Acadia Center
Advancing the Clean Energy Future
15 Court Square • Suite 1000
Boston, MA 02108

November 15, 2024

Massachusetts Interagency Rates Working Group
Re: Long-Term Rates Draft Report

Dear Interagency Rates Working Group Members:

Thank you for the opportunity to submit comments in response to the Interagency Rates Working Group Long-Term Rates Draft Report. Acadia Center is pleased to provide the following comments and recommendations for the Working Group's consideration at this time.

Clean Heat Standard and 3-Year Energy Efficiency Plans

Acadia Center continues to encourage the IRWG to incorporate potential designs for a Clean Heat Standard, as well as analysis of the Draft 2025-2027 Three-Year Electric & Gas Energy Efficiency Plans, as part of the long-term rate study. Acadia Center recommends that the Working Group specifically analyze the potential impact of the Clean Heat Standard (CHS) policy currently being developed by the Department of Environmental Protection (DEP). The current version of the CHS Draft Framework and the proposed changes to the Draft Framework described in Question 0 of the CHS FAQ proposes to place a $4.2 billion compliance obligation on electricity sellers over the 2026-2034 time period.[1] The draft version of the most recent 3-year energy efficiency (EE) plan proposes to collect program funds from ratepayers of $4.99 billion over the 2025-2027 period in order to obtain $13.7 billion in benefits[2], funding that will be borne in large part by electric ratepayers via volumetric per-kWh charges. While Acadia Center supports both strong, energy efficiency programs and a well-designed CHS as policy mechanisms to fund the building decarbonization transition, it is essential to find the proper balance of funding these programs via some combination of electricity rates, fossil fuel and broader societal cost sharing in a manner that does not disincentivize electrification or incumber energy efficiency progress. The EE and CHS programs have the potential to significantly affect electricity rates and therefore the cost of electricity relative to other heating fuels (e.g., natural gas, heating oil, propane); for this reason, their inclusion in the IRWG quantitative analysis is critical.[3]

[1] This estimate is based on analysis performed by Acadia Center given the limited information presented by DEP in the CHS Draft Framework and CHS Frequently Asked Questions documents. DEP has not presented analysis on the total CHS compliance cost for electricity sellers to date.

[2] See https://ma-eeac.org/wp-content/uploads/Exhibit-1-2025-2027-Three-Year-Plan.pdf

[3] For more information, see Acadia Center's May 31, 2024 comments on the IRWG Listening Session #1.

Acadia Center has produced three sets of comments related to the CHS program design that contain more detailed thoughts regarding the connection between a CHS compliance obligation on electricity sellers and the potential price impacts on heat pump operating costs for consumers, among other topics:

- December 2023 Comments on CHS Draft Framework
- February 2024 Comments on CHS Voluntary Early Registration Program
- April 2024 Comments on CHS Draft Framework Proposed Potential Changes

One of the key research questions posed on slide 6 of the presentation is "Could certain components of today's electricity rates be shifted to non-ratepayer cost recovery to better support decarbonization and affordability?" Although not addressed in the IRWG presentation, it's important to consider how the CHS could potentially distribute benefits and costs across consumers using different heating fuels and how it relates to the work currently being undertaken by the IRWG with regards to long-term rate planning. As proposed, the CHS awards two types of electrification credits: 1) Full electrification credits for installing the system and 2) Annual emissions credits based on the ongoing operation of the heat pump system. Fuel sellers (natural gas, heating oil, propane) have three potential compliance pathways: 1) Install heat pumps 2) Sell biodiesel blends 3) Make Alternative Compliance Payments.

Based on the current proposed CHS design, Acadia Center is highly concerned that fuel sellers will meet the majority, if not all, of their compliance obligation via the ACPs (our logic behind this conclusion is discussed in more detailed in our April 2024 CHS comments). Functionally, over time, this would create a large pot of ACP funds which could be deployed in a number of ways – the CHS Draft Framework does not prescribe how these funds would be spent. However, Question 0 of the CHS FAQ, which proposes potential changes to the Draft Framework, introduces the concept of electricity sellers offering "discounts or other rewards to customers that utilize their heat pumps":

> *"Consider assigning default ownership of emission reduction credits from operation of heat pumps to electricity suppliers instead of homeowners. The draft framework suggests that information in monthly electric bills may be used to verify reliance on heat pumps for heating. Because electricity sellers already have access to this information and have experience with crediting programs, assigning credits to electricity sellers could greatly simplify program administration. It would also be consistent with crediting for liquid biofuels in that credits would accrue to the energy supplier. It would also create an incentive for electricity sellers to encourage heat pump usage, possibly by offering discounts or other rewards to customers that utilize their heat pumps. This could partially address stakeholder concerns about the operational costs of electric heat pumps. A variation on this idea could be to include a notice requirement and an "opt-out" option for consumers who wish to retain the rights to annual emission reduction CHCs associated with operating heat pumps in their homes."*

The specific example above is discussing electricity sellers offering "discounts or other rewards" to encourage customers to actually use their installed heat pumps to provide heat during winter (opposed to strictly using them for summer cooling), because the electricity sellers have an incentive to do so – as proposed above, the electricity sellers would be the default owners of the emission reduction credits (a commodity that holds monetary value) generated when customers use their heat pumps to provide space heating. Thus, the CHS appears to have the potential to both indirectly (via pass-through compliance costs) impact the rates/price of all four heating fuels and directly (via direct discounts to electricity customers) impact electricity rates.

Although the CHS is not specific about this point, it seems plausible this logic could also extend to how ACP funds are utilized. These funds – potentially in large part generated via pass-through compliance costs to gas, heating oil, and propane customers – could potentially be used to subsidize electricity rates to encourage both installation and actual utilization of heat pumps to provide space heating. In this way, there could be a fairly direct connection between electricity rates and CHS compliance costs indirectly borne by heating oil and propane customers, highlighting the connection between non-rate payer costs and electricity rates – a discussion topic prompted in the IRWG presentation. From this perspective, it appears critically important that the CHS impacts be integrated into the long-term rates analysis.

Public Finance

Acadia Center also supports consideration of the role that public finance and state debt might play as potential alternative or supplemental financing solutions to help reduce costs and limit the upward pressure on rates. Public bond issuances could be an important source of funding for transmission system investments as well as potentially for distribution system investments in the future and could offset costs borne primarily by ratepayers. This is a topic of emerging consideration and would require extensive research on the benefits, drawbacks, and consequences of this type of financing for particular applications in the utility investment and ratemaking context.

Below, we provide responses to the questions posed at the November 7, 2024 stakeholder session:

Time Varying Rates (TVR)

1. Time-Varying Rates (TVR) should be applied to all three components of residential rates (i.e. distribution, transmission, and generation). All three have costs that vary with time and can be avoided by using time-varying rates. TVR must include a peak window that is narrow enough to motivate customer behavior change and to deliver the intended peak-shifting benefits. Shorter periods of higher costs are easier to understand and respond to in terms of changing energy usage. Periods that are too long (e.g., 4 hours or more) dilute price signals and are less effective at motivating behavior change. The ratio between on-peak and off-peak rates must be large enough for customers to see a noticeable difference in their bills and to motivate changes in behavior. According to the Regulatory Assistance Project, in order to maximize peak demand reductions, peak periods must be sufficiently narrow and the annual average price differential between on-peak and off-peak should be at least 3 to 1.[4]

   Moreover, as ISO New England prepares for the needs of the future regional grid, it has analyzed system needs assuming a peak demand during winter in 2050 of upwards of 57 GW.[5] Annual peak demand for New England today is just over 24GW. While experts have proposed a range of values for anticipated peak demand in 2050, the general consensus is that the region, including Massachusetts, will switch to a winter-peaking system well before 2050. In terms of rate design and the potential implementation of TVR, anticipated changes in

[4] David Littell and Joni Sliger (Regulatory Assistance Project), *Time-Varying Rates in New England: Opportunities for Reform* (2020).

[5] ISO New England, 2050 Transmission Study, February 2024. https://www.iso-ne.com/staticassets/documents/100008/2024_02_14_pac_2050_transmission_study_final.pdf

seasonal load variability mean that the IRWG, and by extension the Department of Public Utilities, should build in flexibility to any rate offerings and the ability to make refinements over time.

2. Opt-out rates tend to result in much higher program participation and retention rates.[6] Further, higher participation in TVR leads to more significant shifts in demand, reducing system costs that benefit all ratepayers. Default TOU rate offerings with an opt-out option would enable the level of peak load reductions and other benefits that are less likely to be realized if confined to either an opt-in program or a pilot program. Pilot programs would further delay the ability of customers to realize the benefits of TVR.

3. Low and moderate-income (LMI) customers tend to have flatter load profiles and use less energy during peak hours compared to higher income households, which generally own more energy intensive appliances. Flatter load profiles mean that LMI customers may have less of an ability to respond to TVR and shift load. However, LMI households may, at the same time, have an opportunity to see immediate bill savings from time-of-use (TOU) rates without any changes in behavior or consumption.[7,8] Numerous studies have specifically analyzed the impact of TOU rates on low-income customers and have shown that in many cases, low-income customers do, in fact, respond to TOU rates at similar rates as non-LMI households.[9,10,11] In order to maximize customer responsiveness and deliver both bill and usage reductions, all customers – both LMI and non-LMI – must have access to appropriate technologies, such as smart thermostats, to make shifts in demand as easy as possible.

   Acadia Center recommends that the IRWG includes a set of policy guardrails to supplement any future TVR offerings and to reduce the risks of unintended outcomes for customers. For example, TVR must be actionable and include sufficiently high off-peak to on-peak price ratios and sufficiently narrow peak windows. Deployment of TVR must include a robust customer outreach and education process. Default TVR should include an appropriate transition period to increase customer familiarity with the new rates. It is also important to implement policies that help to hold low-income households harmless during the transition. For example, low-income customer bills could be capped for the first year of implementation, so that TVR are guaranteed not to increase bills for a certain length of time.

4. In order for TVR to be effective, customers need to know exactly how they can take action to reduce their usage and bills. Shadow billing can be an effective tool for introducing TVR over time and increasing customer comfort with new rates. Automated devices and other technologies like smart thermostats can help to make behavior change as unobtrusive as possible.

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[6] Sanem Sergici (The Brattle Group), *Time-Of-Use Rate Design and Roll-Out: Learnings from Other Jurisdictions*, prepared for the Maine Public Utilities Commission Docket 2024-00231 (October 2024).

[7] Colgan, et al. *Guidance for Utilities Commissions on Time of Use Rates: A Shared Perspective from Consumer and Clean Energy Advocates*. Electricity Rate Design Review Paper No. 2 (2017).

[8] Brendan Baatz (ACEEE), *Rate Design Matters: The Intersection of Residential Rate Design and Energy Efficiency* (2017).

[9] David Littell and Joni Sliger (Regulatory Assistance Project), *Time-Varying Rates in New England: Opportunities for Reform* (2020).

[10] Jordan Folks and Zac Hathaway (Opinion Dynamics), *Assessing Equity in TOU: How Low-Income Customers Fare on Time of Use Rates*. ACEEE 2020 Summer Study.

[11] American Public Power Association, *Moving Ahead with Time of Use Rates* (2020).

5. Advanced Metering Infrastructure data can provide useful information to help tailor TVR offerings and to find the right balance between off/on-peak price differentials, peak hours, and customer responsiveness. Acadia Center urges the IRWG to recognize the role that third-party providers can play in offering innovative solutions using AMI data and to include a recommendation for the DPU to incorporate third-party providers into its eventual TVR implementation plans.

Performance-Based Ratemaking Mechanism (PBRM)

6. While Massachusetts currently has a Performance-Based Ratemaking Mechanism (PBRM) in place, there is room to expand the set of performance incentives and penalties to help deliver greater benefits to customers. As the IRWG considers rate mechanisms to support the Commonwealth's policy goals, it is important to consider the broader set of ratemaking components that inform what customers ultimately pay on their bills. For example, the IRWG should consider whether existing rates for Return on Equity (ROE) fairly balance the interests of ratepayers and shareholders, especially given the fact that while ROE rates have remained generally consistent over time, there is some evidence to suggest that the actual cost of capital has declined in recent years.[12] It may be the case that utilities would still be able to attract sufficient capital with a lower ROE, which would have a notable impact on customer bills, and that utilities are generally overcompensated compared to what financial modelers would expect the actual cost of equity to be.[13]

7. Acadia Center recommends that the IRWG include a recommendation in the Long-Term Rate Study for the Department of Public Utilities to conduct a broad review of the existing PBRM framework to consider whether the PBRM is optimally designed or whether there are reforms that could enable the PBRM to more effectively deliver benefits to ratepayers. A broad PBR review would create an opportunity to better understand whether existing formula rates are serving their intended purposes of keeping rates stable and reducing the risk of frequent rate shocks.

Below, we provide responses to some of the November 13, 2024 stakeholder session questions:

Pilot Programs

1. Acadia Center urges the IRWG to avoid placing too much emphasis on pilot programs as part of an overarching TVR rollout. There is a growing body of evidence from numerous jurisdictions that show the effectiveness of well-designed TVR. Notably, the Maine PUC recently submitted a report on time-of-use rates to the Joint Standing Committee on Energy, Utilities and Technology and stated that a TOU "pilot represents an unnecessary cost to ratepayers and years of valuable customer savings and peak GHG emissions reductions lost," particularly because of the low enrollment rates that are typically inherent to pilots.[14]

Demand Charges

2. Acadia Center is concerned with the potential for demand charges, especially non-coincident peak demand charges, to send misleading price signals in a way that makes it difficult for residential customers to effectively respond. An individual customer's peak demand may or may not align with the system-wide peak,

[12] Severin Borenstein, *What Does Capital Really Cost a Utility?* Energy Institute at Haas (2022).
[13] Karl Dunkle Werner and Stephen Jarvis, *Rate of Return Regulation Revisited*, Energy Institute at Haas (2022, revised 2024).
[14] Maine Public Utilities Commission. *Report Regarding the Implementation of Time-of-Use Rates Pursuant to Resolves 2023, chapter 79*. Submitted to the Joint Standing Committee on Energy, Utilities and Technology, November 20, 2023 (p. 3).

which could lead to misalignment between the periods of increased cost for the customer and periods when system-wide costs are highest.[15]

Sincerely,

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[15] Mark LeBel and Frederick Weston, with contributions from Ronny Sandoval (Regulatory Assistance Project), *Demand Charges: What Are They Good For? An Examination of Cost Causation* (2020).

NOVEMBER 15, 2024

TO: Massachusetts Interagency Rates Working Group (IRWG)
Via e-mail: Rates.WG@mass.gov

Re: American Council for an Energy-Efficient Economy Comments on the Long-Term Rates Study Draft

Dear IRWG Members,

The American Council for an Energy-Efficient Economy ("ACEEE") welcomes this opportunity to provide comments and recommendations on the Long-Term Rate Strategy Study (Study) draft.

ACEEE is a nonprofit research organization based in Washington, D.C. that conducts research, technical assistance, and advocacy for energy efficiency. ACEEE is one of the leading groups working on energy efficiency issues in the United States at the national, state, and local levels. We have been active on energy efficiency issues for more than four decades. For many years ACEEE has provided technical assistance on energy efficiency topics to various stakeholders in Massachusetts. Our comments below on the Study draft are limited and largely reinforce our initial comments shared on October 11th and verbally during the stakeholder sessions.

Protecting low-income households is critical

ACEEE supports many different approaches to rate design that help households and businesses achieve all cost-effective energy efficiency and demand flexibility to minimize system peaks, but households that face the highest energy burdens should be protected from any potential increase in system costs. Thus action by the Department of Public Utilities (DPU) pursuant to the recommendations in Docket 24-15 (Notice of Inquiry by the Department of Public Utilities on its own Motion into Energy Burden with a Focus on Energy Affordability for Residential Ratepayers) is an important precursor to adoption of any opt-out approach to time-varying rates for households and businesses. That action should include both increased discounts for low-income households and systematic changes to ensure virtually full participation by eligible households, including both categorical eligibility and automatic enrollment in addition to improved outreach.

Gradual implementation of time-varying rates may be important

As the Study draft states, "Many jurisdictions have taken the approach of implementing simpler TOU rates as default, with more complex TOU designs and/or CPP as opt-in rate options". One of the things that ACEEE brings to this stakeholder process is some insight on lessons learned from comparable discussions in other jurisdictions, such as Xcel's proposal for time of use rates in Minnesota (Docket E002/M-23-524 - In the Matter of the Petition of Northern States Power Company, dba Xcel Energy, for Approval of a Residential Time of Use Rate Design). Xcel had initially proposed an opt-out time of use approach for all residential customers, but has subsequently significantly modified their proposal, including shifting to an opt-in approach.[1] While ACEEE does support opt-out approaches to time-varying rates, this emphasizes that a phased-in approach over a number of years may be necessary in order to ensure stakeholder support and the ability of customers to actually respond to such price signals. Stakeholders in that proceeding also emphasized the importance of consumer protections, such as a guarantee that bills would not increase by more than 10%, even under an opt-in approach.

[1] https://www.edockets.state.mn.us/edockets/searchDocuments.do?method=showPoup&documentId={50142C93-0000-C01B-BBCC-71CB9CC83B37}&documentTitle=202411-211936-01

Complementary policies and programs are necessary

As the Study draft notes, complementary policies will be necessary, including requirements for critical technologies such as electric vehicle charging infrastructure, heat pumps, and heat pump water heaters to be able to participate in demand response programs, and "programs and technologies that reduce winter peak impacts such as building shell measures, ground-source heat pumps, networked geothermal systems, and nascent technologies like thermal storage." ACEEE appreciates the hard work of the Mass Save implementers and the Massachusetts Energy Efficiency Advisory Council to advance such programs, and encourages full alignment between any future rate design changes and the technology requirements and programs for energy efficiency investments.

Sincerely,

Mark Kresowik
Senior Director for Policy
mkresowik@aceee.org

November 22, 2024

Massachusetts Interagency Rates Working Group

Re: Comments on the Massachusetts Interagency Rates Working Group's Long-Term Ratemaking Study Draft

Dear Massachusetts Interagency Rates Working Group:

Advanced Energy United submits comments on the Long-Term Ratemaking Study Draft as presented at the October 28, 2024 meeting.

Respectfully submitted,

/s/ Shawn Kelly
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skelly@advancedenergyunited.org

/s/ Kat Burnham
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Advanced Energy United Comments on the Massachusetts Interagency Rates Working Group's Long-Term Ratemaking Study Draft

Introduction

Advanced Energy United (United) commends the Interagency Rates Working Group (IRWG) for taking on the important initiative to align rate design with the Commonwealth's decarbonization goals. United appreciates the dedicated and thoughtful efforts by the IRWG to involve stakeholders. United and its members hope to continue to have productive conversations with the IRWG as this initiative makes its way to the Department of Public Utilities (DPU). United is a national association of businesses that works to accelerate the move to 100% clean energy and electrified transportation in the U.S. The term advanced energy encompasses a broad range of products and services that constitute the best available technologies for meeting our energy needs today and tomorrow. These include electric vehicles, energy efficiency, demand response, energy storage, solar, wind, hydro, nuclear, heat pumps (air- and ground-sourced), and smart grid technologies. United represents more than 100 companies in the $374 billion U.S. advanced energy industry, which employs 4.1 million U.S. workers and over 136,000 in Massachusetts.

United attended the October 28, 2024 presentation of the Long-Term Ratemaking Study Draft (Draft Study) developed by Energy & Environmental Economics (E3) and the workshop dedicated to distributed generation (DG) and distributed energy resource (DER) stakeholders held on November 1, 2024. United expressed certain views during the DG/DER stakeholder session and now provides our written comments below. Our comments not only address the Draft Study, but with the IRWG approaching its end of year goal to release their Near-Term Rates Strategy, Long-Term Ratemaking Study, and recommendations, United will reiterate overarching themes and concerns we have expressed throughout this entire process.

Long-term study

United appreciates the Draft Study's focus on Time-Varying Rates (TVR) and believes the Draft Study was well done and demonstrates appropriate consideration to multiple nuances in rate design that must be considered. We agree with the following objectives of IRWG's long-term ratemaking Draft Study, with one clarification:

- Regulatory and ratemaking mechanisms that:
    - incentivize least-cost distribution system upgrades as the Commonwealth seeks to achieve its Clean Energy and Climate Plan targets through 2050;

    - incentivize improved grid reliability, communication, and resiliency; and
    - promote DER and generation for decarbonization;
- Rates that:
    - accommodate transportation and building electrification, in addition to new loads;
    - provide appropriate price signals, including to effectuate load management; and
    - minimize or mitigate impacts on ratepayers, especially low- and moderate-income ratepayers.

United's one clarification to the above objectives is that in addition to regulatory and ratemaking mechanisms that incentivize least-cost distribution system upgrades, consideration should also be given to non-distribution system costs, like generation capacity and transmission costs. United supports the comments submitted by NRG Energy, which provides more details on the importance of evaluating least-cost total system outcomes. We also support NRG Energy's recommendation that there should be further analysis on opt-in versus opt-out TVR rates and the impact on customer bills, as well as the appropriate peak to off-peak ratio.

Focus on Long-Term Rate Design

As a starting point, United suggests executing on major electricity rate design changes only when Advanced Metering Infrastructure (AMI) is widely available. This will allow for better customer education by using actual individual household data to show how different rates would impact customers' bills on an individual basis. AMI data will enable more effective rate designs, such as TVR, which align with electrification goals by reflecting the fluctuating costs of electricity throughout the day. Introducing multiple rate changes within a short timeframe would contribute to customer confusion and choice fatigue. In written and oral comments throughout the IRWG stakeholder process, United has expressed the importance of customer choice and education to help them make those choices. Slide 13 of the Draft Study supports rate optionality paired with customer education, especially as those choices become more complex. For customer education to work best, customers must have access to their usage data and with their consent, be able to share that data with third-party solutions providers.

The IRWG and the DPU itself may also benefit from considering the outcome of the DPU's Affordability Docket in D.P.U. 24-15 and an evaluation of any new electrification rates by Electric Delivery Companies (EDCs) before fully instituting long-term rate design solutions.

The timing of a major rate design change may also need to come within the context of a rate case. Rate design is the third step in a three-step ratemaking process. The first step is calculating the revenue requirement or the amount a utility is approved to collect from

customers. The second step is to allocate that revenue requirement to rate classes based on certain allocation factors like peak demand, energy consumption, and customer count. Time-varying rates and electrification-friendly programs and rates (that encourage new load) could have significant impacts on projected load shapes and overall billing determinants. Conducting rate design that is intended to influence the structural aspect of rates (peak and volume) should not be determined in isolation without due consideration of all competing, complementary, or offsetting factors in determining rates and revenue requirements. For example, any changes in rate design that reduce variability in revenue collection for utilities may also impact the risk profile of the utility and be a relevant factor in determining the appropriate return on equity. That step is meant to allow utilities to collect costs from the causers of those costs. The final step of rate design is developing the mechanisms to collect those costs or the allocated revenue requirement from customers. This mechanism is known as a tariff, which is essentially the price structure for a given customer.

As the needs of our electricity systems and policy have evolved over time, rate design has become an increasingly important tool to encourage customer consumption behavior in a way that reduces the impact of overall system costs for the benefit of all ratepayers. Changes to rate design will not only impact customer consumption patterns and system costs, they will also impact the economics of customers' investment decisions in clean energy and energy efficiency. United approaches rate design from the perspective of the intersection of system-wide costs and ability for customers to control their individual energy costs.

Simply lowering volumetric electricity prices to encourage consumption (just one element of the overall electric bill) contradicts the Commonwealth's goal of reducing GHG emissions. While electrification is encouraged, increased consumption, especially when the grid relies on fossil fuels, is not. A rate design change that relies on drastically increasing fixed charges to decrease volumetric charges would be expected to lead to wasteful energy consumption, according to principles of elasticity of demand. Increasing fixed charges does not address operational efficiency or support a distributed grid. TVR better reflects the actual cost of electricity at different times and is better suited to achieving these goals.

