer charges.

4. Reject demand charges for small commercial customers, to the extent that Eversource may pursue such demand charges as proposed in the Original Rate Design.

5. Apply a twelve-month determination of demand, unless and until Eversource can prove another determination fairly reflects customers' overall usage and contribution to coincident peak demand.

6. Direct Eversource to mitigate adverse bill impacts on seasonal customers.

7. Direct Eversource to provide stronger mitigation discounts and/or more gradual increases for customers who would, under the Company's mitigation plan, still face cumulative distribution rate increases of 25% or more over the next five years (i.e., for those facing 5%-10% increases every year).

8. Direct Eversource to implement an education and outreach plan by January 1, 2019.

9. Direct Eversource to conduct targeted outreach to individual customers, who would face a cumulative distribution rate increase of 15% or more in the first two years after the Proceeding, and to complete this targeted outreach by January 1, 2019.

10. Direct Eversource to provide an online bill calculator to help customers prepare rate changes over the next five years, and make this calculator available by January 1, 2019.

11. Direct Eversource to work cooperatively with the Compact on mitigation measures and in particular to share bill impact data necessary to effectively identify potential customers and to develop an outreach and education plan to offer energy efficiency mitigation for impacted customers.

The shared data should include: electric account number, 12-month usage, 12-month demand (where applicable), current billing determinants, total current annual bill, proposed billing determinants, proposed total bill, dollar and percentage differences between current and proposed bill (in the same format as CLC-3-5 (b)(i) and (b)(ii) for use in identifying, planning offering, and implementing energy efficiency solutions for customers served by the Compact energy efficiency programs.

V. SUMMARY OF RELIEF REQUESTED

Based on the foregoing arguments and authorities, the Compact respectfully requests the following relief:

Cost Allocation

1. Allocate base distribution revenues as proposed in the Initial Filing with separate revenue requirements for NSTAR Electric and WMECo.

2. In the event that the Department orders modifications to the cost allocation proposed in the Initial Filing in any way, reject any variation which would allow Eversource to shift costs from WMA solely onto EMA residential customers.

3. Approve consolidation of only the four reconciling rates as in the Original Rate Design and defer consolidation of all other reconciling rate revenues until the next base rate proceeding.

4. Allocate transmission revenues as proposed in the Initial Filing, provided that the Department finds that Eversource provided reasonable support for its assumption that EMA and WMA customers will operate under a single transmission revenue requirement for EMA and WMA, with consistent unit transmission rates in EMA and WMA.

    a. In the event that the Department prefers the treatment of transmission revenues in the Alternative Rate Design, then the Department should at minimum require Eversource to separate transmission costs for Rate G-1, Rate G-7, and Rate G-7S.

Rate Design: Residential Customer Charge

5. Set the customer charge for EMA residential customers at: (a) the current average rate for each rate class if the Department approves the consolidation of rates across EMA; or (b) the current rates for each of the BECO, CAMB, and COM service territories of NSTAR Electric if not.

Rate Design: MMRC

6. Reject the MMRC.

7. Hold that demand charges are inappropriate for residential and small commercial customers in the absence of AMF.

8. Set the customer charge no higher than the incremental connection costs for all customers, regardless of whether or not they have DG.

9. Direct Eversource to estimate the price and non-price benefits of DG in any future MMRC proposals it may wish to file.

10. Direct Eversource to fully evaluate the impact of the MMRC on the successful development of energy efficiency and on-site generation, including evidence regarding the impact on energy efficiency, compliance with the three-year energy efficiency plan, and incentives to lower demand.

Bill Impacts and Mitigation

11. For each group of customers reassigned to new rate classes:

    a. determine if the cost allocation complies with Section 94I 10% cap for that customer group, and

    b. determine if the change in rate class definitions would result in rates that are not cost-based for the affected customers.

12. Lower the portion of costs recovered through fixed charges to promote customers' ability to mitigate their bill impacts through energy efficiency.

13. Reject demand charges for small commercial customers, to the extent that Eversource may pursue such demand charges as proposed in the Original Rate Design.

14. Apply a twelve-month determination of demand, unless and until Eversource can prove another determination fairly reflects customers' overall usage and contribution to coincident peak demand.

15. Direct Eversource to mitigate adverse bill impacts on seasonal customers.

16. Direct Eversource to provide stronger mitigation discounts and/or more gradual increases for customers who would, under Company's mitigation plan, still face cumulative distribution rate increases of 25% or more over the next five years (i.e., for those facing 5%-10% increases every year).

17. Direct Eversource to implement an education and outreach plan by January 1, 2019.

18. Direct Eversource to conduct targeted outreach to individual customers, who would face a cumulative distribution rate increase of 15% or more in the first two years after the Proceeding, and to complete this targeted outreach by January 1, 2019.

19. Direct Eversource to provide an online bill calculator to help customers prepare rate changes over the next five years, and make this calculator available by January 1, 2019.

20. Direct Eversource to work cooperatively with the Compact on mitigation measures and in particular to share bill impact data necessary to effectively identify potential customers and to develop an outreach and education plan to offer energy efficiency mitigation for impacted customers.

    a. The shared data should include: electric account number, 12-month usage, 12-month demand (where applicable), current billing determinants, total current annual bill, proposed billing determinants, proposed total bill, dollar and percentage differences between current and proposed bill (in the same format as CLC-3-5 (b)(i) and (b)(ii) for use in identifying, planning offering, and implementing energy efficiency solutions for customers served by the Compact energy efficiency programs.

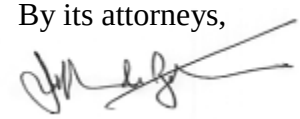
VI. CONCLUSION

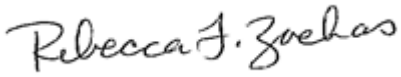
For the reasons above, the Compact respectfully requests that the Department provide the relief requested in Section V and as may be further set forth in this brief.

Respectfully submitted,

THE CAPE LIGHT COMPACT JPE

By its attorneys,





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