Most utility costs are ultimately driven by energy consumption, especially when viewed in the long run. United is not opposed to all fixed charges, so long as the fixed charges are set only to recover customer-specific costs, not those related to energy or demand. This ensures accurate price signals and encourages efficient system operation. Recovering energy and demand costs through a fixed charge distorts price signals and can lead to system inefficiencies. United disagrees with E3's portrayal on Slide 22 of the Draft Study of embedded costs as sunk costs, which essentially means these costs cannot be avoided. Although it is true that once infrastructure has been put into service, those costs remain, many of those investments were

made because of the consumption of electricity, so recovering those costs through an unavoidable charge creates a vicious cycle of sending signals to customers that their energy consumption does not matter, likely leading to over-consumption, which will then lead to inefficient investments in the electricity system and higher utility costs for ratepayers. Based on this flawed theory of sunk costs, fixed charges would need to be increased again to recover those new costs, continuing the vicious cycle of increasing electricity rates.

Consideration of DERs

DERs like rooftop and community solar are crucial for climate goals, and rate designs should encourage, not hinder, their adoption. Even temporary rate changes can have lasting consequences on DER adoption and electrification efforts. Customers tend to make long-term decisions for energy efficiency and DER based on current rates, potentially leading to missed opportunities for energy efficiency and clean energy integration. United appreciates E3's acknowledgement on Slide 19 that rate changes will impact existing DER programs and this reinforces our opposition to a short-term rate design change that would not leave enough time to fully evaluate the impacts of a rate design change on other beneficial programs. In the long-term, if rate design is done correctly, the competitive, innovative DER market will adjust to best serve the needs of customers while mitigating system cost increases. One example may be that rooftop solar installers design their systems to have more west-facing solar to offset consumption during peak periods or phase-in changes to their business to include more solar plus storage that can arbitrage TVR opportunities, which all will help mitigate peak demand increases.

Customers who made financial investments based on current rate design should not be unduly harmed through mandatory rate design changes. Whether the rate design change is decided to be opt-in or opt-out, it is important that the ultimate choice remains with the individual customer and that principles of gradualism be adhered to when changes will have an impact on existing practices. Customers typically have the expectation that rates may change over time, but the basic structure of rates has been stable for many decades, adding to customers' expectation that the status quo structure would remain available for the foreseeable future. Then going forward, customers who are considering future investments, be it energy efficiency measures or onsite clean energy, should have access to the tools that allow them to make the best financial decision for their individual household. This again highlights the importance of customer education tools. United also believes EDCs should be able to recover the costs of these investments.

One point of clarification and recommended edit to the Draft Study before it is finalized is to delete the bullet point that states, "Net energy metering (NEM) encourages offsetting on-site loads due to only 60% of exported energy receiving NEM credits." United believes this

statement is incorrect as this reduction of export credits only applies to systems over 10 kW (and soon to be 25 kW per an ongoing DPU rulemaking to implement the 2022 Climate Law). This system-size breakpoint for net metering cap exempt systems intends to encourage small rooftop systems in the Commonwealth by providing full retail credits for exported power. Based on the most up-to-date data from the U.S. Energy Information Administration, the average residential solar installation size in Massachusetts is around 7 kW, but once the 2022 Climate Law change to 25 kW for the NEM cap exempt system size limit is implemented, the average installation size should be expected to increase materially.

Conclusion

United appreciates the opportunity to comment on the IRWG's Draft Study and we look forward to continued engagement throughout this process.

From: Alvin Blake
To: Rates WG (ENE)
Subject: Long-Term Ratemaking Draft Study
Date: Friday, November 15, 2024 4:17:30 PM

I respectfully submit the following comment in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

As you finalize your study, please ensure the solutions you present will result in the following outcomes:

Wealthier people will pay more for our energy system. Part of the funding streams or structure must be progressive such that people with less are paying less, and people with more are paying more. Not only do lower and middle-class customers already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

Shareholders will cover more costs. Utilities should have a limited ability to recover any revenue shortfall as a result of lowering rates. This will encourage more careful investment management. Massachusetts has one of the highest rates of return on equity in the northeast, averaging between 10 and 11 percent. Shareholder profits should be questioned

Utilities will not be shut off, especially during the summer. No one should be disconnected from the system,

regardless of season, and they definitely should not be charged to reconnect.

In particular, residents need permanent protection from disconnection when extreme heat is most likely. We already protect people from extreme cold by having a winter moratorium, which prohibits disconnections of low-income households from November 15-March 15 (and is usually extended to April 1). As temperatures rise and low-income people are less likely to have air conditioning, stopping utility shutoffs has become even more urgent. There should be a moratorium all summer and, if possible, all year.

Nearly all or all eligible customers will receive discounts. Enrollment in discount rates should be easier, and there should be limited required proof of eligibility.

A MAPC analysis of the 2016-2020 American Community Survey microdata estimates only 28.3% of eligible households are on the existing discount R-2 rate. It is possible that under enrollment is higher in communities with higher percentages of residents of color. For example, the City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-eligible households. The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process. There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification).

Customers will not be punished for going electric. Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is

counterproductive to our climate and justice goals. In future rate designs, customers should see bills decrease when they switch to clean heating and cooling.

Thank you for your consideration

Al Blake

Becket

From: Bob Armstrong
To: Rates WG (ENE)
Subject: Long-Term Ratemaking Draft Study
Date: Tuesday, November 12, 2024 12:59:30 PM

VIA ELECTRONIC FILING

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114
rates.wg@mass.gov

RE: Long-Term Ratemaking Draft Study

I respectfully submit the following comment in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

As you finalize your study, please ensure the solutions you present will result in the following outcomes:

Wealthier people will pay more for our energy system. Part of the funding streams or structure must be progressive such that people with less are paying less, and people with more are paying more. Not only do lower and middle-class customers already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

Shareholders will cover more costs. Utilities should have a limited ability to recover any revenue shortfall as a result of lowering rates. This will encourage more careful investment management. Massachusetts has one of the highest rates of return on equity in the northeast, averaging between 10 and 11 percent. Shareholder profits should be questioned

Utilities will not be shut off, especially during the summer. No one should be disconnected from the system, regardless of season, and they definitely should not be charged to reconnect.

In particular, residents need permanent protection from disconnection when extreme heat is most likely. We already protect people from extreme cold by having a winter moratorium, which prohibits disconnections of low-income households from November 15-March 15 (and is usually extended to April 1). As temperatures rise and low-income people are less likely to have air conditioning, stopping utility shutoffs has become even more urgent. There should be

a moratorium all summer and, if possible, all year.

Nearly all or all eligible customers will receive discounts. Enrollment in discount rates should be easier, and there should be limited required proof of eligibility.

A MAPC analysis of the 2016-2020 American Community Survey microdata estimates only 28.3% of eligible households are on the existing discount R-2 rate. It is possible that under enrollment is higher in communities with higher percentages of residents of color. For example, the City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-eligible households. The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process. There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification).

Customers will not be punished for going electric.
Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is counterproductive to our climate and justice goals. In future rate designs, customers should see bills decrease when they switch to clean heating and cooling.

Thank you for your consideration,

Robert A Armstrong
25 Thompson Rd
Conway, MA 01341
413-522-7617

From: Bonnie Gorman
To: Rates WG (ENE)
Subject: DPU Rate Reform comments
Date: Thursday, November 14, 2024 1:00:06 PM

People who have more money should pay more for our energy system

- Any revenue lost by instituting new discount rates should be recovered by customers making over 120% of the state's median income, with increasing amounts paid by customers in higher brackets. Not only do customers making up to 120% of SMI already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

Shareholders should make a lower return on equity

- Utilities should have limited ability to recover revenue shortfall, which will encourage more careful investment management.

- Massachusetts has one of the highest rates of return on equity in the northeast, averaging between 10 and 11 percent.

No one should be disconnected from the system, regardless of season, and they should not be charged to reconnect.

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- It is possible that under enrollment is higher in communities with higher percentages of residents of color. For example, the City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-eligible households.

- The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process.

- There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification).

Customers should not be punished for going electric.

- Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is counterproductive to our climate and justice goals. In future rate designs, customers should not be punished for going electric.

Thank you for responding to these issues.

Best
Bonnie Gorman RN
222 rock island rd
Quincy MA
617-472-4498

From: Carolyn Becker
To: Rates WG (ENE)
Subject: Long term rate making draft study comments
Date: Monday, November 18, 2024 1:55:49 PM

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

I respectfully submit the following comments in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

As you finalize your study, please ensure the solutions you present will result in the following outcomes:

Wealthier people will pay more for our energy system. Part of the funding streams or structure must be progressive such that people with less are paying less, and people with more are paying more. Not only do lower and middle-class customers already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

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28.3% of eligible households are on the existing discount R-2 rate. It is possible that under enrollment is higher in communities with higher percentages of residents of color. For example, the City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-eligible households. The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process. There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification).

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Thank you for your consideration,

Carolyn Becker

Jamaica Plain, MA 02130

1380 Monroe Street NW, #721
Washington, DC 20010
720.334.8045
info@communitysolaraccess.org
www.communitysolaraccess.org

November 15, 2024

Re: Comments on the Interagency Rates Working Group Long-Term Ratemaking Study

Members of the Massachusetts Interagency Rates Working Group,

Thank you for the opportunity to provide feedback on the Interagency Rates Working Group's ("Working Group") Long-Term Ratemaking Study Draft ("Study"). The Coalition for Community Solar Access ("CCSA") appreciates the ability to comment on the important topics addressed in the Study and commends the Working Group and its consultants for the thoughtful and careful approach to potential long-term rate design changes in Massachusetts.

Introduction

CCSA is a national coalition of over 120 business and non-profit members working to expand customer choice and access to solar for all American households and businesses through the community solar model. Our mission is to empower every American energy consumer with the option to subscribe to local, clean, and affordable community solar. We work with customers, utilities, local stakeholders, and policymakers to develop and implement policies and best practices that ensure community solar programs provide a win, win, win for all, starting with customers.

Consistent with our on-going participation in this process, these comments are designed to ensure that overarching, long-term ratemaking decisions do not negatively impact the State's important policy interest in community solar. Any Working Group recommendation aimed at encouraging electrification should maintain a strong investment signal in renewable energy. CCSA strongly supports using rate design to drive building and transportation electrification to achieve the Commonwealth's climate goals. Any rate changes should be coordinated with complementary policies, such as distributed or community solar, to maximize program effectiveness and resources.

Rate design decisions can also have specific, and disproportionate impacts on vulnerable populations such as low-to-moderate income ("LMI") customers, or those with critical medical needs. When properly designed, time-varying rates ("TVRs") can be a customer-centric approach to advancing energy equity and mitigating energy burdens for LMI

customers. In addition, like community solar, rate design can open the door for LMI customers to access the clean energy transition. However, if not carefully considered, designed, and deployed these rates can negatively impact vulnerable populations and compromise existing distributed energy resource ("DER") programs.

The comments below identify topics within the Study that warrant additional consideration and discussion prior to issuance of the Working Group's final recommendations.

Considerations for Long-Term Rate Design Changes

The electric grid's anticipated switch from a summer to a winter peaking system in the mid-2030's is a consistent theme of the Study. This will necessitate actions to ease that transition and cost-effectively accommodate an unknown level of load growth. Any future electric rate designs will need to reflect system costs and realities under the new paradigm. The Study presents various TVR designs to ease the transition and meet the needs of the future system and describes the implications that could be realized from their implementation. CCSA supports the overall goal of addressing this system shift through a TVR structure. However, any changes must avoid adversely affecting customer adoption of renewable energy generation systems or enrollment in community solar.

Community Solar Can Reduce Electric System Cost Drivers.

The Study correctly identifies three categories of electric rate cost drivers – asset replacement, grid upgrades, and decarbonization of the generation portfolio – that will have a significant impact on the future affordability of electricity.[1] Community solar projects, developed and owned by private, third-party businesses, are well-positioned to alleviate some of the upward pressure these drivers place on rates. In particular, the private capital required for such projects is often used directly towards distribution system upgrades such as new transformers, substations, and distribution lines necessary to accommodate the interconnection of a project to a utility's system.

Even beyond these privately financed grid upgrades or improvement projects, community solar often provides additional benefits to the utility's broader customer base. Storage-paired community solar projects can provide grid services such as peak load reduction and increased grid resiliency that benefit the larger electric system and reduce system costs. Lastly, the deployment of community solar and other renewable generation projects supports the Commonwealth's proposed route in the Clean Energy and Climate Plan to decarbonize its electric generation sector and achieve the climate mandates laid out in the Global Warming Solutions Act and 2021 Climate Act. Each of these benefits plays a key role in Massachusetts' vision to achieve Net Zero by 2050.

[1] Long-Term Ratemaking Study Draft Presentation (October 8, 2024), PDF 18.

Community Solar Can Reduce Customer Bills.
Another common theme of the Study is the need to insulate customers, particularly LMI customers and those with inflexible loads, from the potential high-cost impact of TVR pricing. Community solar is and should be a tool utilized by customers to reduce high energy burdens and electric bills. It is accessible to all customer types, including those that lack the ability – technological or otherwise – to shift their load to off-peak periods. Community solar can also be used in conjunction with income-qualified assistance programs to maximize bill savings for LMI households.

Given the system cost savings and bill savings attributes, the Working Group should be particularly cognizant of and proactively avoid any negative impact that future rate designs may have on customer adoption of community solar and DERs more broadly. Consumer uptake of DERs is one component of many that should be leveraged to achieve the state's Net Zero by 2050 goal. Major changes to electric rate structures require a coordinated review of how solar is compensated. The community solar value proposition will change depending on whether bill credits are valued as a flat rate and monetary credit against any part of the customer's bill, or whether solar bill credit values will also be based on time-of-day generation. Any rate mechanism that creates a disincentive for customer adoption of renewable energy will work directly against the Commonwealth's efforts to decarbonize the sources of electricity upon which it is reliant. Electrification of the heating and transportation sectors is meaningless in achieving climate goals unless the electric generation supply is decarbonized.

Customer Education is Necessary Prior to Widespread Implementation.
Prior to the widespread implementation of any default or opt-out TVR structure, state agencies and electric utilities should ensure that customers have a firm understanding of the new structures through robust education initiatives. Any discussion regarding the implementation of TVR designs, particularly with respect to the timing of customer rollout, must consider ratepayer education needs and costs, which the Study currently lacks.

Customers must be provided with the knowledge and tools to shift their usage away from high-cost, on-peak periods and to lower-cost shoulder and off-peak periods to avoid unexpected or volatile bill changes. In Maryland, for example, time-of-use customers receive a "shadow bill" during enrollment that shows how time-of-use periods change their electric bill with 0%, 5%, and 10% load shift. CCSA encourages the use of opt-in pilots and/or extensive transitional tools, such as shadow billing or additional bill assistance, prior to the widespread implementation of TVRs, particularly for residential customers. CCSA agrees with the Study's recommendation that residential customers not be

subjected to critical peak pricing, demand charges, or real-time pricing schedules, particularly if such rates are offered as a default or opt-out option.[2]

Complex Rate Structures Require Improved Data Sharing.
When the complexity of retail rate structures increases, so does the challenge of ensuring that a community solar subscription is appropriately sized to maximize customer benefits. In Massachusetts, this issue arises because the Alternative On-Bill Credit ("AOBC") value under the SMART program is tied to the basic service rate associated with the community solar project's applicable rate schedule. The AOBC value, therefore, is usually not equivalent to a subscriber's basic service rate, as the subscriber is likely on a different rate schedule than the project and may take supply service from a retail provider or municipal aggregator. Even without a TVR, the lack of data sharing between electric utilities and community solar providers makes it very challenging to ensure that a subscriber is allocated the appropriate share of a project based on their total electric costs. Introducing TVRs makes this exercise more difficult without additional information on the customer's rates and usage.

The Study did not specify whether TVR would apply to just delivery rates or both supply and delivery rate components. To the extent that the Working Group's recommendations seek to differentiate the basic service (supply) rate by time of day, they should ensure that utility billing systems and staff are sufficiently equipped to accurately and timely bill and credit community solar subscribers.[3] In addition, improved data sharing infrastructure and protocols should be in place between the electric distribution utilities and community solar providers to verify that subscribers receive the appropriate bill credit value from their participation in a project. CCSA recommends the adoption of the "net crediting" form of consolidated billing for community solar, which ensures that customers realize net savings from their subscription and do not pay for solar credits they cannot use, or that are improperly applied or valued.

[2] Long-Term Ratemaking Study Draft Presentation (October 8, 2024), PDF 26.
[3] Even under today's current flat rate structure, electric distribution utilities rely heavily on manual and inefficient processes to apply community solar bill credits, which result in frequent errors or points of confusion for customer subscribers and providers. Adding additional complexity to rates makes it all the more necessary to automate and improve the utilities' billing and crediting workflows.

Areas of Alignment

CCSA supports several aspects of the Study and highlights those areas of alignment below.

Recovery of Policy-Driven Costs Outside of Rates

The Study suggests the cost of programs primarily intended to support policy goals should be recovered outside of electric rates through broader taxpayer funding.[4] Financial support of policy programs through electric rates is a regressive mechanism when considering that LMI customers spend a disproportionately higher amount of their income on energy costs as compared to non-income qualified customers. Additionally, introducing the costs associated with policy programs into electric rates serves only to distort the very price signals that TVRs are meant to provide.

While CCSA supports exploring such a mechanism and is interested in participating in discussions concerning the topic, such a major change to the Commonwealth's energy policy should only be considered after a wide range of stakeholders can provide input. Without clear legislative direction to indicate that such a change is possible, it is prudent to base any recommendations concerning electric rate design on the belief that the costs associated with energy policy-driven programs will continue to be recovered through electric rates. Recovering these costs from taxpayers is unworkable without legislative action.

Long-Term Ratemaking Objectives

The Working Group's long-term ratemaking objectives reflect the importance of regulatory and ratemaking mechanisms that (1) incentivize least-cost distribution system upgrades, (2) incentivize improved grid reliability, communication, and resiliency, and (3) promote DERs and the decarbonization of the electric generation sector. Further, the Working Group notes that rates should (1) accommodate beneficial electrification, (2) provide appropriate price signals, and (3) minimize or mitigate ratepayer impacts, with specific focus on LMI customers.[5] CCSA supports these objectives and encourages their use as the foundation of the Working Group's final recommendations on electric rate design options.

Electric Rates and DER Compensation & Incentive Programs

The Study recognizes that "programs and rates should work in unison to provide clear dispatch signals for [DERs] such as batteries" and that "future rate changes should trigger reevaluation of existing DER programs with overlapping goals."[6] CCSA agrees and its

[4] Long-Term Ratemaking Study Draft Presentation (October 8, 2024), PDF 30.
[5] *Id.*, PDF 18.
[6] *Id.*, PDF 27.

comments on the Near-Term Rates Strategy note that amendments to the SMART program are currently under consideration by the Massachusetts Department of Energy Resources. The Commonwealth should avoid independently adjusting both the overarching design of electric rates and DER compensation programs to minimize unintended consequences that could arise due to interactions between the two efforts.

Areas of Concern

Residential Rate Impact

In its discussion of time-of-use block pricing, the Study provides an example of what residential rates could look like in 2035.[7] While recognizing that this example is illustrative and there is no crystal ball to see what electric rates will be in 10 years, CCSA is concerned with the assumed $40 per month residential fixed charge coupled with volumetric rates ranging from roughly 30-50 cents per kilowatt-hour in winter months and 17-25 cents per kilowatt-hour in the summer months. Currently, residential fixed charges among the state's investor-owned electric utilities range from $8.50 in Unitil service territory to $10.00 per month in Eversource Energy and National Grid service territories. Contemplating such a significant increase in fixed charges over the next 10 years is not aligned with the commonly held rate design principles of fairness and gradualism.

As overall system costs are expected to increase in the future, particularly during winter months, customers must be provided the necessary tools to lessen the impact of these costs and keep bills affordable. Keeping the majority of system costs in volumetric rates provides customers with greater control to reduce their bills through conservation, energy efficiency, and DER adoption. The Working Group's recommendations should avoid putting any more of those increasing system costs into fixed charges, as they have disproportionate impacts on LMI customers and low energy users and erode the ability to adapt behavior to control costs.

Need for Additional Education and Tools for Understanding

The Study lacks any reference or consideration of the need for electric ratepayer education and ongoing support concerning TVR or advanced retail rate pricing structures. For TVRs to operate as intended and ensure a positive customer experience, customers must have a clear understanding of what a time-varying rate is, what its intended purpose is, and ways that behavior can or should change to avoid significant bill impacts. In addition, TVRs will need to adjust over time with different on- and off-peak periods seasonally, changing ratios between the periods and different customer strategies in response. Although there are studies that show customers do respond to TOU price

[7] Long-Term Ratemaking Study Draft Presentation (October 8, 2024), PDF 22.

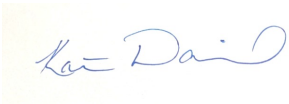
signals, there are limited areas throughout the country that have defaulted customers, particularly residential customers, to time-varying rates.

Conclusion

CCSA is encouraged by the direction and preliminary recommendations included in the Long-Term Rate Study and looks forward to continued collaboration with the Working Group and other Massachusetts stakeholders on development of electric rate structures that (1) encourage the adoption of transportation electrification, building electrification, and distributed energy resource technologies, (2) keep electric rates affordable for all customers, especially low-to-moderate income customers, and (3) accurately reflect and recover system costs. That said, CCSA recommends that any significant changes to Massachusetts electric rates be carefully considered prior to widespread implementation, with particular focus given to potential impacts that adversely affect customer adoption of renewable energy generation systems or enrollment in a community solar project.

Please do not hesitate to reach out with any questions or needed clarifications.

Respectfully submitted,



Kate Daniel
Northeast Regional Director
Coalition for Community Solar Access

Blake Elder
Senior Policy Manager
Coalition for Community Solar Access

November 15, 2024

VIA ELECTRONIC MAIL ONLY
Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114
rates.wg@mass.gov

Subject: Comments on the Interagency Rates Working Group Long-Term Ratemaking Draft Study

Dear Interagency Rates Working Group Members,

In accordance with the Interagency Rates Working Group's ("IRWG") invitation to submit public comment on the Long-Term Ratemaking Draft Study ("Draft Study"), the undersigned advocacy organizations respectfully submit the enclosed comments for your consideration. We thank you for your commitment to studying and developing long-term ratemaking options and for providing the opportunity to share feedback on the Draft Study. We also extend our thanks to the E3 consultant team ("Consultants") for their efforts in preparing the Draft Study.

As many of our organizations have emphasized in previous comments submitted to the IRWG, any rate reform effort in the Commonwealth must prioritize equity and reduce energy burdens for low- and moderate-income ("LMI") customers. Our comments below provide thoughts and recommendations for how long-term ratemaking approaches should build equity and affordability into their design.

I. Analysis of the changing electricity system in 2030s and beyond

While we recognize the limits of presenting the Draft Study in a short amount of time, we note that some of the analysis offered as background premise has significant gaps. For example, the illustration of monthly average energy expenditures on page 4 of the Draft Study assumes EV adoption will result in savings. However, (a) it is not clear that many low-income customers will be able to afford EVs or have access to EV charging in the time frame under consideration; and (b) it is not clear that off-peak EV charging in the aggregate will be enough, in this time frame, to offset the greater cost of expanding the grid to serve air-source heat pumps.

We agree that the timing of a transition from a summer peaking system to a winter peaking system is uncertain and depends on many unknowns, including federal policy and consumer response, both of which will affect the pace of space heating electrification, wind and other expansions in clean energy supply, and EV demand.

As the IRWG moves toward developing recommendations for rate redesign, we suggest calling attention to the need for much deeper and ongoing analysis to inform potentially costly regulatory policy decisions.

II. Time-varying rates ("TVR")

a. TVR designs in general

Building on what stakeholders have already raised in previous rounds of comments, we emphasize that TVR designs must prioritize equity. Equitable TVR design must include protections for low-income customers and others who may not be able to change their electricity usage in response to cost changes. Bill caps, opt-out options, and/or low-income discount rates are all options that should be explored.

When considering opt-in vs. opt-out structures, however, careful implementation matters. Some assert that the low-income discount rate ("R-2 rate") in Massachusetts has seen low enrollment: National Grid estimated that only about 154,596 out of 390,000 potentially eligible customers were enrolled in the R-2 rate in 2023.[1] Further analysis of the actual size of the eligible R-2 population is needed. In any case, there is a concern that many low-income customers may not actually enroll in the protections and would be burdened by high electricity bills if they cannot respond to price signals. It is important that LMI customers who *can* shift their energy usage be able to benefit from TVRs without punishing those who have inflexible loads due to socioeconomic or related circumstances.

We also highlight the importance of designing TVR structures to protect vulnerable customers, rather than leaning on customer education efforts. Intentional customer education about rate reform is extremely important, especially in light of digital inequities, but any program that requires significant customer education on digital tools and technologies should be approached with caution. Relatedly, it is important to recognize the limits of AMI infrastructure and customers' interest, willingness, and ability to use smart home technologies to change their electricity consumption in a significant way.

We recommend that the IRWG cross-reference the D.P.U. 24-15 Energy Affordability docket to further inform its understanding of energy affordability issues and policy ideas. We also recommend that the IRWG conduct additional analysis to quantify the cost savings of TVRs at different participation levels; such an analysis should inform decisions about how to structure TVRs.

While TVRs can be a critical tool for managing peak load growth and limiting the required electric system buildout, care must be taken in their design and implementation so that customers with high energy burdens are not negatively impacted and customers with the lowest energy burdens are encouraged to respond to price changes.

b. TOU blocks

Rates that are not designed with end uses in mind can be indiscriminate. Equity, greenhouse gas reduction, and affordability require a more intentional approach, as discussed

[1] D.P.U. 23-150 Exh. NG-CP-1, at 25–26.

above. TOU rate designs must account for "inflexible" loads critical to health and not safely met on a peak/off-peak basis, such as space heating and cooling, especially for vulnerable customers. Moreover, essential loads, such as health-preserving appliances (e.g., oxygen supply, CPAP "sleep machines," and dialysis machines) need to be identified so that they can be served affordably irrespective of time of need.

c. Critical peak pricing

As discussed above, any use of critical peak pricing requires considerable care and education so that vulnerable customers are not negatively impacted. Critical peak pricing would likely need to be opt-in and self-contained (i.e., not subsidized by others).

d. Peak period demand charges

In addition to aforementioned concerns applicable to other TVR options, peak period demand charges would be especially difficult for most residential customers to understand and adapt to. We also note that demand charge periods that are not coincident with system peaks may punish customers while providing little value to customers.

e. Dynamic rates (real-time pricing)

We agree with the Draft Study's recognition that dynamic rates would be very difficult for residential customers to adapt to.

III. Ratemaking in the future

As we evaluate the current approach to recovery of program costs and how it should change to align with state goals, it is important to remember that any rate design with high fixed charges and low variable charges does not promote affordability. Rather, it amounts to a quantity discount that favors wealthier large users and discriminates against relatively small customers, many of whom are low-income. The IRWG should focus on solutions that will decrease the energy burdens of low-income customers, including sharp discounts for vulnerable customers.

Regarding advanced ratemaking mechanisms that seek to align utility performance with the public interest, we think that stakeholders would benefit from a study with deeper analysis of each option. Some of the advanced ratemaking mechanisms outlined in the Draft Study have already been adopted in some form in Massachusetts. As was raised in stakeholder comments submitted in response to the Long-Term Ratemaking Draft Study Kick-Off Presentation, there is a question of the efficacy of performance-based rates that have been implemented in Massachusetts. The IRWG should evaluate whether the current performance-based rates deliver more new benefits to customers, especially when compared to any increase in utility rates. To the extent that the IRWG lacks the capacity to study each advanced ratemaking option in-depth, we encourage the IRWG to recommend next steps that include investigations by the Department of Public Utilities.

We also note a few gaps in the presentation of advanced ratemaking options. First, the options presented relate to overall revenue requirements and do not distinguish between those needing affordable rates and others, nor do they provide any focus on customers who adopt electrification. Second, the Draft Study does not address potential changes to the utilities' rate of return. In conversations about regulatory reform and rethinking the traditional cost of service model, we should also be considering lowering utilities' rate of return–for example, proposed shifts of cost recovery to fixed charges (which we have concerns about, as noted above) increase revenue certainty and thus reduce risk, leading to reduced rates of return. Finally, the Draft Study suggests that state financing could help reduce costs. While arguably desirable in principle, in part because tax policy is slightly more progressive than ratemaking policy, current Commonwealth revenue projections and the economic assumptions on which they are based are uncertain and may not be able to support additional programmatic demands.

IV. Conclusion

Much about how our electricity system will evolve over the next decade and beyond is uncertain—the timing of the shift to a winter peak, the relative sizes of the winter and summer peaks, the uptake of EVs over time, and the electric sales that provide economic support for rate and policy decisions. Still, long-term ratemaking approaches are important to study and consider now, and we appreciate the IRWG and Consultants' efforts with the Draft Study. As discussed above, we emphasize the need for integrating equity into TVR designs and further studying various regulatory reforms.

We are very pleased with the IRWG's hiring of Dr. Destenie Nock to advise on study results. We look forward to the upcoming energy justice presentation with Dr. Nock, as well as future opportunities to continue to engage with the IRWG on rate reform.

Very truly yours,

Jocelyn Lee, Conservation Law Foundation
Priya Gandbhir, Conservation Law Foundation
Mary Wambui, Planning Office for Urban Affairs
Jerrold Oppenheim, Low-Income Energy Affordability Network (LEAN)
Jerrold Oppenheim, Low Income Weatherization and Fuel Assistance Program Network
Jerrold Oppenheim, Massachusetts Energy Directors Association (MEDA)
Jolette Westbrook, Environmental Defense Fund
Amy Boyd Rabin, Environmental League of Massachusetts
Cynthia Mendes, Clean Water Action/Fund Massachusetts
Lindsay Griffin, Vote Solar
John Walkey, GreenRoots

November 15, 2024

Re: Interagency Rates Working Group Long-Term Ratemaking Study Comments

Massachusetts's clean energy goals include electrification of building and transportation sectors as an essential part of reducing emissions. However, current electric rate design may hinder electrification of these sectors, as electrification may increase the total energy burden on ratepayers. As such, the Commonwealth created the Interagency Rates Working Group (IRWG) to study modifications to rate design that promote electrification without negatively impacting the overall energy costs for consumers. The IRWG recently presented their Long-Term Ratemaking Draft Study and sought stakeholder comments. The Long-Term Ratemaking Study will be used to present recommendations for ratemaking mechanisms that promote electrification to assist the Commonwealth in meeting its clean energy goals. Constellation NewEnergy,Inc. (CNE) respectfully submits the following comments to the IRWG for its consideration on the Long-Term Ratemaking Study.

CNE is the nation's largest producer of reliable, clean, carbon-free energy and a leading supplier of energy products and services to community aggregations, businesses, and individual consumers throughout Massachusetts and across the United States. CNE provides ten percent of the nation's carbon-free electricity and helps customers reach their own climate goals through innovative clean energy solutions, including renewable energy procurements, energy efficiency programs, and energy management services.

CNE and other retail electric suppliers are able and willing to create products that help the Commonwealth achieve its climate goals and incentivize electrification. However, to create these products, suppliers need access to the usage data that will come as Advanced Metering Infrastructure (AMI) is implemented throughout the state. AMI data is pivotal for development and utilization of products that can incentivize customers towards electrification. For example, using AMI data, suppliers could design products with different prices for off- and on-peak times which encourages customers to lower their usage during peak hours, lowering their overall energy burden and reducing demand on the system. Recently, the legislature passed S.2967 (*An Act promoting a clean energy grid, advancing equity and protecting ratepayers*) that included provisions to establish an AMI data repository that suppliers are allowed to access. This is an important step towards providing the tools suppliers need to assist the Commonwealth in creating products that advance clean energy goals.

However, access to the data is only part of the solution. Suppliers have more flexibility to create products that incentivize electrification where Supplier Consolidated Billing (SCB) is implemented. Currently, Massachusetts uses Utility Consolidated Billing (UCB), where the electric distribution company (EDC) controls the customer's bill and allows a retail supplier to include its product only as a single price per kilowatt hour (kWh) line item. If Massachusetts were to adopt SCB, retail electric suppliers would bill the customers for its supply as well as the utilities transmission and distribution charges. A such, retail suppliers would be free of the utilities' billing restrictions, thereby providing

more flexibility in the types of products that can be offered. This allows a supplier to incentivize electrification in buildings and transportation by creating products that provide additional value beyond electric supply. For example, a supplier's product could include free or reduced prices for electric vehicle charging, which provides an incentive for customers to switch to electric vehicles and lowers emissions in transportation.

Short of SCB, retail suppliers should, at a minimum, be able to have the same access and flexibility in billing as the utilities will have in adopting new rate structures. For example, adding additional line items to accommodate time of use rates or one-time charges for programs like energy efficiency upgrades. Retail suppliers supply over 75% of the load for all customer classes in Massachusetts (about 88% Non-Residential and 58% Residential). Consequently, making the data and billing mechanisms available to retail electric suppliers could go a long way toward the IRWG's objective in designing rate mechanisms to assist the Commonwealth's sustainability goals.

We appreciate the opportunity to provide comments for the IRWG's work on the Long-Term Ratemaking Study. We look forward to future collaboration on creating new rate mechanisms.

Thank you for your consideration and please do not hesitate to contact me if you have any questions or require additional information.

Sincerely,

David Creer
Manager, State Government Affairs

From: David Greenberg
To: Rates WG (ENE)
Subject: Long-Term Ratemaking Draft Study
Date: Thursday, November 14, 2024 7:19:29 AM
Attachments: DG.Sig.png

VIA ELECTRONIC FILING

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

RE: Long-Term Ratemaking Draft Study

I respectfully submit the following comment in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

As you finalize your study, please ensure the solutions you present will result in the following outcomes:

Wealthier people will pay more for our energy system. Part of the funding streams or structure must be progressive such that people with less are paying less, and people with more are paying more. Not only do lower and middle-class customers already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

Shareholders will cover more costs. Utilities should have a limited ability to recover any revenue shortfall as a result of lowering rates. This will encourage more careful investment management. Massachusetts has one of the highest rates of return on equity in the Northeast, averaging between 10 and 11 percent. Shareholder profits should be capped to avoid price gouging.

Utilities will not be shut off, especially during the summer. No one should be disconnected from the system, regardless of season, and they definitely should not be charged to reconnect.

In particular, residents need permanent protection from disconnection when extreme heat is most likely. We already protect people from extreme cold by having a winter moratorium, which prohibits disconnections of low-income households from November 15-March 15 (and is usually extended to April 1). As temperatures rise and low-income people are less likely to have air conditioning, stopping utility shutoffs has become even more urgent. There should be

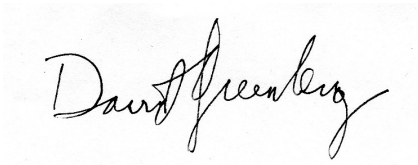
a moratorium all summer and, if possible, all year.

All eligible customers will receive discounts. Enrollment in discount rates should be easier, and there should be limited required proof of eligibility.

A MAPC analysis of the 2016-2020 American Community Survey microdata estimates only 28.3% of eligible households are on the existing discount R-2 rate. It is possible that under enrollment is higher in communities with higher percentages of residents of color. For example, the City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-eligible households. The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process. There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification).

Customers will not be punished for using more electricity.
Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is counterproductive to our climate and justice goals. In future rate designs, customers should see bills *decrease* when they switch to clean heating and cooling.

Thank you for your consideration,



David Greenberg
Colrain, MA

From: Downing Cless
To: Rates WG (ENE)
Cc: Sallye Bleiberg; Downing Cless
Subject: Long-Term Ratemaking Draft Study
Date: Friday, November 15, 2024 9:38:47 PM

Interagency Rates Working Group November 15, 2024
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114
rates.wg@mass.gov

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Thank you for your consideration,

Sallye Bleiberg, Chair, Brookhaven Residents' Climate Change Committee (165 members)

Downing Cless, Chair, Advocacy Subcommittee, Brookhaven Residents' Climate Change Committee

November 15, 2024

Via email to Rates.WG@mass.gov

Austin Dawson
Deputy Director - Policy, Planning, and Analysis Division
p. 617.875.6856
Massachusetts Department of Energy Resources
100 Cambridge Street, 9th Floor, Boston, MA 02114

Re: Electric Distribution Companies Comments on Long-Term Ratemaking Report

Dear Mr. Dawson,

Eversource, National Grid, and Unitil (Electric Distribution Companies, "EDCs") appreciate the opportunity to comment on the Long-Term Ratemaking Study Draft Presentation prepared by E3 ("E3 Presentation") for the Interagency Rates Working Group ("IRWG"). The EDCs thank the IRWG for undertaking this initiative, and E3 for their thorough analysis of the drivers of future system costs, and the considerations of how rates and future rate designs contribute to achieving the Commonwealth's electrification goals.

As the EDCs noted in their prior comments, dated September 6, 2024, E3's presentation of current utility rates and rate designs aligns with the EDCs' overall understanding of customer energy burdens and the gaps between current rate designs and public policy objectives. As E3 has noted, decarbonization policies will require significant investment in the electric power system to meet increases in demand while maintaining safe, efficient, and reliable service to all customers. The EDCs recognize that higher costs could result in financial challenges to customers. Enhancements to rate design and greater use of load management can facilitate electrification and affordability policy goals.

Changing System Costs

The EDCs agree with the E3 Presentation's emphasis on the changing nature of electric system costs and the need for rate design and regulatory frameworks to evolve to ensure an effective, fair, and affordable energy transition. Managing loads through a combination of efficient rate design and targeted programs is essential to mitigating incremental electric system costs associated with electrification and decarbonization.

The E3 Presentation outlines the implications of the shift in electric system peak demand from summer peak to winter peak, and notes that consumers will need to be prepared for evolving rates that reflect this shift in electric system costs. The E3 Presentation provides an illustration of this change over time at the ISO-NE system level, showing an expected dual winter and summer peaks by 2035, and a winter-peaking system by 2040. It is important to note, however, that electrification

will shift electric distribution system peaks to winter before shifting the bulk system peak. The most recent load forecasts for all three EDCs project winter peak demand will occur on their respective distribution networks between 2030 and 2035. Because marginal distribution costs are driven by anticipated peak demand, rate designs that seek to provide efficient price signals to reflect marginal costs must have built in flexibility to adjust to winter peak before such peak occurs. Given the relatively short projected timelines for significant changes to the nature of distribution system costs, it is imperative to consider associated changes to rates and rate design through a long-term lens and ground decisions in principle in order to avoid abrupt bill impacts and rate shocks to customers.

Long-Term Rate Design

General Principles and Framework for Considering Long-Term Rate Design

The EDCs had previously noted that effective, stable, fair, and efficient rate design, balanced thoughtfully with customer, policy, and practical considerations, is necessary to provide a solid foundation for achieving the Commonwealth's electrification and affordability goals. As a general principle, rate design best achieves each of the above objectives when customers are charged in a manner that reflects how costs are incurred on the system. Each component of the overall rate is driven by different types of costs, and those costs are incurred in different ways. Rate design to recover energy supply costs (wholesale market purchases for energy and generation capacity) should be considered separately from the design of rates to recover delivery system costs (local transmission and distribution system costs, including customer-related costs and demand-related costs). At a basic level, volumetric charges, fixed charges, and demand charges should be applied to recover costs that are incurred volumetrically, costs that are fixed, and demand-based costs, respectively.

The E3 Presentation makes clear that any rate design involves trade-offs between competing attributes; a rate design that closely reflects system costs to send the most efficient price signals may be less predictable or more difficult for customers to respond to. As such, the first step for developing rate design must be establishment of priority objectives. Once priorities are established, practical mechanisms may be added to the rate design to improve balance. For any given rate design, there are numerous options for variations to improve customer experience. For example, a customer non-coincident peak (NCP) demand charge may be based on the customer's single highest demand each month as described in the E3 Presentation. To reduce bill volatility for residential customers, an NCP demand charge may instead be formulated as a tiered subscription-like charge based on the average of the customer's highest demands over a 12-month period. A customer may move between tiers with significant changes in their demand profile year-to-year, but the risk of unexpected high bills and the need for customers to actively track their NCP demand are significantly reduced. Likewise on the supply side, a volumetric TOU rate for energy may be paired with a Critical Peak Pricing (CPP) program for generation capacity, or there may be a "super peak" period in addition to the on- and off-peak TOU periods to reflect the time periods when generation capacity costs are likely to be incurred. In each example both options are grounded in the same principles to achieve the same objectives, there is only a difference in the details of how they are applied.

It should also be noted that any change to rate design, including changes to the default rate or the addition of opt-in alternatives within the same rate class, will reduce bills for some customers and increase bills for others, relative to the existing rate design and holding all else equal. Likewise, some customers may be able to easily change their load characteristics to respond to new price signals, while others will have less flexibility. While customer bill impacts must always be carefully considered with any change to rate design, the benefit of the rate design options included in the E3 Presentation is that they provide customers with more possibilities for managing their bills relative to current rates, especially for customers who electrify. Customer education and programs to ensure equitable access to emerging load management technologies will be necessary to realize these possibilities.

The ability for customers to manage their costs is important to both the customer and the EDC. High costs to customers can lead to customers abandoning their cost responsibility given the growing availability of distributed energy resources. The EDCs have played a central role in that growth by interconnecting customers and serving as a clearinghouse for payments to and across customers. However, these customers still require the electric distribution system as evidenced by the Capital Investment Project dockets before the Department of Public Utilities (e.g. D.P.U. 22-47, D.P.U. 22-52 to D.P.U. 22-55). Since these customers still require transmission and distribution service, it is appropriate that they are held responsible for system costs commensurate with other customers. Failure to achieve this would force customers who have less resources to bear the growing costs of future electrification. The EDCs agree with the E3 Presentation that DER compensation programs must work together with rate design to send efficient price signals. DER compensation programs will likely require re-evaluation following overarching changes to rate design in the Commonwealth. Changes to rate design and DER compensation should be considered separately on their own merits in meeting respective primary objectives.

Last, it is important to recognize the critical but limited role of rate design in achieving policy goals. Programmatic mechanisms must continue to be implemented alongside rate design to fully address system and policy needs over the long-term.

Rate Design Options Included in the E3 Presentation

The E3 Presentation addresses a range of rate design options characterized as "Time Varying Rates" (TVR). Two options presented—TOU rates and Real Time Pricing—are volumetric charge mechanisms based on the time variance of wholesale energy market prices and are thus applicable to supply rates. Demand charges, both non-coincident and coincident, reflect peak demand-related distribution and transmission system costs, and thus apply to delivery rates. CPP functions as a demand response program. While CPP could be applied to delivery rates, it has been traditionally used to reduce generation capacity market costs and is often paired with TOU rates for energy on the supply bill. Keeping these distinctions in mind, the EDCs offer feedback on each of the rate design options included in the E3 Presentation below.

Rate Design Options for Supply Rates

The EDCs note that the maturation of the competitive supply market in the Commonwealth may complicate the implementation of TVR for supply rates. With the large number of customers in

the Commonwealth now taking supply service under municipal aggregation, benefits associated with TVR for Basic Service Supply provided by the EDCs may be significantly limited if competitive suppliers do not offer the same or similar rate design. The IRWG should consider the interplay between competitive supply and Basic Service in the effectiveness of any TVR design.

- **Real-Time Pricing** – Real-Time Pricing offers the most granular and complex approach to sending wholesale market price signals to customers. Under this model, customers are typically subject to hourly wholesale market pricing. For this to work effectively, it requires customers to have a greater understanding of energy markets and load flexibility. Customers that can benefit from this type of design would need access to hourly market data and have the ability to make projections regarding hourly price changes. At the same time, such customer would need to have the flexibility to adjust their load in real-time. Real-time pricing requires the customer to actively engage in load management and presents real risks for customers who are unable to make anticipatory or real-time changes at the frequencies required to respond to the price signals. Recent accounts of real-time pricing in Texas in 2021 during a winter disaster showed that customers could be exposed to extremely high costs during unforeseen events. As with CPP, real-time pricing reflects transmission system impacts but would not convey accurate price signals regarding the distribution system.

- **Fixed Time-of-Use (TOU) Blocks** – This is the traditional TOU rate design. The design consists of fixed TOU periods with defined peak and off-peak hours, reflecting periods of higher and lower wholesale energy market prices respectively. Such designs may also include a "shoulder" period that transitions from off-peak to peak hours, or a "super peak" period to capture the highest energy price hours of the year and/or the hour of the year that determines forward capacity market (FCM) obligations. As noted in the E3 Presentation this rate design is minimally complex, but as such provides a more limited opportunity for load to respond to market conditions. TOU supply rates may achieve an appropriate balance of sending market price signals to residential customers while avoiding the complexity and risk of Real Time Pricing.

  TOU rate design can be and often is used for delivery rates as well as supply rates. However, as noted above, TOU rates are generally conceived as volumetric charges, which do not reflect how demand-related costs are incurred on the distribution system. The retention of volumetric delivery rates sends inefficient price signals, and unnecessarily limits load management benefits relative to what may be achieved with demand charges.

- **Critical Peak Pricing (CPP)** - A CPP rate typically requires the EDC to send a notification to the customer that the electric power system is projected to reach a critical state and that pricing will be extremely high during this emergency period. The intent of the CPP is to encourage customers to curtail their load to temporarily ease the pressure on the electric power system. As noted in the E3 Presentation, some customers may see savings, but it could also lead to higher bills for inflexible customers. The E3 Presentation states that such programs could be offered on an opt-in basis, but opt-in rates would mute the system benefits of any load curtailment. Moreover, CPP is explicitly tied to wholesale

market pricing and the impact of such a rate design is more directly correlated with the wholesale transmission system. Distribution system impacts vary by location and occur at lower voltage levels where CPP may not have any long-term effect.

Rate Design Options for Distribution Rates

For EDCs in Massachusetts, distribution rates are set in rate cases based on the utility's total revenue requirement. Customer-related distribution costs are recovered through fixed charges per customer per bill. Demand-related distribution costs are currently recovered through volumetric (per kWh) charges, though costs are driven by non-coincident peak and system-coincident peak demands.

- **Demand Charges** – The EDCs have long advocated the use of demand charges to recover demand-related distribution costs, as they most closely reflect how distribution system costs are incurred and therefore send the most accurate price signals to customers. Ideally, distribution rates would consist of three charges: (1) the fixed customer charge to recover customer-related distribution costs, (2) an NCP demand charge to recover local distribution system costs, and (3) a "Peak Period" demand charge to recover shared distribution system costs. Because demand charges provide the most efficient price signal among available options, demand charges offer the greatest potential to manage distribution system load and thereby mitigating system costs driven by electrification.

  While some stakeholders have expressed concerns about residential customers' ability to understand and respond to demand charges, as described earlier in these comments, demand charges can be engineered in any number of ways to reduce complexity and risk while maintaining an efficient price signal. An NCP demand charge could be designed as a tiered (inclining block) rate and applied based on customer annual NCP demand. A peak period demand charge would function like a TOU rate, with predetermined on- and off-peak periods. Demand charges also provide customers with more opportunity to manage their bills, and in many cases reduce electrification costs relative to volumetric TOU rates. Messaging to customers to educate them on demand charges can be highly simplified and focus on the importance of staggering end uses.

Ratemaking in the Future and Regulatory Frameworks

Embedded vs. Future Costs

The E3 Presentation describes three types of costs that are recovered in rates, including "avoidable" forward looking costs, embedded, or "sunk" costs that have already been incurred, and program costs in support of policy goals.

The E3 Presentation describes forward-looking costs as "avoidable" through changes in customer usage and/or demand, and includes costs for "energy, generation capacity, transmission capacity, and distribution capacity in this category. While wholesale market costs recovered in supply rates (energy, generation capacity, and bulk transmission) may be considered forward-looking and "avoidable," transmission and distribution (i.e. delivery) rates in the Commonwealth currently recover embedded costs only. Rates can be designed to send appropriate price signals to customers

regarding future costs, which, provided that those price signals cause customers to respond accordingly and reduce their demand, could allow for the avoidance of certain costs in the future, allowing rates to be lower than they would be otherwise. That said, it is important to distinguish the point that those future "avoidable" costs can be signaled to customers through rate design but need to be recovered through current electricity rates until such costs are not incurred. Utility rates in Massachusetts are designed based on a historical test year (for both capital investments and operating expenses), adjusted for known and measurable changes to establish cast-off or going in rates after a base distribution rate case. The Department of Public Utilities has taken to approving Performance Based Ratemaking (PBR) plans, which then serve to incent efficient cost management by the EDCs in the period between rate cases, by allowing for gradual annual rate changes designed to track with the EDCs cost of service over time. In this way, rates are set based on *historical* (not future) costs, and to the extent future costs are avoided, customers will benefit from lower rates than would otherwise occur at the time of the next rate case, when rates are reset at the EDC's cost of service, and the process repeats.

Policy-related Program Costs

The E3 Presentation notes that the current approach to recovery of policy-related program costs is hindering state goals. Currently the cost of programs to support the Commonwealth's policy goals are recovered through volumetric charges on the delivery bill. As the E3 Presentation points out, funding these programs through electric rates is more regressive than relying on taxpayer funding. The EDCs have a responsibility to provide safe and reliable service to all customers regardless of income and do not collect and evaluate customer income. Further, funding policy-related programs through volumetric charges on electric bills actually increases the cost for customers to electrify and therefore undermines some of the policies these programs are meant to support. The EDCs support the Commonwealth's electrification and affordability objectives and support evaluation of alternative mechanisms that would more equitably recover the costs of such programs so that certain customers or customer classes are not over-burdened with the costs of such programs.

Regulatory Frameworks

The E3 Presentation also addresses alternative ratemaking mechanisms such as Performance-Based Ratemaking, Revenue Decoupling, and multi-year plans.

- *Performance-Based Ratemaking.* Elements of Performance-Based Ratemaking have been in place in the Commonwealth for the EDCs for a number of years. The EDCs are required to report on a variety of metrics, both reporting and scorecard, that track performance against core obligations and public policy objectives. In its most recent electric rate case, National Grid received approval for two performance incentive mechanisms that are designed to incent the company to pursue goals that are beyond its core service obligations and aligned with public policy objectives, namely increasing enrollment in low-income discount rates and interconnecting distributed energy resources. These PIMs provide the Company with a symmetrical earning opportunity upside and penalty for underperformance. The Mass Save program administrators have also operated with

performance incentives in place for several years that incent energy conservation, greenhouse gas reductions, and equity objectives.

- *Revenue Decoupling.* The EDCs currently operate with revenue decoupling where additional revenues beyond the approved revenue requirement are returned to ratepayers. This framework has been successful in allowing the EDCs to aggressively pursue energy efficiency objectives, offer renewable energy incentives, and introduce alternative rate designs in support of climate goals.

- *Multi-Year Rate Plans and Formula Rates.* Multi-year rate plans define rates for a duration beyond the one-year period that is typical for rates to be set and reviewed under traditional ratemaking. When well-designed and implemented, these types of rate plans have the potential to provide several benefits to ratepayers, including lower prices; more moderate price changes over time; utility supply of more services; higher reliability and improved customer service; improved utility efficiency and performance; and reduced regulatory costs.

Ratemaking mechanisms such as those described above are important constructs for promoting utility performance and outcomes aligned with an affordable clean energy transition. The E3 Presentation does not provide adequate treatment of this issue if it is intended to be included in the scope of this study and the final report, as it does not sufficiently consider how regulatory frameworks may need to evolve to more efficiently support the scale of investment needed to enable the Commonwealth's decarbonization objectives, and the misalignment of this need with current historical ratemaking constructs.

In addition to the regulatory frameworks described above, National Grid believes that forward test years should be considered as an advanced ratemaking concept to be explored in the Commonwealth. A shift to forward test years may be found to better align revenues with the investment needs of the energy transition.

E3 also suggests that the current regulatory framework potentially incentivizes greater capital investment than needed and that the advanced regulatory frameworks described above can be "gamed" by the utility. The claim that EDCs are prone to "capital bias" is not new, but is also not substantiated with evidence, particularly as it relates to the Massachusetts EDCs. The EDCs strongly disagree with this incorrect assertion. The EDCs do not automatically rely on capital investments to satisfy their obligation to serve, and instead rely on a multifaceted approach. In the recent Electric Sector Modernization Plan dockets (D.P.U. 24-10/D.P.U. 24-11/D.P.U. 24-11), the EDCs included detailed information on the non-wires alternatives analyses that each EDC performs in their respective evaluations of potential investments necessary to serve customers on both a short-term and long-term basis. Additionally, the EDCs' commitment to energy efficiency investments in the Commonwealth of Massachusetts is nation-leading. The most recent example of this commitment is the submission of an approximately $5 billion statewide three-year energy efficiency plan to the Department in dockets D.P.U. 24-140 through D.P.U. 24-149, which will provide historically high net benefits to the EDCs' customers. There is no benefit to the EDCs to

"game" incentives or invest beyond what is needed to provide safe and reliable service, and no evidence has been offered to support such a claim.

Utility regulation has evolved and has resulted in more expansive regulatory scrutiny of investments and prudency reviews, as well as more frequent periodic reviews that provide a robust constraint on a utility to overbuild. Regulators have numerous tools in their regulatory toolkit to provide oversight over the capital investment plans of utilities. These include extensive rate case reviews and annual Performance Based Rate reviews that encompass the evaluation of capital spending plans and prudency. It is also important to note that utility capital spending plans are now developed based on highly codified industry standards and technical requirements around reliable and safe operations of the electric distribution system.

In addition, given the extensive scrutiny from both active advocacy parties and regulators regarding affordability concerns and challenges around siting new infrastructure, capital projects necessary to provide safe and reliable service are being delayed or deferred, which has arguably resulted in under-investment, rather than over-investment.

Closing Comments

The EDCs believe that changes to rate design and regulatory frameworks are a critical foundation for ensuring an effective, fair, efficient, and affordable energy transition. Given that no single rate design can simultaneously support every objective of this transition, rate design options must be considered based on their own objectives. Programmatic mechanisms such as load management programs and electrification incentives will be critical to more surgically and efficiently target policy objectives that are not fully achieved by rate design alone. Regulatory frameworks such as PBRs, revenue decoupling, and multi-year rate plans will help provide the EDCs with mechanisms to most efficiently promote utility performance and outcomes that are aligned with an affordable energy transition.

***

The EDCs appreciate the opportunity to submit comments on rate design and look forward to continued collaboration with IRWG.

Very truly yours,

Lauri Mancinelli
Principal Analyst, Regulatory Strategy
National Grid

Richard Chin
Manager, Rates (MA)
Eversource

Patrick Taylor
Chief Regulatory Counsel
Unitil

From: George Clifford
To: Rates WG (ENE)
Subject: Long-Term Ratemaking Draft Study
Date: Wednesday, November 13, 2024 1:57:29 PM

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

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Thank you for your consideration,

George Clifford Boston, MA 02118

GridX Comments to IRWG

RE: Long-Term Ratemaking Study Report

November 14, 2024

Massachusetts Interagency Rates Working Group (IRWG)

https://www.mass.gov/info-details/interagency-rates-working-group

SUBJECT:

RE: IRWG Long-Term Ratemaking Study Report Request for Public Comment

To the IRWG and other stakeholders:

GridX, Inc. ("GridX") thanks the Massachusetts Interagency Rates Working Group ("IRWG") for the opportunity to provide public comments on the October 28, 2024, presentation outlining the IRWG's Long-Term Ratemaking Study Report. We are excited that the IRWG has a stated objective to "present a vision and recommendations for advancing ratemaking mechanisms and rates for a decarbonized energy system and the associated technologies and capabilities available" and submit these comments with intent to be both broadly supportive and collaborative for Massachusetts to achieve this objective.

GridX respectfully recommends that the IRWG consider the importance of personalized rate education and customer empowerment tools. We expand on this recommendation below.

Discussion

A. We are supportive of the IRWG's general set of findings that time-varying rates ("TVR") can be used to modify customer load.

As a threshold matter, we believe that TVR should be a component of any comprehensive load flexibility strategy. TVR are enabled by Advanced Metering Infrastructure ("AMI") and covers several categories of customer rate design where electricity prices vary at times of day (and often seasonally). This includes familiar time-of-use ("TOU") pricing, but also critical peak pricing ("CPP") where electricity prices spike during peak periods, and even real time pricing ("RTP") where electricity prices reflect dynamic fluctuations in wholesale market prices. TVR have historically demonstrated

meaningful response; a 2023 analysis conducted by Dr. Ahmad Faruqui and Ziyi Tang, encompassing 80 pilots and 400 different pricing treatments, revealed that customers meaningfully reduce peak consumption as the peak-to-off-peak price ratio increases.

Despite the known success attributed to TVR, however, customer enrollment has historically lagged behind rate availability. Specifically, while over 60% of American energy customers have TOU rates available, only about 7% of these customers are enrolled in TOU plans. States seeking to bridge that gap have approved several different TVR design strategies, including making space for multiple rate offerings (e.g., different customers may benefit from higher or lower price differentials, timing, incentives, etc.), providing shadow billing, comparing all contemplated rate designs (e.g., opt-in versus opt-out models), and unlocking sets of customer tools to promote active and effective customer engagement. We recommend that the IRWG consider these various strategies and how they might apply to the future deployment of TVR in Massachusetts.

B. We recommend the IRWG discuss personalized rate education and other customer empowerment tools for TVR.

One particularly effective tool in growing TVR enrollments, encouraging customer retention, and increasing customer satisfaction is through **personalized rate education**. Personalized rate education involves helping customers understand the true cost impact of their energy usage by utilizing AMI data to execute authentic and theoretical billing, spanning all rates and tariffs.

Personalized rate education can directly support some of the potential challenges identified in the Energy+Environmental Economics ("E3") Interagency Rates Working Group Study: Long Term Ratemaking report. For example, E3 concludes, "To provide customers with economically efficient price signals, TVR should ideally reflect changes in avoidable system costs over time: Customers should anticipate that TVR rates will be expected to evolve year-to-year as system costs change."[1] With the possibility of frequent changes, accurate and rapid customer education becomes increasingly important. Customers will be most empowered to react to changing rates when they

[1] Slide 26

understand via a direct comparison how their utility bill might look on the changing rate versus the current rate.

Additionally, E3 expands on the trade-offs between TOU, dynamic rates, and options in between, further noting that "many jurisdictions have taken the approach of implementing simpler TOU rates as default, with more complex TOU designs and/or CPP as opt-in rate options."[2] GridX is supportive of offering customers multiple rate options, but also cautions that this should be accompanied by a personalized rate comparison tool to inform customers how their *specific* utility bill – based on their *actual* usage – might change depending on the rate they enroll in.

There are several existing examples of personalized rate education being successfully implemented. For example, as part of its decision to make TOU the default residential rate for large IOUs in California, the California Public Utilities Commission authorized sufficient funding to support a robust statewide marketing, education and outreach ("ME&O") program.[3] Among other tactics, the ME&O program included personalized rate comparisons and rate education that were proactively delivered to customers through mail and email. Additionally, the IOUs were ordered to offer online self-serve solutions that also provided personalized rate comparisons and tools to help customers learn how to be successful with TOU rates.

The Board of Sacramento Municipal Utility District ("SMUD") also voted to make TOU the default rate for its nearly 600,000 residential customers in 2017.[4] SMUD's effective ME&O program focused heavily on communications of the on-peak time period supplemented with personalized rate analysis that was provided to customers at regular intervals prior to the date of customer migration to the SMUD TOU rate. Investment in

[2] Ibid.
[3] *Decision on Residential Rate Reform for Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company and Transition to Time-of-Use Rates*, Decision 20-07-011 (Jul. 16, 2020).
[4] *See* SMUD Chief Executive Officer and General Manager's Report and Recommendation on Rates and Services (Mar. 16, 2017), available at https://www.smud.org/-/media/Documents/Corporate/About-Us/Company-Information/Reports-and-Documents/GM-Reports/2017-GM-Rate-Report-Vol-1.ashx.

robust ME&O results in low opt-out rates, high satisfaction with, and awareness of, the default TOU rate.

These and other examples help to indicate that cost-effective software solutions exist for utilities to procure and leverage their investment in AMI for the purpose of supporting advanced rate design. Personalized rate education can support Massachusetts in creating more focused and specific messages for those customers that are impacted by moving to a TOU rate structure.

Given all of these benefits, we support consideration of personalized rate education as a topic for the IRWG as it considers recommendations related to its Long-Term Ratemaking Study.

Conclusion

GridX appreciates consideration of these comments and looks forward to further engaging with IRWG on this critical topic. We would be pleased to participate in any conversation around TVR, personalized rate education, and other customer engagement solutions.

Sincerely,

Rachel Bryant
Sr. Director of Regulatory & Policy
GridX, Inc.
712 Bancroft Road, Suite 844
Walnut Creek, CA 94598
713-705-6584
rachel.bryant@gridx.com

Massachusetts Institute of Technology

Comment on MA IRWG Long-Term Rates Report:
Grid-Coordinated Heat Pump and EV Rates; and Capped Dynamic Rates

To: **Massachusetts Interagency Rates Working Group,**

by: **Harvey Michaels,** Faculty, Massachusetts Institute of Technology, Sloan School of Management
Principal Investigator, Clean Heat Transition Project
hgm@mit.edu 508-740-9233 November 15, 2024

Thank you to IRWG and E3 for preparing a long-term rate study with substantial merit, and looking at the correct problems in an effective manner. Herein we offer a few perspectives on the data you present, and also a few innovative proposals for your consideration. These reflect the ongoing *Clean Heat Transition study* in Sloan's System Dynamics Group, and study of *Energy Management and AI: Strategies for a Sustainable Future*, which includes a graduate course exploring climate solution pathways applying AI-enabled innovations to resolve the conflicts between grid and consumer economics.

Our situation: Our rates are already too high for heat pumps and EVs to flourish, and our path could make things worse.

Rates must come down, for our economic competitiveness, and for heat pumps and EVs to reach the adoption rates our climate needs. Today's rates, which average $.33/kwh in the Boston area, are twice the national average, and at these prices the economics of both heat pumps and EVs are not compelling. At about $.20/kwh, which is above the national average rate and about what the MA Municipal Electrics are charging, heat pumps and EVs do create value, and *therefore $.20 is probably the maximum price* we need for our climate, at least for these end uses. As described below, it is a justifiable price.

With the baseline of even higher prices coming, there would be no path to the goal of net zero which requires ubiquitous electrification of heat and vehicles by 2050. Grid infrastructure is forecast to need a doubling of generation, transmission, and distribution capacity by 2050, solely to accommodate the climate requirement to transition to heat pumps and EVs. Otherwise, grid peak has been dropping since 2006 and would continue to do so. But this double-size grid would serve *only about 30% additional kwh* as forecast – which results in higher per-kwh costs.

Electric prices are high because grid capacity is underutilized, and this utilization rate is trending the wrong way. The New England grid on average is 55% unutilized right now, and based on the 2050 forecast it will be almost 70% unutilized by then. That's a grid flying with a lot of slack ("empty seats" as analogy) that we all need to pay for.

Our opportunity: The conflict between high rates and our climate imperative is substantial, *but resolvable:*

If we avoid new load on only the most congested 3-5% of the hours each year, or shift existing loads, peak growth could be much less than forecast. We should economically be able to reduce capacity growth by over 50% from the current forecast; mostly by using cost-based dynamic pricing of electricity.

If we encourage climate-beneficial new heat pump and EV load in the remaining 95% of hours, exclusively, then the average cost of electricity can drop markedly. *Marginal costs on 95% of hours average under $.05 per kwh.* Comparatively, the marginal cost of a kwh on the peak, spread over the 200 highest load hours (as we do for DR programs), is at least $1 per kwh.

Our Proposals:

Rate Proposal 1: Consider special end use rates for *grid-coordinated* heat pumps and EV's ($.20/kwh cap). Heat Pumps and EVs are a special case: *beneficial, marginal, and price sensitive.* With such a rate, we can anticipate high market adoption, lower average rates, and lower needed incentive costs. The rate should be tied to requirements to ensure coordination with the grid.

- As a price-sensitive marginal load, it is economically appropriate that a special rate not carry *full freight* for sunk costs per kwh, or even for policy costs: since without rates below $.20/kwh, there would be too little adoption to cover much of these costs anyway. Since the marginal cost is only about $.05, there is still substantial contribution to cover sunk and policy costs at $.20; probably more than at standard rates because of the higher adoption. This is the ratemaking logic with precedent in Economic Development Rates.

- Load flexibility should be the priority, because with it new heat pumps and EVs can be a rate-lowering opportunity, rather than a problem. Uncoordinated with the grid, EVs and heat pumps are peakier than average loads, with marginal cost above average rates, thereby *raising average rates*. Coordinated with the grid, EVs and heat pumps are *flatter* than average loads, with marginal costs substantially below average rates, thereby **lowering average rates**. Importantly, dual heat homes that provide up to 90% of annual heat from electricity avoid the winter peak entirely. We can also extend the same lower rates for heat pumps without backup or controls in all-electric deep retrofit homes, new high efficiency homes, homes with thermal storage, or geothermal homes, to acknowledge their much lower contributions to winter peak.

Rate Proposal 2: Consider ASAP moving to ubiquitous dynamic prices, *capped at the current-rate monthly bills.* With a cap on monthly bills based on the current flat rates each month, dynamic prices pose no customer risk; and should cause no pushback, and no reason to opt-in or out. As an *Everybody Wins* rate, it could roll out as soon as advanced meters are installed, providing an immediate benefit to meter conversion. And the earlier the rates go in place, the sooner the ecosystem develops to capitalize on it.

With such a cap, it is reasonable to *anticipate lower average rates in time.* Short term, a revenue loss is possible but it should be small, and likely temporary. These costs could be seen as a modest investment trending quickly to dropping average rates due to higher grid utilization (filling the "empty seats"), a viable climate solution, and offering consumer equity benefits.

Rates should focus on the Annual Peak; with less concern for the spot market. To test the opportunity for load flexibility before we pay to expand the grid to double its current size, we should try dynamic pricing and/or DR focused on avoiding the annual peaks. Doing so ubiquitously would likely unleash an ecosystem of AI-enabling app-makers to create consumer value by juggling loads on behalf of the customer. And *winter has our most expensive peak hours today* –rates should reflect that; especially hours when natural gas to power stations is curtailed. We find that AI-supported smart home ecosystems, are making smart regulation of devices in response to price or DR signals much easier and inexpensive than before, and therefore r*ate complexity is not a problem.*

Energy Retailers can help. We should also encourage, with regulatory preferences and through promotion by the DOER Green Communities program, that Community Choice Aggregators and other Electric Retailers offer similar rate forms to residential consumers as an option. This aims to ensure broad access

to cost-effective electrification opportunities, fostering equitable participation across the state's diverse communities.

Related Non-Rate Proposals: For coordination, our Mass Save and Connected Solutions programs should also be adjusted:

We should add a new Mass Save Smart Home program with incentives to encourage technologies capable of assisting consumers in responding to rates and the program ideas above. Putting the technology ecosystem for coordinating home devices with a grid means that dynamic rates will more quickly become effective at reducing peak grid requirements, and reducing average kwh costs.

Incentives should allow the retention of existing fossil fuel heating systems in residences adopting heat pump technology, provided that these systems are utilized only when ambient temperatures are below 20°F and are capable of being remotely monitored by utility companies to ensure compliance. We have, and should continue to develop, pathways for such homes to ultimately disconnect from the gas pipelines at an appropriate time, applying next generation heat pumps, community geothermal networks, or a limited use of site-stored renewable fuel.

The Connected Solutions Program should be corrected to reflect that our winter peak demand has substantial marginal cost today, as well as our dominant future peak. Our Avoided Cost study should be revisited regarding this question of current winter peak costs – to date there has been no focus on the severity of today's significant winter cost issue, growing markedly in the future.

I would be happy to discuss these ideas and suggestions with you. Thank you for moving the Commonwealth forward towards a model climate solution.

Respectfully submitted,

Harvey Michaels, Massachusetts Institute of Technology
Sloan Lecturer - Energy Management Innovation; Principal Investigator, Clean Heat Transition Project
cell: 508-740-9233 hgm@mit.edu

Harvey Michaels is MIT Sloan Lecturer - Energy and Climate Innovation, and Principal Investigator of the Clean Heat Transition study for Sloan's System Dynamics Group. He is currently teaching *Energy Management and AI: Strategies for a Sustainable Future.* He served previously on faculty teams for several cross-campus energy studies, including Community Energy Innovations, the *Future of the Electric Grid*, and campus energy planning. Harvey serves on several boards related to Energy Efficiency and Climate Solutions, and previously led two energy efficiency companies (sequentially): Xenergy and Aclara.

memo

To: Massachusetts Interagency Rates Working Group Members

From: ISO New England

Date: November 15, 2024

Subject: Comments on Draft Long-Term Ratemaking Study

Thank you for the opportunity to provide comments on the Interagency Rates Working Group (IWRG)'s Draft Long-Term Ratemaking Study. In the New England wholesale markets, demand resources are competitive assets that help meet the region's electricity needs. ISO New England (ISO-NE) offers a variety of programs which compensate electricity users for reducing consumption when demand or market prices are high and system reliability is at risk. In addition to these existing opportunities, flexible demand will be essential for the clean energy future and variable retail rates will be a critical element to enabling this shift.

As the region considers demand response programs and variable rate designs, ISO has participated in various stakeholder discussions, such as ongoing NECPUC Working Group on Retail Rates and the June 2024 Consumer Liaison Group meeting on demand response.[1] The ISO looks forward to continuing to serve as a technical partner in the region, including with the IWRG. Below are some considerations for future rate designs that the ISO views as important, given the potentially significant impacts of certain designs on grid operations.

Opportunity for Future Retail Rate Design to Encourage Demand Flexibility

As the electricity supply is decarbonized and becomes more intermittent, demand flexibility – increasing demand when prices are low, and reducing demand when prices are high – becomes more valuable. At the same time, demand flexibility requires deployment of advanced metering infrastructure and time varying retail rates. As noted in the IRWG's draft report, the ISO predicts that electrification goals will drive changes in the region's energy demands, eventually moving to a winter peaking system.[2] The shifting peak and increasing demand will affect future needs for generation and transmission. Peak load management

[1] For more information, see the following: NECPUC Retail Demand Response and Load Flexibility Working Group; Demand Response Implementation in New England and the Growing Need for Demand Flexibility, Consumer Liaison Group Meeting June 4, 2024.

[2] *Economic Planning for the Clean Energy Transition: Illuminating the Challenges of Tomorrow's Grid*, ISO New England October 2024, *Future Grid Reliability Study*, ISO New England July 2022

via time-varying rates (TVR) will be essential to managing regional transmission costs, distribution system costs and energy costs as well as maximizing savings from avoided generation capacity.

Demand response, historically, has only rewarded load reductions. Increasingly, there will be opportunities for consumers to reduce demand when prices are high and/or during periods of under generation and to increase demand when prices are low and/or during periods of over generation. Advanced metering infrastructure and retail rates that enable and reward customers or their aggregators to respond to changing wholesale price signals are needed for demand flexibility to be successful.

Considerations of TVRs and the Impact on Grid Operations

Retail rate programs can have a significant impact on ISO New England's system and market operations as the effects of programs operating outside of ISO's markets can be challenging to forecast. While ISO New England is becoming increasingly aware of utility conservation programs where load reduction occurs during peak hours on summer days where seasonal peak loads are anticipated, such as Massachusetts's ConnectedSolutions program, visibility into these programs is limited.

As the region considers future program design (including adoption of TVRs), increased awareness of program characteristics will facilitate ISO's understanding of expected load behavior under certain conditions. As ISO New England has discussed with various stakeholders across the region, we are specifically interested in components of retail programs that shift customer demand and result in changes to ISO's forecasting and operations. Examples of such TVR program components include:

- Is enrollment and participation voluntary or mandatory?
- What triggers rate fluctuations (i.e., prices, system conditions, pre-determined windows)?
- What is the estimated magnitude and duration of program response?
- What are the methods for communicating TVRs to stakeholders (i.e., EDCs, participating customers, ISO-NE)?
- What is the process for review and modification of program components?

As the clean energy transition accelerates, the ISO appreciates the opportunity to participate in important discussions such as these on TVR which are shaping the future of the power grid. We look forward to continuing our work with Massachusetts and our other New England stakeholders to ensure the grid is reliable throughout the clean energy transition.

Sincerely,

Anne George
Vice President, Chief External Affairs and Communications Officer

From:	Jan Swindell
To:	Rates WG (ENE)
Subject:	Comments on the Interagency Proposal
Date:	Thursday, November 14, 2024 10:18:06 AM

Hello,

I respectfully submit the following comments in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

As you finalize your study, please ensure the solutions you present will result in the following outcomes:

Wealthier people will pay more for our energy system. Part of the funding streams or structure must be progressive such that people with less are paying less, and people with more are paying more. Not only do lower and middle-class customers already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

Shareholders will cover more costs. Utilities should have a limited ability to recover any revenue shortfall as a result of lowering rates. This will encourage more careful investment management. Massachusetts has one of the highest rates of return on equity in the northeast, averaging between 10 and 11 percent. Shareholder profits should be questioned

Utilities will not be shut off, especially during the summer. No one should be disconnected from the system, regardless of season, and they definitely should not be charged to reconnect.

In particular, residents need permanent protection from disconnection when extreme heat is most likely. We already protect people from extreme cold by having a winter moratorium, which prohibits disconnections of low-income households from November 15-March 15 (and is usually extended to April 1). As temperatures rise and low-income people are less likely to have air conditioning, halting utility shut-offs has become even more urgent. There should be a moratorium all summer and, if possible, all year.

Nearly all or all eligible customers will receive discounts. Enrollment in discount rates should be easier, and there should be limited required proof of eligibility.

A MAPC analysis of the 2016-2020 American Community Survey microdata estimates only 28.3% of eligible households are on the existing discount R-2 rate. It is possible that under enrollment is higher in communities with higher percentages of residents of color. For example, the City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-

eligible households. The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process. There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification).

Customers will not be punished for going electric.
Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is counterproductive to our climate and justice goals. In future rate designs, customers should see bills decrease when they switch to clean heating and cooling.

Thank you for your consideration,

Janice Swindell

Spencer, MA

From: John Muratore
To: Rates WG (ENE)
Subject: long-term Ratemaking Draft Study
Date: Thursday, November 14, 2024 10:23:50 AM

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Hello.

I respectfully submit the following comments in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

As you finalize your study, please ensure the solutions you present will result in the following outcomes:

Wealthier people will pay more for our energy system. Part of the funding streams or structure must be progressive such that people with less are paying less, and people with more are paying more. Not only do lower and middle-class customers already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

Shareholders will cover more costs. Utilities should have a limited ability to recover any revenue shortfall as a result of lowering rates. This will encourage more careful investment management. Massachusetts has one of the highest rates of return on equity in the northeast, averaging between 10 and 11 percent. Shareholder profits should be questioned

Utilities will not be shut off, especially during the summer. No one should be disconnected from the system, regardless of season, and they definitely should not be charged to reconnect.

In particular, residents need permanent protection from disconnection when extreme heat is most likely. We already protect people from extreme cold by having a winter moratorium, which prohibits disconnections of low-income households from November 15-March 15 (and is usually extended to April 1). As temperatures rise and low-income people are less likely to have air conditioning, halting utility shut-offs has become even more urgent. There should be a moratorium all summer and, if possible, all year.

Nearly all or all eligible customers will receive discounts. Enrollment in discount rates should be easier, and there should be limited required proof of eligibility.

A MAPC analysis of the 2016-2020 American Community Survey microdata estimates only 28.3% of eligible households are on the existing discount R-2 rate. It is possible that under enrollment is higher in communities with higher percentages of residents of color. For example, the City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-eligible households. The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process. There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification).

Customers will not be punished for going electric.
Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is counterproductive to our climate and justice goals. In future rate designs, customers should see bills decrease when they switch to clean heating and cooling.

Thank you for your consideration,

John Muratore
Boston, MA 02130

From: Jonathan Cohn
To: Rates WG (ENE)
Subject: Long-Term Ratemaking Draft Study
Date: Friday, November 15, 2024 2:20:11 PM

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114
rates.wg@mass.gov

RE: Long-Term Ratemaking Draft Study

Thank you for your work on the ratemaking study. I respectfully submit the following comment in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

As you finalize your study, please ensure the solutions you present will result in the following outcomes:

- **A fairer system where wealthier people pay more.** Part of the funding streams or structure must be progressive such that people with less are paying less, and people with more are paying more. Not only do lower and middle-class customers already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

- **More costs covered by shareholders**. Utilities should have a limited ability to recover any revenue shortfall as a result of lowering rates. This will encourage more careful investment management. Massachusetts has one of the highest rates of return on equity in the northeast, averaging between 10 and 11 percent. Maintaining high shareholder profits should not be prioritized above the public interest.

- **Protection from shutoffs, especially during the summer.** No one should be disconnected from the system, regardless of season, and they definitely should not be charged to reconnect. In particular, residents need permanent protection from disconnection when extreme heat is most likely. We already protect people from extreme cold by having a winter moratorium; we should extend this to the full year.

- **Wider takeup of discounts**. Enrollment in discount rates should be easier, and there should be limited required proof of eligibility. The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process. There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification).

- **No punishment for customers choosing to go electric.** Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is counterproductive to our climate and

justice goals. In future rate designs, customers should see bills decrease when they switch to clean heating and cooling.

Thank you for your consideration,
Jonathan Cohn
333 Columbus Avenue, Apt 54
Boston, MA 02116

From: joy pearson
To: Rates WG (ENE)
Subject: proressive rate reform
Date: Wednesday, November 13, 2024 1:45:02 PM

Hello,

Please do not charge us all the same for Electricity. Consider fairness. Charging us for the telephone poles and other such things is done wrong.

- People who have more money should pay more for our energy system (a progressive system, not a regressive system!)
- Shareholders should shoulder more costs
- No one should be disconnected from the system, regardless of season, and they should not be charged to reconnect.
- Enrollment in discount rates should be easier and required proof of eligibility should be limited.
- Customers should not be punished for going electric.

Joyce Pearson
193 Sylvan Street, Malden, MA 02148

From: Katherine Plosky
To: Rates WG (ENE)
Subject: Long-Term Ratemaking Draft Study
Date: Thursday, November 14, 2024 7:07:00 AM

I respectfully submit the following comment in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

As you finalize your study, please ensure the solutions you present will result in the following outcomes:

Wealthier people will pay more for our energy system. Part of the funding streams or structure must be progressive such that people with less are paying less, and people with more are paying more. Not only do lower and middle-class customers already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

Shareholders will cover more costs. Utilities should have a limited ability to recover any revenue shortfall as a result of lowering rates. This will encourage more careful investment management. Massachusetts has one of the highest rates of return on equity in the northeast, averaging between 10 and 11 percent. Shareholder profits should be questioned

Utilities will not be shut off, especially during the summer. No one should be disconnected from the system, regardless of season, and they definitely should not be charged to reconnect.

In particular, residents need permanent protection from disconnection when extreme heat is most likely. We already protect people from extreme cold by having a winter moratorium, which prohibits disconnections of low-income households from November 15-March 15 (and is usually extended to April 1). As temperatures rise and low-income people are less likely to have air conditioning, stopping utility shutoffs has become even more urgent. There should be a moratorium all summer and, if possible, all year.

Nearly all or all eligible customers will receive discounts. Enrollment in discount rates should be easier, and there should be limited required proof of eligibility.

A MAPC analysis of the 2016-2020 American Community Survey microdata estimates only 28.3% of eligible households are on the existing discount R-2 rate. It is possible that under enrollment is higher in communities with higher percentages of residents of color. For example, the City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-eligible households. The dismal levels of enrollment, despite outreach efforts, affirm the need

to simplify and ease the process. There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification).

Customers will not be punished for going electric.
Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is counterproductive to our climate and justice goals. In future rate designs, customers should see bills decrease when they switch to clean heating and cooling.

Thank you for your consideration,

Katherine Plosky

From: Kent Wittenburg
To: Rates WG (ENE)
Subject: comment on Long-Term Ratemaking Draft Study
Date: Thursday, November 14, 2024 10:15:11 AM

Hello.

I respectfully submit the following comments in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

As you finalize your study, please ensure the solutions you present will result in the following outcomes:

Wealthier people will pay more for our energy system. Part of the funding streams or structure must be progressive such that people with less are paying less, and people with more are paying more. Not only do lower and middle-class customers already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

Shareholders will cover more costs. Utilities should have a limited ability to recover any revenue shortfall as a result of lowering rates. This will encourage more careful investment management. Massachusetts has one of the highest rates of return on equity in the northeast, averaging between 10 and 11 percent. Shareholder profits should be questioned

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eligible households. The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process. There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification).

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Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is counterproductive to our climate and justice goals. In future rate designs, customers should see bills decrease when they switch to clean heating and cooling.

Thank you for your consideration,

Kent Wittenburg

Boston, MA 02129

From: Larry Chretien
To: Rates WG (ENE)
Subject: comments on Draft Long-Term Ratemaking Study
Date: Friday, November 15, 2024 4:15:16 PM

Thank you for the opportunity to comment on the Long-Term Ratemaking Study. On behalf of Green Energy Consumers Alliance, I will make these points:

First, I appreciate the analysis that has been done and the IRWG's civic engagement process. However, while I understand the general benefits of looking down the road at how the electricity system might change, there is simply too much uncertainty. The longer we look out it becomes less useful than focusing on the short- and medium-term. There are reasons to reform our rate structure for the next five years or so. At some point, perhaps around 2030, we will likely see the need to reform the structure again as the system evolves. And when look at the system then, we will have much visibility to 2035 than we do today.

In terms of time-varying rates (TVR), they are going to be critical in terms of helping to shave peaks to the benefit of all ratepayers. However, Green Energy Consumers would oppose residential demand charges and we believe that real-time pricing is not worth the effort. We support a simple, statewide (not Balkanized by utility territory) TVR structure that consumers can understand. Perhaps low-income ratepayers should be allowed to opt-into TVR. Otherwise, the net benefits to all ratepayers is proportional to participation. For that reason, TRV should be done on an opt-out basis after a very robust process for educating consumers. Great care should be taken to support consumers with health-related inflexible loads.

From today forward, especially when advanced meters are in place, we need a robust managed charging program for EV drivers to both incentivize EV adoption and to reduce peak demand in all seasons. Especially for the next several years, increased EV adoption reduces electricity rates for all ratepayers, including those who do not have an

EV. Right now, EV drivers are cross-subsidizing those who do not have EVs. To state the obvious, the Commonwealth will not reach its GHG reduction targets without widespread EV adoption. EVs provide multiple benefits to consumers and the state's energy goals in ways that stationary storage does not. Fortunately, it is relatively easy to manage EV charging compared to just about every other appliance.

It is imperative that a new rate structure be put in place that reduces the energy burden on low-income families. This can be done in ways that are compatible with TVR, whether by capping the bills on low-income customers, enhancing the low-income discount rates, or other means. These are ways under the jurisdiction of the Department of Public Utilities. However, there are limits to what we can do within the walls of electricity regulation. The math is simply too difficult. For that reason, Green Energy Consumers Alliance appreciates that the Draft put on the table the notion that state funds ought to be considered in order to ensure

equity. It will not be easy finding dollars within the state budget, but a just transition to net zero will depend upon that.

Sincerely,

Larry Chretien, Executive Director
Green Energy Consumers Alliance
larry@greenenergyconsumers.org

Empowering consumers and communities to speed a just transition to a zero-carbon future.

All donations from now until Giving Tuesday (December 3rd) are being MATCHED, dollar for dollar, by a generous donor. That means if you are able to contribute today to our climate programs and advocacy work, our friends will double it.

From: Laura Gardner
To: Rates WG (ENE)
Subject: IRWG public comment
Date: Tuesday, November 12, 2024 1:19:57 PM

I respectfully submit the following comment in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

As you finalize your study, please ensure the solutions you present will result in the following outcomes:

1. Customers will not be punished for going electric or for other customers going electric.

Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase and may increase rates for those left on the gas system, as well. This is counterproductive to our climate and justice goals. In future rate designs, customers should see bills decrease when they switch to clean heating and cooling and those who can't switch over quickly enough should not be punished either.

2. Wealthier people will pay more for our energy system. Part of the funding streams or structure must be progressive such that people with less are paying less, and people with more are paying more. Not only do lower and middle-class customers already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

3. Shareholders will cover more costs. Utilities should have a limited ability to recover any revenue shortfall as a result of lowering rates. This will encourage more careful investment management. Massachusetts has one of the highest rates of return on equity in the northeast, averaging between 10 and 11 percent. Shareholder profits should be questioned.

4. Utilities will not be shut off, especially during the summer. No one should be disconnected from the system, regardless of season, and they definitely should not be charged to reconnect.

In particular, residents need permanent protection from disconnection when extreme heat is most likely. We already protect people from extreme cold by having a winter moratorium, which prohibits disconnections of low-income households from November 15-March 15 (and is usually extended to April 1). As temperatures rise and low-income people are less likely to have air conditioning, stopping utility shut offs has become even more urgent. There should be

a moratorium all summer and, if possible, all year. We must protect vulnerable populations as heat starts to rise more and more in the summer.

4. Nearly all or all eligible customers will receive discounts. Enrollment in discount rates should be easier, and there should be limited required proof of eligibility.

A MAPC analysis of the 2016-2020 American Community Survey microdata estimates only 28.3% of eligible households are on the existing discount R-2 rate. It is possible that under enrollment is higher in communities with higher percentages of residents of color. For example, the City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-eligible households. The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process. There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification).

Thank you for your consideration,

Laura Gardner
Co-Chair
Climate Reality Massachusetts Southcoast
508-542-7152

MAPC
METROPOLITAN AREA PLANNING COUNCIL

SMART GROWTH AND REGIONAL COLLABORATION

VIA ELECTRONIC MAIL ONLY

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114
Rates.WG@mass.gov

November 15, 2024

Re: MAPC Comments on Interagency Rates Working Group Long-Term Ratemaking Study Presentation

Dear Interagency Rates Working Group Members,

Thank you for the opportunity to submit comments in response to the presentation of E3's Long-Term Ratemaking Study on October 28, 2024. The Metropolitan Area Planning Council (MAPC) is the Regional Planning Agency serving the people who live and work in the 101 cities and towns of Greater Boston. We are committed to smart growth, sustainability, regional collaboration, and advancing equity.

While we understand that an examination of long-term ratemaking well into the future is inherently more speculative than the analysis completed in the near-term study, we are disappointed to see very little analysis of equity implications, energy affordability, and disproportionate energy burdens in the current draft. While the near-term study examined the varying impacts of different rate approaches on low-income customers and options for limiting the negative impact of rate reforms on low-income customers, the long-term study currently has no analysis or deeper examination of affordability concerns.

While widespread or even mandatory adoption of TVRs may be required to provide the necessary price signals to moderate the growth of winter peak in the long-term, we are deeply concerned about the potential energy burden impacts for low- and moderate-income ratepayers as they transition from current and near-term rates to TVRs. These ratepayers will be less likely to have flexible loads like electric vehicles and central AC to benefit from TVRs and often have less control over making investments that can enable load flexibility. Ensuring that low- and moderate-income ratepayers do not disproportionately become the "losers" of cost-neutral TVRs must be a priority in the long-term. We hope that this study will try to understand how TVRs may impact low- and moderate-income ratepayers and define more clearly the principles or best practices that should be considered for evaluating affordability impacts.

We are heartened to see that the IRWG has hired Peoples Energy Analytics and Dr. Destenie Nock to enhance the integration of equity and energy justice principles into the study's

recommendations. We look forward to reviewing the draft supplemental report Dr. Nock's team will be developing and urge the IRWG to ensure that these recommendations can be meaningfully incorporated into both the near- and long-term strategies.

We thank the IRWG for this opportunity to comment. Future TVRs are a critical tool to encourage more effective use of decarbonized energy and limit the scaleup of infrastructure needed to serve a more-electrified future. However, they must be thoughtfully designed to ensure already energy-burdened residents are not disproportionately impacted by their widespread adoption. Considerations for energy affordability and equity must be at the forefront of ratemaking and policymaking at all stages of the transition towards rates of the future. We look forward to continuing to engage with the IRWG on these issues as the process moves towards its conclusion.

Sincerely,

Julie Curti
Director of Clean Energy
Metropolitan Area Planning Council
617-933-0716 | jcurti@mapc.org

From: Margaret Dorney
To: Rates WG (ENE)
Subject: My comments
Date: Thursday, November 14, 2024 5:14:02 PM

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Hello.

I respectfully submit the following comments in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

As you finalize your study, please ensure the solutions you present will result in the following outcomes:

Wealthier people will pay more for our energy system. Part of the funding streams or structure must be progressive such that people with less are paying less, and people with more are paying more. Not only do lower and middle-class customers already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

Shareholders will cover more costs. Utilities should have a limited ability to recover any revenue shortfall as a result of lowering rates. This will encourage more careful investment management. Massachusetts has one of the highest rates of return on equity in the northeast, averaging between 10 and 11 percent. Shareholder profits should be questioned

Utilities will not be shut off, especially during the summer. No one should be disconnected from the system, regardless of season, and they definitely should not be charged to reconnect.

In particular, residents need permanent protection from disconnection when extreme heat is most likely. We already protect people from extreme cold by having a winter moratorium, which prohibits disconnections of low-income households from November 15-March 15 (and is usually extended to April 1). As temperatures rise and low-income people are less likely to have air conditioning, halting utility shut-offs has become even more urgent. There should be a moratorium all summer and, if possible, all year.

Nearly all or all eligible customers will receive discounts. Enrollment in discount rates

should be easier, and there should be limited required proof of eligibility.

A MAPC analysis of the 2016-2020 American Community Survey microdata estimates only 28.3% of eligible households are on the existing discount R-2 rate. It is possible that under enrollment is higher in communities with higher percentages of residents of color. For example, the City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-eligible households. The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process. There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification).

Customers will not be punished for going electric.
Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is counterproductive to our climate and justice goals. In future rate designs, customers should see bills decrease when they switch to clean heating and cooling

Sincerely,
Margaret Suby
Jamaica Plain
Sent from my
iPhone

From: Maria Bartlett
To: Rates WG (ENE)
Subject: Long-term rate making draft study
Date: Wednesday, November 13, 2024 10:21:27 PM

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

RE: Long-Term Ratemaking Draft Study

Thank you for this opportunity to respectfully submit the following comments in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

Please ensure the following:

1. Rate paying should be progressive not regressive.

People with less should pay less and people with more should pay more. Plus, wealthier customers generally use increased energy and could be paying for excessive use.

2. Shareholders should cover more costs. Massachusetts' utility shareholders earn high rates of return on equity, averaging between 10% and 11%! Shareholder profits should be questioned

3. There should be no disconnections during the cold of winter and heat of summer. No one should be

disconnected from the system, regardless of season, and they definitely should not be charged to reconnect.

There should be a moratorium all summer and, if possible, all year.

4. The discount system needs improvement. Enrollment in discount rates should be easier, and there should be limited required proof eligibility. Studies show most people self-report accurately.

5. Customers should not end up paying more when going electric.
Currently, switching from gas to electricity results in a rate increase. This is counterproductive to the climate and justice goals. In future rate designs, customers should see bills decrease when they switch to clean heating and cooling.

Thank you for your consideration,

Maria Bartlett

26 Jenkins Road

Andover, MA 01810

From: Michael Duclos
To: Rates WG (ENE)
Cc: Mike_Duclos_icloud
Subject: Long-Term Ratemaking Draft Study
Date: Thursday, November 14, 2024 11:23:35 AM

VIA ELECTRONIC FILING

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114
rates.wg@mass.gov

RE: Long-Term Ratemaking Draft Study

I respectfully submit the following comment in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

I am a member of the Heat Smart Alliance, a volunteer organization dedicated to facilitating the the replacement of existing home fossil fuel heating systems with electric heat pumps and heat pump water heaters, and so am very familiar with the vexing issue of asking people to convert from fossil gas to heat pumps and to pay more, not less, for energy after making that change, which is extremely counterproductive to our GHG reduction efforts. https://heatsmartalliance.org/

I was a Commissioner on Governor Baker's Commission on Clean Heat, which struggled with this issue, and in the final Report the recommendation was made for a rate adjustment mechanism to address this pricing conundrum. https://www.mass.gov/info-details/learn-about-the-commission-on-clean-heat#:~:text=On%20September%2020%2C%202021%2C%20the,emission%20reductions%20from%20heating%20fuels.

I have followed and commented in detail the development of the Mass. Clean Energy and Climate Plan (CECP), and understand the legal requirements placed upon the signing by Governor Baker of the Commonwealth by the Climate Act of 2021.

So I have devoted considerable time and attention to this problem, to which we badly need a solution, particularly in light of the recent federal election results.

To be clear, absent a resolution to the issue of increasing energy costs for those converting

from natural gas to heat pumps for space and water heating, I firmly believe Commonwealth will fail to achieve the legally mandated GHG emissions reduction and will be sued as a result.

I see this as shameful in light of the implications of Climate Change for all of us.

As the Executive Summary of the UN's 2024 Emissions Gap report illustrates in Table ES.1 we in the US were Leaders in per capita GHG emissions in 2023. https://wedocs.unep.org/bitstream/handle/20.500.11822/46443/EGR2024_ESEN.pdf?sequence=20

We badly need to reverse course rapidly.

As you finalize your study, please ensure the solutions you present will result in the following outcomes:

We should seriously consider reducing electricity costs for lower income individuals in the Commonwealth, subsidized by money coming from increased natural gas rates as a matter of equity and to provide a financial signal to the market that the Commonwealth is serious about meeting our GHG legal obligations. Since the use of a 'carbon tax', the most direct and effective mechanism to drive change is so politically problematic, other ways need to be explored to move the fossil gas / electricity cost balance point in a favorable direction.

I recommend considering this action in concert with the following actions:

Wealthier people will pay more for our energy system. Part of the funding streams or structure must be progressive such that people with less are paying less, and people with more are paying more. Not only do lower and middle-class customers already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

Shareholders will cover more costs. Utilities should have a limited ability to recover any revenue shortfall as a result of lowering rates. This will encourage more careful investment management. Massachusetts has one of the highest rates of return on equity in the northeast, averaging between 10 and 11 percent. Shareholder profits should be questioned

Utilities will not be shut off, especially during the summer. No one should be disconnected from the system, regardless of season, and they definitely should not be charged to reconnect.

In particular, residents need permanent protection from disconnection when extreme heat is most likely. We already protect people from extreme cold by having a winter moratorium, which prohibits disconnections of low-income households from November 15-March 15 (and is usually extended to April 1). As temperatures rise and low-income people are less likely to have air conditioning, stopping utility shutoffs has become even more urgent. There should be a moratorium all summer and, if possible, all year.

Nearly all or all eligible customers will receive discounts. Enrollment in discount rates should be easier, and there should be limited required proof of eligibility.

A MAPC analysis of the 2016-2020 American Community Survey microdata estimates only 28.3% of eligible households are on the existing discount R-2 rate. It is possible that under enrollment is higher in communities with higher percentages of residents of color. For example, the City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-eligible households. The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process. There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification)**Customers will not be punished for going electric.**

Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is EXTREMELY counterproductive to our climate and justice goals. In future rate designs, customers should see bills decrease when they switch to clean heating and cooling.

Thank you for considering these comments.

Sincerely, Michael B. Duclos

Stow, MA 01775

978-793-3189

From: Nancy Polan
To: Rates WG (ENE)
Subject: Long-Term Ratemaking Draft Study
Date: Friday, November 15, 2024 3:25:05 PM

RE: Long-Term Ratemaking Draft Study

I respectfully submit the following comment in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

As you finalize your study, please ensure the solutions you present will result in the following outcomes:

Wealthier people will pay more for our energy system. Part of the funding streams or structure must be progressive such that people with less are paying less, and people with more are paying more. Not only do lower and middle-class customers already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

Shareholders will cover more costs. Utilities should have a limited ability to recover any revenue shortfall as a result of lowering rates. This will encourage more careful investment management. Massachusetts has one of the highest rates of return on equity in the northeast, averaging between 10 and 11 percent. Shareholder profits should be questioned

Utilities will not be shut off, especially during the summer. No one should be disconnected from the system, regardless of season, and they definitely should not be charged to reconnect.

In particular, residents need permanent protection from disconnection when extreme heat is most likely. We already protect people from extreme cold by having a winter moratorium, which prohibits disconnections of low-income households from November 15-March 15 (and is usually extended to April 1). As temperatures rise and low-income people are less likely to have air conditioning, stopping utility shutoffs has become even more urgent. There should be a moratorium all summer and, if possible, all year.

Nearly all or all eligible customers will receive discounts. Enrollment in discount rates should be easier, and there should be limited required proof of eligibility.

A MAPC analysis of the 2016-2020 American Community Survey microdata estimates only 28.3% of eligible households are on the existing discount R-2 rate. It is possible that under enrollment is higher in communities with higher percentages of residents of color. For example, the City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-eligible households. The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process. There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification).

Customers will not be punished for going electric.
Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is counterproductive to our climate and justice goals. In future rate designs, customers should see bills decrease when they switch to clean heating and cooling.

Thank you for your consideration,

Nancy Polan

nancypolan@gmail.com

10 Pine Meadow Dr. Southampton, MA

NRG Energy, Inc.
804 Carnegie Center
Princeton, NJ 08540

NRG Energy Comments on Long-Term Ratemaking Draft Study
November 15, 2024

I. Introduction

NRG Energy Inc. ("NRG") thanks the Interagency Rates Working Group ("IRWG") for soliciting comments from stakeholders on the Long-Term Ratemaking Draft Study that E3 presented on October 28, 2024.

The NRG Retail Companies provide competitive electric generation supply as well as other energy-related products and services to residential and non-residential customers in the Massachusetts competitive retail market. The NRG Retail Companies also currently provide electric generation supply to more than 30 cities and towns in Massachusetts through municipal aggregation programs. Across North America, NRG serves 8 million energy and energy services customers, including through its smart-home company, Vivint, which has a technology-development office in Boston.

NRG appreciates E3's work to complete the Draft Study and the focus on "Time-Varying Rates." In response to the Draft Study, NRG provides the following recommendations for both improving the Study and for the IRWG to consider as they develop recommendations:

1. The IRWG should clarify that the goal of regulatory and ratemaking reform is to achieve least-cost total system outcomes (not just least-cost distribution system upgrades)

2. To inform the IRWG's recommendations and future regulatory proceedings in MA, the Study should include the following analysis:

    A. An estimate comparing total system savings of an "opt-out" vs "opt-in" TOU

    B. An estimate of the peak:off peak ratio under "cost-based" TOU and the total system savings based on different peak:off peak ratios for TOU

    C. Qualitative considerations for TOU and recommendations for how Low-Moderate Income ("LMI") customers can benefit directly and indirectly from TOU while receiving appropriate rate protections

3. The Study and the IRWG should acknowledge and take account of Massachusetts' restructured marketplace. More specifically:

A. The Study and IRWG should include consideration of what can be done to facilitate TVR for retail supply/muni agg customers (e.g. access to data, well-functioning utility backend systems)

B. The IRWG should recommend a bundled TOU rate that includes all system costs (T&D, energy, ancillary, capacity, emissions)

In our comments below, NRG will provide brief general commentary on the Study and then will provide greater detail on our three overarching recommendations highlighted above.

Before we detail the three recommendations for the Draft Study and for the IRWG, one procedural recommendation is to invite ISO-NE to an IRWG meeting to discuss cost causation, and the hours of the year that drive new investments in transmission and capacity. Alternatively, the IRWG could send ISO-NE a list of questions and share the answers on the IRWG website. The hours of the year that impact cost allocation (e.g. annual coincident system peak hour for capacity) and that impact cost causation (e.g. likely the top 100-200 hours of the year for the Installed Capacity Requirement) are different. Given that MA represents such a high percentage of the total load in ISO-NE, MA consumers will realize limited benefits from reducing consumption during just "cost allocation" hours. Effective rate design will need to send strong price signals during the "cost causation" hours.

We appreciate that Kerry Schlichting from ISO-NE attended the November 12 IRWG meeting and highlighted the presentations that ISO-NE had provided to the NECPUC DR Working Group. While those presentations were informative, key questions remain, including:

- In ISO-NE's "2050 Transmission Study," ISO-NE highlighted that reducing peak load by 1 GW could save consumers $750M-$1.5B in transmission costs. When ISO-NE refers to "peak load," how many hours of the year is the ISO referring to and when would those hours be expected to occur? In other words, when would customers need to reduce load to avoid or defer those transmission investments?
- Similarly, how many hours of the year would customers need to reduce load to avoid a new need for new capacity investments?

As such, we urge the IRWG to invite ISO-NE to present on the hours of the year and the drivers behind new investments in transmission and capacity or to answer the questions above.

II. The IRWG Should Clarify that the Goal of Regulatory And Ratemaking Reform is to Achieve Least-Cost Total System Outcomes

The "IRWG Objectives" listed on Slide 4 of the October 28 presentation include: "Long-Term Ratemaking Study to present a vision and recommendations for advancing ratemaking mechanisms and rates for a decarbonized energy system and the associated technologies and capabilities available. Regulatory and ratemaking mechanisms that incentivize least-cost

distribution system upgrades as the Commonwealth seeks to achieve its Clean Energy and Climate Plan targets through 2050."

Despite this objective, the Draft Study appropriately contains significant detail regarding non-distribution costs, including $7-$10 billion in transmission cost savings and projected wholesale prices in 2035 that include "generation capacity and transmission costs." Slide 22 highlights that "avoidable" costs comprise the majority of today's bill, with avoidable costs including "energy, generation capacity, transmission capacity, and distribution capacity."

While regulatory and ratemaking reform should target avoidable distribution costs, consumers in MA would forego billions of dollars in savings if the reform failed to encompass non-distribution costs. Consumers would also fail to realize the promise of AMI deployments. The DPU doesn't have jurisdiction over ISO-NE, but as ISO-NE made clear on Slide 11 of E3's presentation, reductions in peak demand at the retail-level have a tremendous impact on bulk-system costs.

NRG recommends that going forward, the IRWG modify the framing so it states: "Regulatory and ratemaking mechanisms that incentivize least-cost total system outcomes, including avoidable transmission, distribution, capacity, energy, ancillary services, and emissions costs."

III. To Inform the IRWG's Recommendations and Future Regulatory Proceedings in MA, the Study Should Include the Following Analysis:

A. An estimate comparing total system savings of an "opt-out" vs "opt-in" TOU

The Mass. Department of Public Utilities ("DPU") will need to decide whether customers in MA should join customers from twelve other utilities in the United States who currently have default or mandatory opt-out TOU rates.[1] The Study and the IRWG can play an important role in informing the DPU by estimating the total system savings that MA would realize under both opt-in and opt-out scenarios.

The Brattle Group estimates that residential TOU participation is approximately 20% for opt-in and 85% for opt-out.[2] Using Brattle analysis of the level of peak demand reductions that can be expected from opt-out customers at different peak:off-peak pricing ratios, at a ratio of 4:1, peak demand reductions could equal approximately 10% without technology and 17% with technology.[3] Therefore, under an opt-out scenario with technology, one could expect a nearly 15% reduction in peak demand.[4] Under an opt-in scenario with technology, one could expect closer to a 4% reduction in peak demand.[5] Therefore, under opt-out, there would be an additional

[1] "Time-of-Use Rate Design and Roll-out: Learnings from Other Jurisdictions." Sanem Sergici, Ph.D, Brattle Group. Prepared for Maine PUC Docket No. 2024-00231. October 8, 2024. Slide 3
[2] Ibid, Slide 7
[3] Ibid, Slide 6
[4] To get this, we multiplied the 85% participation level times the 17% peak demand reduction expected at 4:1
[5] To get this, we multiplied the 20% times a 20.5% peak demand reduction expected at 4:1, since slide 8 states the peak demand reduction tends to be 20% higher for opt-in vs opt-out customer, and 1.2 times 17% is 20.5%

approximately 1 GW of peak demand reduction in MA at current load levels, and would grow over time as load levels increased. For context, ISO-NE has estimated that just 1 GW of peak demand reduction could reduce just transmission costs by $750 million-$1.5 billion dollars.[6]

We recommend that E3 build off the existing analysis from Brattle and ISO-NE (on transmission) to also calculate the difference in total system savings under opt-in vs opt-out including avoided capacity, energy, ancillary and distribution. E3 should be able to leverage the "Avoided Energy Supply Cost" study to conduct this analysis.

Using this analysis, as well as qualitative considerations, the IRWG can provide a recommendation regarding whether MA should incorporate default, TOU rates.

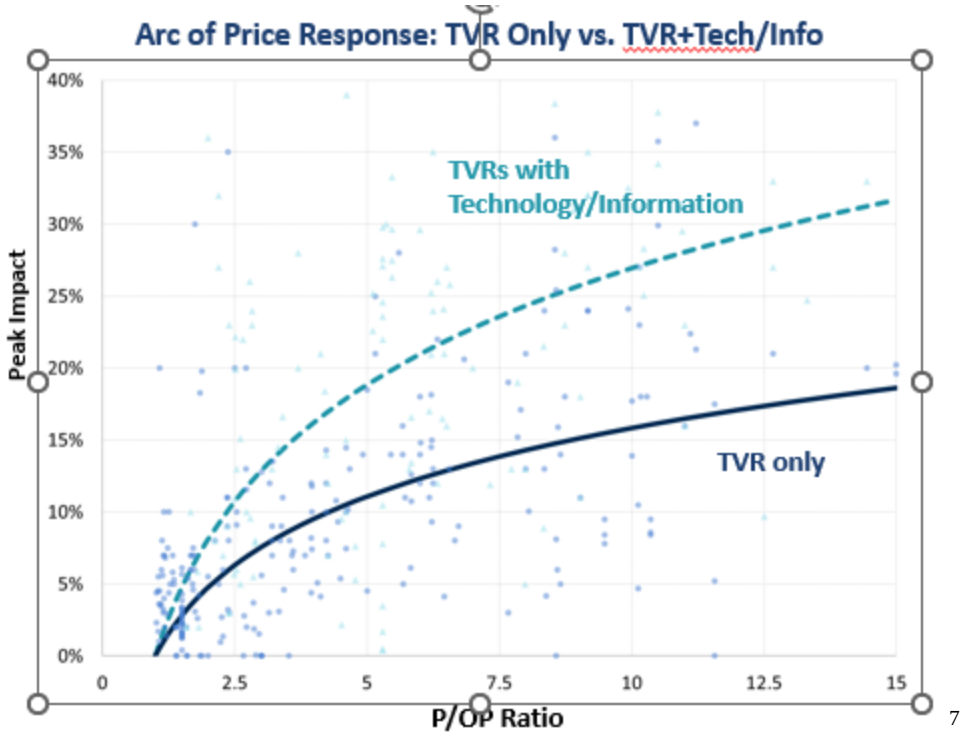
B. An estimate of total system savings based on different peak:off peak ratios for TOU

The Draft Study notes that "in a cost-based TOU rate, the differences between peak and off-peak pricing would reflect differences in avoidable system costs….in practice, peak vs. off-peak ratios are often designed by balancing demand elasticity (larger ratios) vs. perceived customer preferences (flatter)."

The DPU will need to decide whether to create a truly cost-based TOU rate or a TOU rate that blends avoided costs and other factors. The DPU will also likely need to decide the number of tiers for a TOU rate, the length of the peak period, and whether to include a Critical Peak Price.

To inform this decision, the Study should identify what the "cost-based" peak:off-peak ratio would be in MA and estimate total system savings based on varying levels of peak:off-peak ratios. The following chart suggests that the largest jumps in peak demand reductions occur as ratios increase from 2:1 to 4:1, with declining increases beyond 4:1.

[6] 2024_02_14_pac_2050_transmission_study_final.pdf (iso-ne.com). P. 16-17



[7]

A recent paper from the "Energy Institute at Haas" highlighted the outcome of TOU prices in the "Sacramento Municipal Utility District."[8] SMUD transitioned to three-tiered pricing in 2019 during non-holiday summer weekdays, moving from a constant rate of 13c per kilowatt hour (kwh) in 2018 for all consumption, to customers paying 28c/kwh from 5-8pm, 16c/kwh from noon-5pm and 8pm-midnight, and 12c/kwh from midnight to noon. The study states "we estimate that TOU pricing caused peak-hour AC use to decrease by 3.5 minutes per hour, a 15% reduction… If each has a 4kW air conditioning unit and it runs 3.5 fewer minutes in an hour, that is a savings of 0.233 kW per customer/hour, which adds up to 134 MW or about 7% of average hourly peak period load." In sum, a 2.3:1 super peak-off peak ratio reduced peak load by an estimated 7%.

NRG recommends "cost-based" peak:off peak ratios balanced against simplicity for customers. This would likely result in a three-tiered rate similar to SMUD's, with off-peak, peak, and super peak.

C. Qualitative Considerations for TOU and Recommendations for how Low-Moderate Income ("LMI") Customers Can Benefit Directly and Indirectly from TOU While Receiving Appropriate Rate Protections

[7] "Time-of-Use Rate Design and Roll-out: Learnings from Other Jurisdictions." Sanem Sergici, Ph.D, Brattle Group. Prepared for Maine PUC Docket No. 2024-00231. October 8, 2024. Slide 6

[8] "Do Time-of-Use Prices Deliver Energy Savings at the Right Time?" Aaron Smith. Energy Institute at Haas. Nov 1, 2024. https://energyathaas.wordpress.com/2024/11/04/do-time-of-use-prices-deliver-energy-savings-at-the-right-time/

Massachusetts has the benefit of following several states who have implemented TOU rates. In addition to the quantitative analysis that we recommended above, the IRWG should summarize key lessons learned from these other states, especially as they relate to opt-in vs opt-out and peak:off-peak ratios. One common theme is the importance of extensive customer education, well ahead of any implementation of new rates. In our May 31 comments, NRG provided a list of resources for the IRWG to consider. Slides 14-19 of the recent presentation from Sanem Sergici to the Maine PUC offer several takeaways for the IRWG to consider.

The Study and the IRWG should also recommend how to ensure LMI customers benefit from the AMI deployment and TOU rates, both through direct participation and indirectly through bill savings due to avoided system costs. LMI customers often participate in TOU at levels comparable to non-LMI customers and so should be given the opportunity to participate in TOU rates in MA, with appropriate protections.[9]

IV. The Study and the IRWG should acknowledge and take account of Massachusetts' restructured marketplace. More specifically:

A. The Study and IRWG should include consideration of what can be done to facilitate TVR for retail supply/muni agg customers

Given the high percentage of customers in MA that receive their energy supply from municipal aggregators or licensed retail suppliers, the Study should survey municipal aggregators and retail suppliers and then outline how to facilitate TVR for these customers. Access to data and well-functioning utility backend systems are necessary to facilitate TVR. Based on NRG's experience in several other retail choice states, three foundational steps for EDC's to take are:

- Provide watt level, 48 hour or less interval-level data from AMI meters to licensed suppliers serving retail customers in Massachusetts via .CSV flat files
- Settle all retail load at the ISO and bill all load using actual interval usage data, and not load profile, and calculate and provide individual ICAP tags for customers. Using load profile data will cause a mismatch between actual consumption and energy bills.
- Not require customers to re-authorize their competitive suppliers once AMI is deployed and customers are migrated to a customer portal; the more hoops that customers must jump through to access their data, the less likely they are to access their data

B. The IRWG should recommend a bundled TOU rate that includes all system costs (T&D, energy, ancillary, capacity, emissions)

Customers should have the opportunity to control as much of the "avoidable" portion of their bill as possible. Having separate TOU rates for different parts of the bill could confuse customers. A bundled TOU rate would send a single, streamlined price signal to customers that properly

[9] "Time-of-Use Rate Design and Roll-out: Learnings from Other Jurisdictions." Sanem Sergici, Ph.D, Brattle Group. Prepared for Maine PUC Docket No. 2024-00231. October 8, 2024. Slide 9

reflects total avoidable costs during different hours of the year. We recognize that implementation would need to be carefully thought through given the restructured market in MA, but the IRWG or the DPU could convene stakeholders on how to implement a bundled rate given the restructured market in MA.

Eventually, customers could see locational-specific elements in their TOU rates for parts of the distribution system expecting high potential load growth or a need for load reductions in certain hours.

Conclusion

NRG thanks the IRWG for the consideration of these comments and staff's work in leading the IRWG. We look forward to continuing to engage in the IRWG stakeholder process.

Sincerely,

Greg Geller
Founder and CEO, Stack Energy Consulting (representing NRG)
P: (781) 808-6616
E: greg@stackenergyconsulting.com
W: Stack Energy Consulting

STACK ENERGY
CONSULTING

From: Patricia Ramsey
To: Rates WG (ENE)
Subject: Long-Term Ratemaking Draft Study
Date: Thursday, November 14, 2024 11:14:30 AM

My name is Patricia Ramsey and I live in Amherst, MA. I am very concerned about how energy costs affect low income families and respectfully submit the following comment in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

As you finalize your study, please ensure the solutions you present will result in the following outcomes:

Wealthier people will pay more for our energy system. Part of the funding streams or structure must be progressive such that people with less are paying less, and people with more are paying more. Not only do lower and middle-class customers already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

Shareholders will cover more costs. Utilities should have a limited ability to recover any revenue shortfall as a result of lowering rates. This will encourage more careful investment management. Massachusetts has one of the highest rates of return on equity in the northeast, averaging between 10 and 11 percent. Shareholder profits should be questioned

Utilities will not be shut off, especially during the summer. No one should be disconnected from the system, regardless of season, and they definitely should not be charged to reconnect.

In particular, residents need permanent protection from disconnection when extreme heat is most likely. We already protect people from extreme cold by having a winter moratorium, which prohibits disconnections of low-income households from November 15-March 15 (and is usually extended to April 1). As temperatures rise and low-income people are less likely to have air conditioning, stopping utility shutoffs has become even more urgent. There should be a moratorium all summer and, if possible, all year.

Nearly all or all eligible customers will receive discounts. Enrollment in discount rates should be easier, and there should be limited required proof of eligibility.

A MAPC analysis of the 2016-2020 American Community Survey microdata estimates only 28.3% of eligible households are on the existing discount R-2 rate. It is possible that under enrollment is higher in communities with higher percentages of residents of color. For example, the City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-

eligible households. The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process. There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification).

Customers will not be punished for going electric.
Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is counterproductive to our climate and justice goals. In future rate designs, customers should see bills decrease when they switch to clean heating and cooling.

Thank you for your consideration,

Patricia Ramsey

70 Larkspur Drive,

Amherst, MA 01002

From: Patricia Weinmann
To: Rates WG (ENE)
Subject: Long-Term Ratemaking Draft Study
Date: Wednesday, November 13, 2024 9:16:36 PM

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Hello.

I respectfully submit the following comments in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

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Thank you for your consideration,

Patricia-Maria Weinmann

Boston, MA 02130

From: Paul Skudder
To: Rates WG (ENE)
Subject: SUBJECT: Long-Term Ratemaking Draft Study
Date: Friday, November 15, 2024 2:29:57 PM

VIA ELECTRONIC FILING

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114
rates.wg@mass.gov

RE: Long-Term Ratemaking Draft Study

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Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is counterproductive to our climate and justice goals. In future rate designs, customers should see bills decrease when they switch to clean heating and cooling.

Thank you.

Paul Skudder

From: Peter Snoad
To: Rates WG (ENE)
Subject: Comments re Long-Term Ratemaking Draft Study
Date: Wednesday, November 13, 2024 9:39:24 PM

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Greetings:

I respectfully submit the following comments in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

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Thank you for your consideration.

Sincerely,

Peter Snoad

50 Dunster Road, Jamaica Plain, MA 02130

Peter Snoad

"Fierce partisanship....has long been a safe proxy for the real divide, which is a nation split into two camps: those who believe in white supremacy and those who don't."
-- *Kai Wright*

"Love is the question and the answer."
-- *Mel King*

I respectfully acknowledge that I am an uninvited guest who lives, works, and plays on the unceded territory of the Massachusett, Pawtucket, Wampanoag, and Nipmuc peoples who have stewarded these lands and waters since time immemorial.

http://www.petersnoad.com
Read my plays at the New Play Exchange

Upcoming:

Kindred Spirits
Seoul Players
Seoul, South Korea
November 8-16, 2024

Now What? (staged reading)
Winner, Kaplan New Plays Competition
Eventide Theatre
Dennis, MA

December 8, 2024

Recent:

Kindred Spirits
The Artistic Home
Chicago, IL

Simple Pleasures
Winters Theatre Company
Winters, CA

Going Wild (reading)
Arts Fort Worth
Fort Worth, TX

From: Regina LaRocque
To: Rates WG (ENE)
Subject: Long-Term Ratemaking Draft Study
Date: Friday, November 15, 2024 2:04:06 PM

VIA ELECTRONIC FILING

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114
rates.wg@mass.gov

RE: Long-Term Ratemaking Draft Study

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Thank you for your consideration,

Regina LaRocque, MD

49 Madison Road, Wellesley, MA 02481

From: Rick Rohrer
To: Rates WG (ENE)
Subject: electricity rates!
Date: Sunday, November 17, 2024 5:25:30 PM

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Hello.

I respectfully submit the following comments in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

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Thank you for your consideration,

Richard J. Rohrer, MD

Lexington MA 02421

From: Luckmann, Roger
To: Rates WG (ENE)
Subject: Long-Term Ratemaking Draft Study
Date: Friday, November 15, 2024 2:12:08 PM

I submit the following comment in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

1. If it is if a realistic option to reduce return for investors while maintaining financial viability for the utilities, that should be considered as a means to offset revenue losses from reduced rates.
2. A heat pump rate could be offered selectively to customers converting from gas to electric heat to make that switch more attractive to gas customers assuming it is acceptable to offer the reduction fo some but not all adopters of heat pumps.
3. A rate reduction based on a maximum percent of income should be a starting point for cutting rates for low income customers, but should be modifiable based on some criteria such as family size and disabilities.
4. Consider further reducing Mass Save heat pump incentives for upper income customers more than is proposed in the Mass Save three-year plan while considering phasing in some residential building performance standards to ensure upper income houses will have to move to heat pumps even in the absence of large financial incentives. This would be another means to make up for rate collection shortfalls.

Roger Luckmann MD MPH
Professor Emeritus
Family Medicine and Community Health
UMass Medical School
44 Grove Road
Natick, MA 01760

Elders Climate Action Mass

From: Seth Wilpan
To: Rates WG (ENE)
Subject: Long-Term Ratemaking Draft Study
Date: Thursday, November 14, 2024 7:59:24 AM

RE: Long-Term Ratemaking Draft Study

I respectfully submit the following comment in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

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Thank you for your consideration,

Seth Wilpan Florence, MA

From:	Sherry Morgan
To:	Rates WG (ENE)
Subject:	electricity rates
Date:	Thursday, November 14, 2024 12:26:32 PM

To: DPU

Hello, I am a member of Elders Climate Action- Massachusetts. I am submitting these comments to the working group on rate reform.

1. Wealthier customers should pay more for our energy system

Any revenue lost by instituting new discount rates should be recovered by customers making over 120% of the state's median income, with increasing amounts paid by customers in higher brackets. Not only do customers making up to 120% of SMI already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

2. Shareholders should make a lower return on equity as Massachusetts has one of the highest rates of return on equity in the northeast (averaging between 10 and 11 percent.

Utilities should have limited ability to recover revenue shortfall, which will encourage more careful investment management.

3. No one should be disconnected from the system, regardless of season, and they should not be charged to reconnect.

Residents need permanent protection from disconnection when extreme heat is most likely. We already protect people from extreme cold by having a winter moratorium, which prohibits disconnections of low-income households from November 15-March 15 (and is usually extended to April 1). As temperatures rise and low income people are less likely to have air conditioning, stopping utility shutoffs has become even more urgent.

4. Enrollment in discount rates should be easier, and required proof of eligibility should be limited.

- A MAPC analysis of the 2016-2020 American Community Survey microdata estimates only 28.3% of eligible households are on the existing discount R-2 rate.
- It is possible that under enrollment is higher in communities with higher percentages of residents of color. For example, the City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-eligible households.
- The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process.
- There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification).

5. Customers should not be punished for going electric.

- Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is counterproductive to our climate and justice goals. In future rate designs, customers should not be punished for going electric.

6. The DPU should investigate adopting a performance-based regulation framework.

Regulatory goals could include measures such as excellent operational performance, customer empowerment and satisfaction and reasonable, equitable and affordable rates.

Sincerely,
Sherry Morgan
South Deerfield, MA

November 22, 2024

VIA ELECTRONIC MAIL ONLY
Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114
rates.wg@mass.gov

Subject: Comments on the Interagency Rates Working Group Long-Term Ratemaking Draft Study

Dear Interagency Rates Working Group Members,

Sierra Club appreciates the opportunity to provide feedback on the Interagency Rates Working Group's (IRWG) Long-Term Ratemaking Draft Study. We strongly support the IRWG's rate design and regulatory goals. Sierra Club agrees that effective rate design is critical to advancing transportation and building electrification, promoting efficient use of the grid through appropriate price signals, and minimizing impacts on ratepayers, especially low- and moderate-income customers. We also support the IRWG's objectives of identifying regulatory and ratemaking mechanisms that incentivize efficient grid investments and promote distributed energy resources (DERs) for decarbonization.

Sierra Club acknowledges the substantial effort involved in preparing these studies. Both the Long-Term Ratemaking Draft Study and Near-Term Rates Report provide valuable insights and analysis that greatly enhance informed discussions and decision-making, and we commend the IRWG and the E3 consultant team for their thoughtful work.

In the comments below, we offer our thoughts and recommendations on how Massachusetts can effectively implement long-term ratemaking strategies in conjunction with the rollout of advanced metering infrastructure (AMI). We also offer recommendations with respect to the roll-out of near-term rate designs. Sierra Club retained Synapse Energy Economics, Inc. to assist with the preparation of these comments.

I. TIME-VARYING RATES

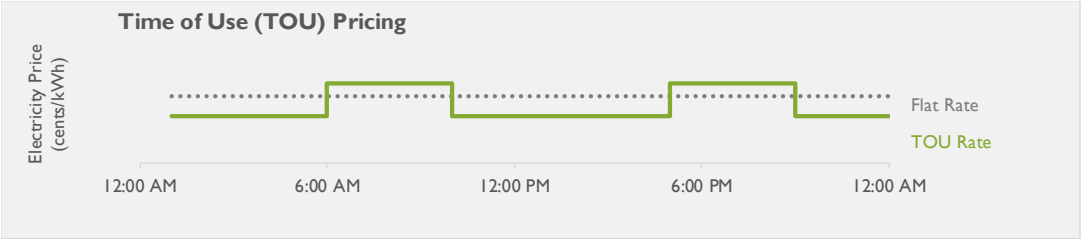
Sierra Club appreciates the IRWG's focus on minimizing peak demand growth in order to limit the cost associated with electrification. We are pleased that the Long-Term Draft Study emphasizes the potential for time-varying rates to mitigate peak demand, while also acknowledging that some end uses (such as heating) will have limited flexibility. Sierra Club also notes that lower-income populations will likely have less-flexible loads, as lower-income

customers are less likely to have electric vehicles.[1] While Sierra Club supports the widespread adoption of time-varying rates in the Commonwealth, we emphasize that the roll-out of such rates should be gradual, beginning with well-marketed opt-in time-varying rates before transitioning to default (opt-out) time-varying rates coupled with adequate protections for vulnerable populations, as discussed in more detail in the following sections. Further, we observe that Critical Peak Pricing (CPP) tends to produce much greater load shifting than time-of-use (TOU) rates, and thus should be offered as an opt-in rate and marketed to customers as soon as advanced metering infrastructure is installed.

a. Assessment of Time-Varying Rate Options

There are multiple types of time-varying rates, each with its own advantages and disadvantages. We briefly describe these below, followed by our recommendations for adoption of time-varying rates in Massachusetts.

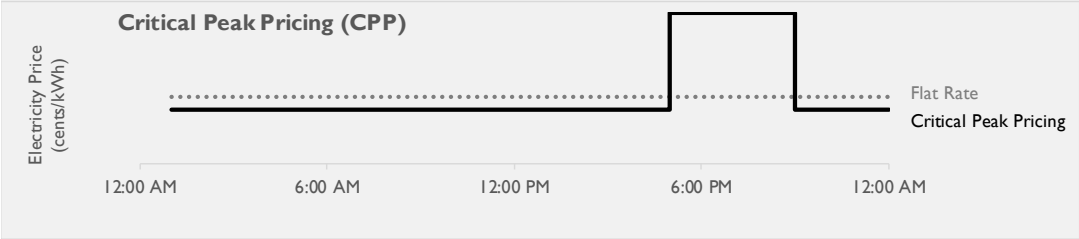
Time-of-Use (TOU) Rate: Under this rate design, electricity prices vary during the day according to a set schedule, which is designed to roughly represent the costs of providing electricity during different hours. A simple TOU rate would have two different prices: one for on-peak periods and another for off-peak periods. This rate design approach can provide customers with a more accurate price signal, which encourages customers to shift their usage from on-peak periods to off-peak periods, thereby reducing system costs. It is also relatively simple to understand, and can be designed with mild on-peak to off-peak price ratios, thereby mitigating risk for customers who cannot always shift their load away from peak periods. A simple TOU rate is illustrated below in green, as compared to a standard flat rate (dotted line).



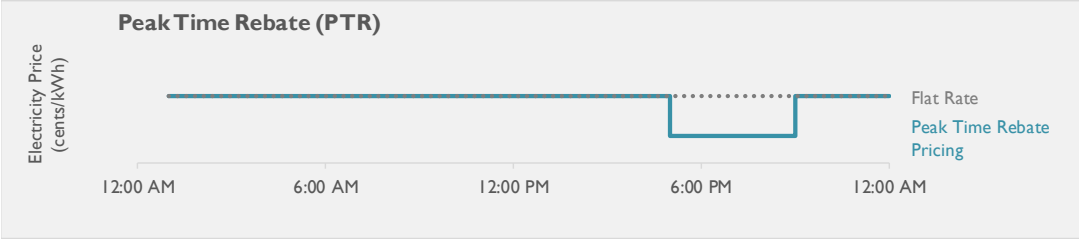
Critical Peak Pricing (CPP): A critical peak price would assess an extremely high price during only a small number of event hours per year, in return for a lower price during the rest of the hours of the year. Customers are generally notified the day before an event. For example, a utility may call ten critical peak pricing events during the year, each of which lasts for four hours. During the events, electricity is priced at $1.00/kWh. Critical peak pricing can be easily layered on top of a standard TOU rate. The advantage of this rate is that it can effectively target

[1] Although electric vehicles are becoming more affordable, lower-income households tend to own fewer vehicles in general, with 30% of low-income households not owning or leasing a vehicle at all. *See:* Bureau of Transportation Statistics. "The Household Cost of Transportation: Is it Affordable?" July 2, 2024. Available at https://www.bts.gov/data-spotlight/household-cost-transportation-it-affordable.

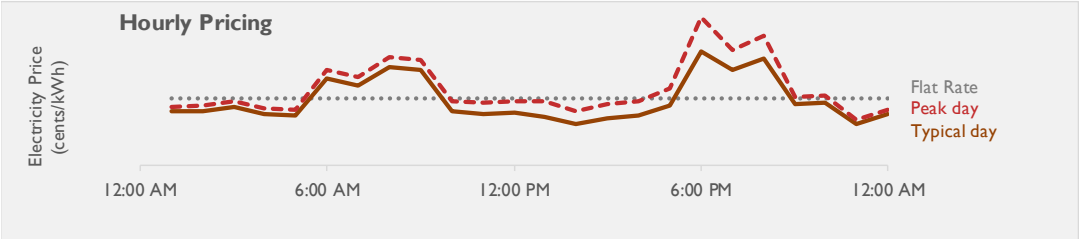
the hours when the system is most stressed, and it can provide significant cost savings for customers who shift load. Because of the strong price signal and the relative infrequency of events, customers on CPP rates tend to respond strongly by shifting a large amount of load to non-event hours. A CPP rate is illustrated below in black, as compared to a standard flat rate (dotted line).



Peak Time Rebates (PTR): A peak-time rebate is the inverse of a CPP rate. Instead of paying a higher price during event hours, a customer is rewarded for reducing his or her demand during those hours. While PTR is very popular with customers, a key challenge with this rate structure is measuring the baseline of what the customer's demand would have been. It also does not provide as strong of an incentive for customers to shift load, as customers tend to react more strongly to the risk of paying higher prices than they do to the reward of saving money. A PTR rate is shown below in blue, as compared to a standard flat rate (dotted line).



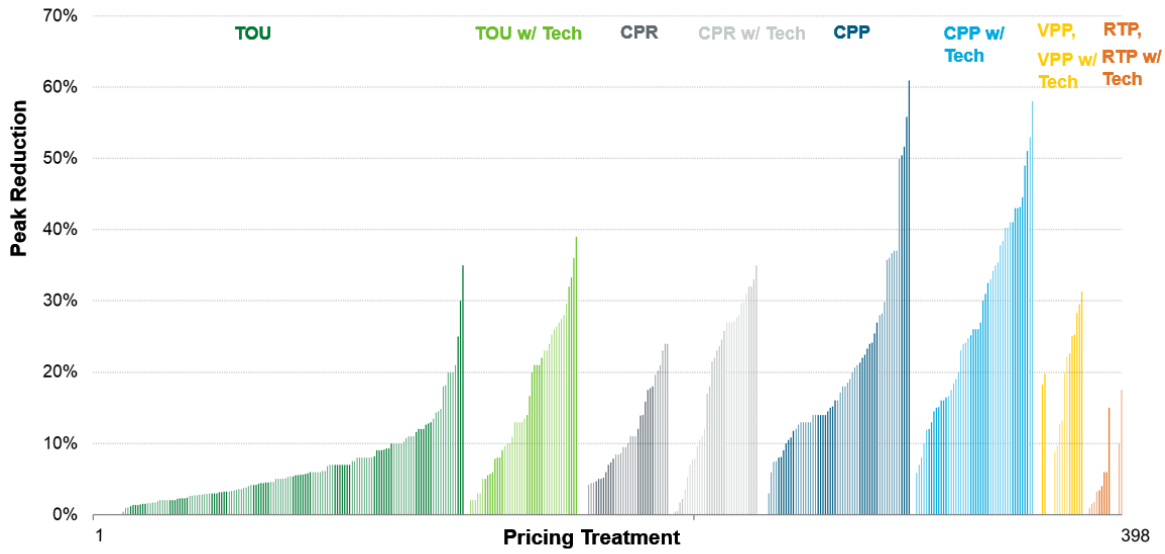
Hourly Pricing: Under hourly pricing, electricity rates change hourly based on actual system costs. The manner in which rates change is not pre-set; rather, rates change dynamically in response to system conditions. This form of rate design is generally too complex for most residential customers. An example of hourly pricing is illustrated below for both a peak day and a typical day, as compared to a standard flat rate (dotted line).



As noted above, peak time rebates tend to produce less load shifting than other time-varying rates and require the establishment of a counterfactual level of consumption for each customer. Hourly pricing is too complex for most customers and is therefore unlikely to produce significant benefits. In contrast, both critical peak pricing and time-of-use rates have potential to provide substantial benefits in Massachusetts.

Critical peak pricing is particularly promising. Research from the Brattle Group covering 79 pilots and programs shows that the median TOU rate tends to achieve peak load reductions of approximately 7-8%, while the median CPP rate produces peak load reductions of 20-25%, or approximately three times more than TOU rates, as shown in the figure below.

FIGURE 1. BRATTLE PEAK REDUCTION EVIDENCE FROM ~400 TREATMENTS BY RATE TYPE[2]



Source: Results from 79 pricing pilots and programs and 398 individual treatments in the Arcturus database.

b. Peak Period Demand Charges

Demand charges (beyond a very small charge related to a customer's line transformer) are not appropriate for most residential customers, as they are difficult to understand. While peak period demand charges represent an improvement over non-coincident demand charges, they are generally less efficient than other time-varying rates, particularly CPP. This is because during the peak periods, the demand charge only encourages customers to not exceed their monthly peak demand, since reducing demand below his or her monthly maximum will have no financial

[2] Sergici, Sanem. Time-of-Use Rate Design and Roll-out: Learnings from Other Jurisdictions. Maine PUC Docket No. 2024-00231. October 8, 2024, slide 5.

benefit for the customer. In contrast, a time-of-use rate encourages customers to reduce consumption during all hours of the on-peak window, because the customer avoids the peak period price for all kilowatt-hours not consumed. For these reasons, Sierra Club does not recommend pursuing peak period demand charges.

c. Opt-In vs. Opt-Out Rates

Sierra Club recommends introducing rates on an opt-in basis, with the potential to transition to default TOU rates after customers have gained experience with opt-in rates. Stakeholders should also consider that effectively marketed opt-in CPP rates may even produce *greater* demand reductions than default (opt-out) TOU rates. This is because under default (opt-out) TOU rates, a large portion of customers remain unengaged. These customers may be unwilling or unable to shift load, or they may lack awareness of the fact that prices vary by time of day. For this reason, the average load reduction under default TOU rates tends to be quite low. Indeed, the Brattle Group found that after default TOU had been in place for several years in Ontario, peak load reductions had declined to approximately 1 percent.[3]

In contrast, aggressively marketed opt-in rates may be able to achieve similar, or even greater levels of peak load reductions as default TOU. As discussed above, CPP tends to produce much greater load-shifting per customer than TOU rates, requiring fewer participating customers to achieve sizeable load reductions. For example, Nova Scotia Power's recently-filed evaluation report[4] showed that opt-in CPP customers achieved approximately *four times* as much peak load reductions as opt-in TOU customers, as shown in the table below.

TABLE 1. TOU VERSUS CPP LOAD SHIFTING IN NOVA SCOTIA'S TIME-VARYING PRICING PILOT, YEAR THREE

Tariff	Average Absolute Reduction per Household		Average Percentage of Total Household Load Reduction	
	Morning Peak	Evening Peak	Morning Peak	Evening Peak
TOU	0.154 kW	0.153 kW	7.4%	7.0%
CPP	0.768 kW	0.943 kW	27.0%	32.2%

Source: Nova Scotia Power. Evaluation of the Time-Varying Pricing Pilot, Phase 3. Matter M11823. July 23, 2024

[3] Lessem, N., Faruqui, A., Sergici, S., and Mountain, D. The Impact of Time-Of-Use Rates in Ontario. *Public Utilities Fortnightly*. February 2017, at 59.

[4] Nova Scotia Power. *Evaluation of the Time-Varying Pricing Pilot, Phase 3.* Matter M11823. July 23, 2024. Available at https://uarb.novascotia.ca/fmi/webd/APP/connector/0/855/dl/20240731+NSPI+to+NSUARB+TVP+Pilot+Program+Year+Three+Evaluation+Report.pdf.

d. Customer Protections

As discussed above, we recommend that time-varying rates be implemented on an opt-in basis initially, due to the potential for adverse bill impacts on vulnerable customers, as well as customer confusion and backlash.[5] Transitioning customers to time-varying rates can result in significant negative impacts for "structural losers"—those whose energy usage patterns are likely to lead to higher bills under time-varying rates, particularly if the customer is unable to shift load away from higher-priced on-peak periods. This is especially concerning for vulnerable populations, including low and middle-income households who do not have the means to absorb significantly higher costs, resulting in disproportionate hardship relative to other customers. It is therefore imperative that the potential impacts on vulnerable populations from default time-varying rates are well understood, and customer protections are in place prior to implementing default time-varying rates.

California provides a useful example of a jurisdiction that has made time-of-use rates the default option for residential customers while mitigating adverse impacts on customers, particularly vulnerable populations. The transition to time-of-use rates in California has been long, iterative, and deliberate, which has enabled regulators and the utilities to collect substantial quantities of empirical data and develop meaningful protections for vulnerable customers. In addition, the long timeline has allowed for robust marketing, education, and outreach, which has allowed customers to develop an understanding and familiarity with the rates prior to implementation. Finally, the default TOU rates in California have been implemented with mild on-peak to off-peak price ratios (generally less than 2:1) to enable customers time to learn how to shift their usage without experiencing large bill impacts in the early years.

The Commission required the California investor-owned utilities to evaluate customer responsiveness to time-varying rates, develop effective education and outreach plans, measure differences in impact by region and customer profile, and study other aspects of rate design and implementation. Specifically, the utilities were required to:

1) Conduct analysis regarding bill impacts on vulnerable customers and their ability to shift load.[6]
2) Establish a Marketing, Education, and Outreach (ME&O) working group; hire a consultant to advise the working group on appropriate metrics, goals, and strategies; and

[5] *See, for example:* Orenstein, Walker. Minnesota Star Tribune. "After backlash, Xcel retreats from Minnesota plan for higher peak rates, lower overnight costs." August 22, 2024. Available at https://www.startribune.com/after-backlash-xcel-retreats-from-minnesota-plan-for-higher-peak-rates-lower-overnight-costs/601127975.

[6] The Commission found that economically vulnerable customers in hot climate zones may be more likely than other customers to experience high summer bill impacts on a TOU rate while being unable to shift their energy usage patterns to mitigate these negative bill impacts. In order to ensure that economically vulnerable customers do not experience unreasonable economic hardship on TOU rates, the Commission in D.17-09-036 excluded customers eligible to receive income-based assistance in hot climate zones from being defaulted to TOU.

deliver a comprehensive ME&O plan that including a vision, metrics, timeline, and budgets through the implementation of default TOU rates.[7]

3) Provide significant information and support to customers well in advance of the transition to default rates, including:[8]

    a. A bill comparison tools to allow customers to choose the rate schedule that best meets their needs

    b. Information that will help potential benefiters opt-in to TOU rates ahead of default and enroll said customers

    c. Information to help structural non-benefiters understand what actions to take to mitigate bill impacts, and information on how to opt-out to other rate options (such as the inclining block rate) for structural non-benefiters who are unable to shift load sufficiently.[9]

    d. In addition, the Commission required the utilities to offer multiple rate options to customers, including an inclining block (non-TOU) rate, and provide bill protection (hold harmless provision) for a year.

We recommend that a similar process be adopted in Massachusetts if default time-varying rates are contemplated. Specifically, we recommend:

- Only time-of-use rates or peak-time rebates be considered for implementation on a default (opt-out) basis.
- The utilities provide significant education and outreach, including tools to help customers choose the rate schedules that best meet their needs.
- Any default TOU rate should initially have a mild price differential to mitigate the impacts on vulnerable customers, avoid rate shock, and allow customers time to develop familiarity with the rate and with load shifting strategies. Rates with larger differentials (or other types of TVR) can still be offered on an opt-in basis.
- In collaboration with stakeholders, the utilities should develop approaches for identifying low-to moderate income and medically vulnerable customers.
- Low-income, medically-reliant, and any other identified cross-section of vulnerable customer populations should be exempted, and instead only moved to a TOU rate if the customer affirmatively opts in. Identifying such customers requires thoughtful process and stakeholder engagement.

[7] CPUC Decision 17-12-023 in docket R.12-06-013, December 20, 2017, at 3-4. http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M201/K231/201231862.PDF
[8] *Id.*, at 10.
[9] *Ibid.*

II. HIGHER FIXED CHARGES

Both the Long-Term Ratemaking Draft Study and the Near-Term Rates Report note the potential for higher fixed charges to reduce electrification costs. As discussed below, while it may be reasonable to move recovery of some costs from the volumetric rate to the fixed charge, Sierra Club recommends that higher fixed charges be approached with caution so that rates provide efficient price signals and do not hinder affordability for low-income customers. Because low-income customers tend to use less electricity than higher-income customers, a fixed charge that is not income-graduated would tend to increase low-income customers' bills. Further, although income-graduated fixed charges can theoretically help protect low-income customers, we note that the implementation of this concept is challenging.

a. Recovering Policy Costs in Fixed Charges

Recovering certain policy costs in fixed charges may be appropriate to the extent that those policy costs are largely unrelated to volumetric energy consumption. If the policy costs are driven by volumetric energy consumption, then it is appropriate to continue to recover those costs through volumetric charges. For example, because our electricity system is not yet decarbonized, increasing electricity consumption generally results in increased greenhouse gas emissions. Thus, the principle of cost causation would hold that policy costs related to reducing greenhouse gas emissions should be recovered in proportion to energy consumption; i.e., through the volumetric charge.

b. Recovering Embedded Costs in Fixed Charges

Sierra Club has concerns regarding the concept of recovering embedded costs through fixed charges, as shown on slide 22 of the Long-Term Ratemaking Draft Study. This slide seems to suggest that an electric distribution utility's revenue requirement can be divided into a portion that is "embedded" or "sunk" and a portion that is "avoidable," and that the fixed charge would recover the "embedded" costs while the volumetric charge would be set to recover the "avoidable" or variable costs. This seems to imply that the volumetric rate should be set based on average variable cost, which is contrary to the principle of setting rates based on marginal costs to maximize economic efficiency.

Economic theory holds that economic efficiency is maximized when customers face prices that reflect *marginal* costs, not average variable costs. The marginal cost refers to the cost associated with meeting a relatively small increase in demand, and may be significantly higher than the average variable cost. Prices should not be set below the marginal cost, because doing so creates an economic inefficiency where the value customers derive from using an additional quantity of electricity (their marginal benefit) is less than the cost of producing that additional quantity of electricity (marginal cost).

It is also important to define the appropriate timeframe for determining marginal costs. In electric utility regulation, it is generally accepted that the rates that customers face should be relatively stable, and thus customers should not face wild swings in rates associated with capacity constraints and the lumpy investments required to relieve those constraints. Because short-run marginal costs can be highly variable (skyrocketing when there is a need to expand capacity, but falling to near-zero when there is adequate capacity), long-run marginal costs tend to be used in rate design. In *Principles of Public Utility Rates*, James Bonbright writes:

> I conclude this chapter with the opinion, which would probably represent the majority position among economists, that, as setting a general basis of minimum public utility rates and of rate relationships, the more significant marginal or incremental costs are those of a relatively long-run variety – of a variety which treats even capital costs or "capacity costs" as variable costs.[10]

In other words, electric utility rates should be set on the basis of long-run marginal costs in order to provide relatively stable, but efficient price signals. It is therefore critical that prices not be set below marginal cost (e.g., at the average variable cost), or rates will provide inefficient price signals.

To determine the proportion of revenue collected through volumetric rates, one should begin by multiplying the marginal cost by the volumetric sales. If the resulting revenue is less than the utility's revenue requirement (which is based on embedded costs), then rates can be scaled to meet the utility's revenue requirement, or the fixed charge can be set to recover the remaining revenue requirement.

c. Income-Graduated Fixed Charges

Both the Long-Term Ratemaking Draft Study and the Near-Term Rates Report reference the potential to use income-graduated fixed charges to mitigate impacts on low-income, low-usage customers. Income-graduated fixed charges are tiers of fixed charges that are intended to align with different levels of income. While this tiering is sensible in theory, it can be challenging to implement in practice. California's experience with introducing an income-graduated fixed charge highlights these challenges.

The main issue is whether and how to confirm whether lower-income customers are eligible for the lower fixed charges.[11] The California Public Utility Commission's decision on income-graduated fixed charges summarizes multiple approaches proposed by stakeholders, from relatively simple to increasingly complex, including: self-attestation without verification,

[10] James Bonbright, Principles of Public Utility Rates (New York: Columbia University Press, 1961), p. 336.
[11] Whether and how to confirm whether higher-income customers should be charged the higher fixed charge may also be an issue, though it seems to be a lower priority.

verification leveraging existing processes for low- and moderate-income programs (to the extent they differ from other processes/data sources), self-attestation with verification, and verification using credit agency or tax data.[12]

The challenge with the simplest process, self-attestation without verification, is fraud. Without verification, customers who may not deserve lower fixed charges may receive them. All other approaches have some form of verification, with the difference being the rigor of the verification.

The most straightforward way to verify low- and moderate-income customer eligibility for a portion of customers may be by confirming whether they are also enrolled in other existing low- and moderate-income programs. A key benefit of this approach is better alignment of definitions of low- and moderate-income customers across program efforts. A key challenge with leveraging existing low- and moderate-income programs for enrollment concerns the ability to reach all eligible customers. Specifically, existing low- and moderate-income programs may not reach all low- and moderate-income customers.

Another relatively straightforward way to verify eligibility for all customers may be by conducting verification using the same processes that are in use for existing low- and moderate-income programs. However, this can strain existing program resources and add cost as many more customers may require verification. In addition, the verification process may remove eligible customers if customers do not respond to the request for verification. In California, between 49 and 78 percent of households selected for verification in the California Alternate Rates for Energy (CARE) and Family Electric Rate Assistance (FERA) low-income programs were unenrolled when they did not respond to the income verification request. [13]

Challenges with the most complex processes—such as using new data sources and verification processes—concern relevance, access, security/privacy, cost, and time. The data in some sources may not directly tie to program eligibility requirements. For example, property tax assessment values may be a poor proxy for income, especially for low-income residents who may face higher tax assessments relative to their actual sale price of their homes.[14] Some sources of data may be inaccessible to utilities due to privacy concerns or customer protections. Utilities may not want to integrate income data into their databases, resulting in the need for a third-party

[12] The Public Utilities Commission of the State of California. Rulemaking 22-07-005. Order Instituting Rulemaking to Advance Demand Flexibility Through Electric Rates. *Decision Addressing Assembly Bill 205 Requirements for Electric Utilities.* March 27, 2024. Table 1: Opening Testimony Income Verification Proposals. Pages 38 and 39. Available at: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M531/K686/531686019.PDF.

[13] *Ibid.*

[14] Berry, Christopher. *Reassessing the Property Tax*. The University of Chicago, Harris School of Public Policy and the College. March 1, 2021. Available at: https://bpb-us-w2.wpmucdn.com/voices.uchicago.edu/dist/6/2330/files/2019/04/Berry-Reassessing-the-Property-Tax-3121.pdf

to manage the verification. Some sources of data may be costly to acquire. New verification processes can take years to implement and may require significant utility resources to support.

The California Public Utility Commission's decision relies on customer enrollment in its existing low income programs (CARE and FERA) for verification of customers eligible for income-graduated fixed charges as a starting point for simplicity and efficiency reasons. However, this creates only three tiers: CARE households would be assessed a $6 fixed charge, FERA households would be assessed a $12.08 fixed charge, and all other customers would be assessed a fixed charge of $24.15. Because there are only three tiers, customers with incomes of $50,000 or more are all assessed a fixed charge of $24 per month, which limits the fixed charge's ability to address equity concerns for more moderate-income customers.

The California Public Utility Commission will continue discussions of the more complex processes, and the process may evolve over time.[15] The Commission's decision also identifies an interest in designing and implementing an income verification process that can better differentiate between moderate- and high-income customers, as a lower proportion of moderate-income customers are enrolled in FERA as compared to the proportion of low-income customers enrolled in CARE.[16]

III. REGULATORY REFORMS

a. Performance-Based Ratemaking

The Long-Term Ratemaking Draft Study identifies Performance-Based Ratemaking (PBR) as a potential method to align utility performance with the public interest. PBR is generally defined as the combination of a multi-year rate plan and performance incentive mechanisms (PIMs).

- A multi-year rate plan is a set of rules governing the rates or allowed revenues of the utility for multiple years into the future, with a regulatory requirement that the utility not have another rate case until the end of a stay-out period.
- Performance incentive mechanisms are comprised of performance metrics, targets, and financial incentives (positive or negative) in order to encourage optimal utility performance in key areas.

The description of PBR on slide 23 of the Draft Study refers only to one component of PBR: the metrics and performance incentive mechanisms that track utility performance and potentially reward or penalize the utility based on that performance. Sierra Club acknowledges the potential for performance incentive mechanisms to better align utility performance with

[15] Id, Page 43.
[16] Id, Pages 43 and 44.

public policy objectives and supports their careful adoption. Whether or not PIMs should be combined with a multi-year rate plan is discussed below.

We also note that "earnings sharing mechanisms" are referenced in the performance-based ratemaking bullet, but we believe that this was intended to refer to "shared savings mechanisms" instead. Earnings sharing mechanisms are primarily implemented in the context of multi-year rate plans as a customer protection measure. They typically cap a utility's earnings at a certain level and require that the utility share some of its over-earnings with customers. This ensures that utility earnings do not become excessive during multi-year rate plans.

In contrast, a shared savings mechanism is often applied as a form of performance incentive mechanism. If a utility delivers net benefits to customers (through, for example, implementing a lower-cost non-wires alternative), the utility is entitled to keep a portion of the net savings. Sierra Club supports the use of shared savings mechanisms.

b. <u>Multi-Year Rate Plans and Formula Rates</u>

The Long-Term Ratemaking Draft Study also identifies Multi-year Rate Plans and Formula Rates as options to align utility performance with the public interest. Although Sierra Club acknowledges that a well-designed multi-year rate plan can provide incentives for utilities to reduce costs, we strongly oppose the use of formula rates, as these plans eviscerate utilities' cost control incentives.

Specifically, a formula rate plan is devoid of cost containment incentives because it formulaically ensures that revenues track costs. A formula rate plan generally accomplishes this by measuring deviations in the utility's earned return on equity (ROE) from its target ROE. If a utility's earned return is above its ROE target (meaning that its revenue exceeds its costs), it will be required to reduce its rates. Likewise, if a utility's earned return is below its target return (meaning that costs exceed revenues) it will be allowed to increase its rates.[17] Because this allows rates to increase to match the utility's costs, it provides no incentive for the utility to reduce costs.

In contrast, multi-year rate plans establish a utility's allowed revenue requirement at the outset of the rate plan, and do not adjust revenues to equal costs during the course of the plan. This provides the utility with an incentive to reduce its costs below its allowed revenue requirement so that it can keep all or a portion of the difference between its revenues and costs.

During the rate plan, revenues may either be held at a fixed level or be adjusted according to a predefined formula called an "attrition relief mechanism" or "ARM." An ARM may be based on an external cost index (such as inflation), cost forecasts, or a combination of the two.

[17] Mark N. Lowry, Matthew Makos, and Gretchen Waschbusch, "Alternative Regulation for Emerging Utility Challenges: 2015 Update" (Edison Electric Institute, November 11, 2015), 47.

Importantly, the formula does not track the utility's *actual incurred* costs. As explained in the Edison Electric Institute's survey of alternative regulatory mechanisms, "[t]he rate adjustments provided by ARMs are largely "external" in the sense that they give a utility an *allowance* for cost growth rather than reimbursement for its *actual* growth."[18]

Massachusetts has a rich history with multi-year rate plans, primarily based on index-based ARMs (particularly the US Gross Domestic Product Price Inflation). However, in recent years, utilities have argued that such external indexes will not provide sufficient revenues to enable electrification. In National Grid's most recent rate case, the multi-year rate plan with its inflation-based ARM was reduced in scale so that now it only applies to operating expenses. Capital costs are recovered through a capital tracker, rather than a PBR mechanism.[19] Given the extent of the investment necessary to enable electrification, it is unclear whether multi-year rate plans broadly applied to a utility's total revenue requirement will continue to be used in Massachusetts.

IV. COMMENTS ON NEAR-TERM RATE DESIGN OPTIONS

Sierra Club appreciates the thorough analysis undertaken of various rate options for this study. Below we provide feedback on each of the four rate designs analyzed in the Near-Term Rates Report.

a. Higher Fixed Charge

As discussed in Section II above, Sierra Club has concerns with substantial increases in the fixed charge due to the potential impacts on low-income customers and attenuation of efficient price signals. If higher fixed charges are considered, they should be income-graduated to mitigate impacts on lower-income customers, and they should include multiple tiers to better reflect customers' ability to pay. However, we emphasize that the successful deployment of income-graduated fixed charges with multiple tiers would be challenging for the enrollment and verification reasons discussed previously.

b. Seasonal (Universal)

[18] Mark N. Lowry, Matthew Makos, and Gretchen Waschbusch, "Alternative Regulation for Emerging Utility Challenges: 2015 Update" (Edison Electric Institute, November 11, 2015), 34.

[19] Massachusetts Department of Public Utilities. Order in D.P.U. 23-150. Petition of Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, pursuant to G.L. c. 164, § 94 and 220 CMR 5.00, for Approval of a General Increase in Base Distribution Rates for Electric Service, a Performance-Based Ratemaking Plan, and a Capital Recovery Mechanism. September 30, 2024.

Sierra Club supports movement towards a seasonal rate for all customers in the near-term. This movement should be gradual in order to avoid sharp bill increases for customers. However, we agree that universal adoption of a seasonal rate is appropriate for several reasons:

1) Such a rate is more cost-reflective because the Massachusetts utilities are summer peaking. A seasonal rate would be more equitable by recovering more revenue from customers who use more electricity in the summer, and who drive more of the system peak-related costs.

2) The universal seasonal rate modeled would result in much lower bill increases for non-electrifying low-income customers relative to the modeled fixed charge increase.

3) A high volumetric price in the summer would also encourage customers to install more energy efficient summer-use appliances (namely air conditioning).

4) The seasonality of the prices could be gradually reduced over time as the system becomes more winter-peaking.

    - One approach would be to allocate distribution costs according to the load squared method, in which distribution costs are allocated to each hour in proportion to the square of the class load in that hour. As more load emerges in the winter, the seasonality of the rate would gradually flatten.

    - Another option would be to allocate costs proportionate to the peak demand in each season, with corrections for the higher grid carrying capacity in the winter versus the summer due to lower loss rates in colder weather.

We note that if there are concerns regarding over-compensation of customers with solar, the compensation level could be completely separated from consumption rates and set at the level necessary to meet the Commonwealth's energy policy goals. It is our understanding that the SMART program is generally designed to function this way already.

Finally, we recommend that seasonality also be reflected in any time-of-use rates that may be adopted in the future to ensure that the rates are cost-reflective.

c. Seasonal – Technology Specific (Electric Heating)

The seasonal, technology-specific tariff presented in the Near-Term Rates Report has the potential to provide even greater savings to electrifying customers than the universal seasonal rate modeled by E3, and a technology-specific seasonal rate option could be offered alongside a more mild universal seasonal rate.

While Sierra Club supports rates that have strong seasonal differentiation on an opt-in basis, such rates should still be based on cost causation. A rate that recovers 100% of demand-related distribution costs in the summer may be appropriate as long as virtually all substations peak during the summer months. However, the rate should be adjusted as the system slowly becomes winter-peaking.

V. CONCLUSION

Sierra Club appreciates the opportunity to provide feedback on the IRWG's Long-Term Ratemaking Draft Study and Near-Term Rates Report. We commend IRWG and E3 for the detailed analysis presented in these studies which helps to lay a strong foundation for advancing sustainable energy policies in an equitable manner.

Our comments underscore the importance of cautious implementation of higher fixed charges and the necessity of aligning rates with long-term marginal costs. We strongly support a long-term move to time-varying rates, while encouraging a measured approach to rolling out default (opt-out) time-varying rates. Additionally, we highlight the importance of implementing effective customer education programs and designing mechanisms to mitigate adverse impacts on vulnerable populations. These considerations are essential to achieving the Commonwealth's policy objectives while ensuring fairness and affordability for all ratepayers.

Moving forward, we encourage the IRWG to adopt a balanced approach to rate design, incorporating stakeholder feedback to refine recommendations. This will ensure that Massachusetts continues to lead in crafting innovative, inclusive, and effective energy policies that meet the needs of today and anticipate the challenges of tomorrow. We look forward to continued engagement in this vital process.

/s/ Sarah Krame

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November 15, 2024

Via E-mail to Rates.WG@mass.gov

Massachusetts Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge St., 9th Floor
Boston, MA 02114

Re: Comments of the Solar Energy Industries Association ("SEIA") on the Long-Term Ratemaking Study Report Presentation

Dear Interagency Rates Working Group:

The Solar Energy Industries Association ("SEIA") submits the following comments on the presentation on Long-Term Ratemaking that was made by the Interagency Rates Working Group ("IRWG") and Energy+Environmental Economics ("E3") on October 28, 2024 (the "Presentation").

SEIA is leading the transformation to a clean energy economy through advocacy and education. Founded in 1974, SEIA is the national trade association for the solar and storage industries, building a comprehensive vision for the advancement of these technologies. SEIA works with its 1,200 member companies and other strategic partners to create jobs and diversity, champion the use of cost-competitive solar in America, remove market barriers, and educate the public on the benefits of solar energy. SEIA appreciates the opportunity to participate in the IRWG and to comment on the Presentation.

As elaborated below, SEIA has concerns about the ability of the Presentation to serve as a launching point for meaningful policy discussions in this space without significant further development and stakeholder input. SEIA urges additional opportunities for comment and stakeholder engagement as an actual study or report are prepared and discourages a rush to produce a report or study by the end of this year.

Further, while the Presentation does not yet advance specific proposals, making focused comments more difficult, it includes implicit assumptions that may indicate leanings towards rate approaches, such as significant increases in fixed customer charges, that are deeply problematic. SEIA outlines some of its specific concerns about the apparent trajectory of the study below.

I. The Presentation lacks the content and analysis needed to advance policy in Massachusetts; the IRWG should provide for another round of stakeholder review.

SEIA supports the IRWG's stated purpose: "to advance near- and long-term electric rate designs that align with the Commonwealth's decarbonization goals."[1] SEIA agrees that better-designed rates could support decarbonization efforts, including by addressing barriers to electrification of transportation and heating sectors, and could also reduce overall energy burden in the long-term. SEIA lauds the announced inclusion of Dr. Nock as part of the IRWG effort to ensure that energy justice is thoughtfully incorporated into the work of the IRWG. And SEIA agrees that planning now for the rate structures of the future could smooth the Commonwealth's energy transition.

However, SEIA is concerned that – absent further development – the Presentation is not ready to serve as a starting point for serious policy development and is not ready to be advanced into a final study or report by the end of the year. SEIA recognizes and appreciates that significant

[1] *See* "Interagency Rates Working Group," available at https://www.mass.gov/info-details/interagency-rates-working-group, last accessed Nov. 12, 2024.

work has been invested to reach this point. That work was not wasted, but SEIA urges the IRWG to be cautious and not to overestimate the progress it has made. Rate design is complex, multifaceted, and has been the subject of decades of debate and rate case determinations in Massachusetts and across the country. SEIA urges the IRWG to be humble and recognize that further work is needed if the product of this process is to meaningfully advance the rate design conversation in the Commonwealth. The IRWG should not rush to put out a final report that would do little more than highlight trends or concepts. Rather, it should develop a further draft, solicit input and continue to refine and focus the discussion so that its recommendations can be based on full consideration of all associated implications.

At this time, the Presentation is simply too high-level to drive the detailed analysis needed to advance the discussion of future rate designs in the Commonwealth. SEIA recognizes that the Presentation attempted to summarize a significant amount of information into a 90-minute presentation and that additional work likely has been and will be done. However, the broad scope and surficial nature of the Presentation prevented it from meaningfully advancing the discussion on the many topics covered and is not sufficient to elicit the detail of stakeholder input that is needed. The broad, high-level approach led to the Presentation providing introductions of general concepts rather than a detailed analysis of alternatives in the specific context of Massachusetts. While it may not be the purpose of this effort to adopt specific policy proposals, the level of analysis presented does not yet allow for significant comparison of policy options. Nor does it effectively incorporate the various drivers of rates in Massachusetts or the specific policy mechanisms that are already in place in the Commonwealth.[2]

[2] For instance, SEIA is concerned that the Presentation: discussed "electricity costs" on slide 10 in a simplistic way that conflates and mischaracterizes distinct cost drivers, potentially muddling the available mechanisms for reducing future system costs; fails to appropriately incorporate the key takeaway from slide 11 that future transmission costs (and likely distribution and generation costs as well) can be significantly reduced by behavioral changes (shifting of

II. The Presentation suggests that the path forward for rates in Massachusetts is a move towards increased fixed charges; this is a troubling premise based on controversial assumptions that needs increased scrutiny.

SEIA continues to be concerned with the unwarranted conclusion that significantly increased fixed charges are present in any rate of the future. This assumption is explicit throughout the Presentation, including in assumptions of a $40 fixed customer charge and additional non-bypassable distribution charges. Shifting from a structure where end users pay for the electric system in Massachusetts based on how they use that system to a structure where a significant portion of costs are recovered on a per-customer basis would be a radical reversal of rate design priorities. Such a shift would also have negative consequences that are not fully acknowledged in the Presentation. SEIA submitted comments on the Near-Term Rates Report on September 6, 2024 that identified concerns with a shift towards fixed charges, and SEIA incorporates those comments here as well. However, it is critical to emphasize the fundamental tension between recovering the costs of providing electricity to end users through fixed charges and efforts to use rates to provide price signals that encourage efficient behavior, and ultimately drive down the cost of the electric system for all customers.

Fundamentally, cost causation and price signals are critical to empowering customers to adopt and use technologies and services to adjust their demand and reduce overall costs of the electric system that must then be apportioned to all customers through rates; fixed charges oppose those signaling effects. This idea has long been a cornerstone of rate design in Massachusetts. In

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demand away from peaks) – a takeaway that emphasizes the importance of rates that reflect cost causation; incorporates a controversial, unnecessary, and confusing concept of "embedded costs" into the discussion of TOU rates on slide 14; appears to have made inaccurate assumptions about "existing DER programs" on slide 19, which, if not corrected, could lead to inaccurately assessing the effect of various rate designs on distributed energy resources; divides customer bills in a misleading and inaccurate way on slide 22 that incorporates many contestable assumptions; and describes ratemaking approaches on slide 23 without recognizing that Massachusetts has long and extensive experience with the mechanisms listed on that slide.

assessing rate structures, the Massachusetts Department of Public Utilities ("DPU") emphasizes the importance of "efficiency." As the DPU describes it:

> 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.[3]

The DPU's approach is significant not only because it reflects the long-established practice of an agency with deep expertise in this area but also because it captures the power of rate designs that send end-use customers price signals that reflect actual costs associated with use of the electric system. The idea that well-designed rates signal to customers the cost of their usage, which in turn results in behavioral changes that can lower costs for all customers, will become even more important as advanced meters are deployed and customers increasingly have access to technologies that empower them to control their usage.

This should be the key takeaway from slide 11 of the Presentation, which shows the magnitude of savings on the transmission system that are achievable through managing peak usage of the transmission system – management that could occur through responses to effective price signals.

Unfortunately, the Presentation elsewhere seems to assume the desirability of dramatically higher fixed customer charges.[4] But fixed charges beyond those reflective of the actual fixed costs to serve a customer, have generally been disfavored by the DPU (and stakeholders) because, among other things, they are inefficient and do not send price signals to customers that usage of

[3] *National Grid*, D.P.U. 23-150 at 477 (Sept. 30, 2024) (internal citations omitted).
[4] *See, e.g.*, slides 7, 14 & 22.

the electric system imposes costs.[5] Recovering more of the cost of the electric system through fixed charges encourages increased volumetric consumption because it dilutes the cost signal to customers that there is a cost to that consumption. Like a buffet that charges by the customer regardless of what the customer chooses to eat, fixed charges encourage increased use. All else equal, this is true even of consumption that occurs during the peak periods that drive the need for costly infrastructure investment. As a result, increasing fixed customer charges can drive increased need for infrastructure investment and increased costs.

Moreover, the level of fixed charge proposed in the Presentation ($40/month) is multiple times the current residential fixed charges applicable in Massachusetts and far above the national average.[6] This number appears to have no basis in cost allocation and no grounding in any methodological approach that would prevent using fixed charges as a short-run gimmick to reduce the appearance of rate increases by keeping the volumetric rate static or lower. Establishing a fixed charge—and determining the outer bounds of a level of charge—should be grounded in standard ratemaking practice, not arbitrarily assigned. Proposing such a high fixed charge without any discussion of the underlying rationale or methodological justification impairs not just the credibility of the higher fixed charge proposal itself, but the entire Presentation.

Proposed reliance on radically higher fixed customer charges also misses a window of opportunity to deploy far more efficient rates that can induce load shifting and reduce the magnitude of needed infrastructure investment. As new technologies are poised to give Massachusetts customers unprecedented information about their usage and ability to shift their

[5] See, e.g., *National Grid*, D.P.U. 23-150 at 535.
[6] *See*, EQ Research, "Residential Fixed charges – Comparison of U.S. Utilities as of March 30, 2023," available at: https://eq-research.com/eq-publications/residential-fixed-charges-comparison-of-u-s-utilities-as-of-march-30-2023/ (last accessed Nov. 15, 2024) (collecting approximately 170 standard residential fixed charges from across the country, not one of which was as high as $40).

demand, the benefit that efficient price signals can provide will be even more significant in the future than it is today. Soon, more customers than ever will be able to shift their load in response to price signals. If they do, the need to build out new infrastructure can be significantly reduced, lowering costs for all customers. Time-varying and time of use rates, enabled by advanced metering, can facilitate more efficient signals to better target responsive customer behaviors so that they drive down long-term costs. Despite this, the Presentation appears to anticipate fixed charges roughly quadrupling in the future, which would substantially dilute the effectiveness of such price signals.[7]

The IRWG should not ignore that just a couple of months ago, the DPU rejected a proposal to support electrification in the Commonwealth by reducing volumetric charges and replacing them with a substantially higher fixed charge.[8] Critically, this proposal was overwhelmingly opposed by stakeholders, including the Attorney General, DOER, low-income advocates, environmental advocates, large customers, and SEIA.[9] Many of the criticisms focused on the fact that fixed charges dilute the price signals that encourage reduced consumption and lack a mechanism to send information about the varying cost of usage during different periods.[10] The DPU agreed that shifting volumetric charges to a fixed charge would reduce incentives to conserve energy or improve efficiency.[11]

The IRWG should also not ignore the Commonwealth's track record of success in reducing greenhouse gas emissions through efficiency programs. Those programs have been an effective means of reducing customer costs both by directly reducing consumption and by reducing the need

[7] *Compare id.* (approving a $10 customer charge) *with* slide 14 (assuming a $40 customer charge).
[8] *National Grid*, D.P.U. 23-150 at 509-13.
[9] *Id.* at 496-507.
[10] *Id.*
[11] *Id.* at 509.

for infrastructure investment. Energy efficiency programs – like incentives to reduce consumption generally – depend on reduced consumption reducing customers' costs, a causal chain that is diluted as fixed charges increase. But these side effects of fixed charges are not analyzed in the Presentation.

Any benefits that may be achieved by increasing the portion of electric system costs that are recovered from customers through fixed charges in terms of facilitating electrification should be carefully balanced against the harms that flow from fixed charges. This is especially true when the time frame of this rate design effort spans decades, during which the relative costs of various technologies and the costs for electric energy may change significantly. The Presentation does not do this. It is not clear that the extent to which shifting electric system costs to fixed charges would improve the economics of electrification technologies has been weighed against the harms and cost shifts that fixed charges can impose more broadly. Nor is it clear from the Presentation whether other rate design elements, such as the varying types of time-varying rates, have been evaluated for their ability to support electrification independent of increases to fixed charges, particularly in conjunction with load-shifting technologies and resources that are likely to become available over the relevant time period. SEIA strongly encourages deeper consideration of time-of-use and time-varying rates, which will become more feasible soon and, unlike fixed charges, can be tailored to encourage behaviors that lower system costs for all customers.

III. The IRWG should not base rate design around an unexplained and highly controversial assertion of "embedded costs."

At numerous points, the Presentation includes implicit assumptions that there is a category of "embedded costs" that are somehow either not associated with customer usage, not "avoidable," or simply costs associated with the deployment of existing infrastructure (i.e., "costs that have

already been incurred").[12] The precise nature of these asserted costs is unclear, never explained, and may be different as used in different parts of the presentation. No recommendations can be based on this concept without the concept being fully explained and justified. Regardless, this implicit assumption is contrary to precedent in Massachusetts and has the potential to lead towards inadvisable policies. SEIA urges the IRWG to question this assumption and rigorously scrutinize the use of "embedded costs" and similar labels as justifications for increased fixed charges.

As an initial matter, the Presentation is exceedingly loose throughout in how it accounts for the costs associated with the electric system. Generation, transmission, and distribution costs are critically different. Each category is subject to different cost drivers, relevant at different scales, and affected by different markets and policy mechanisms. Sometimes, the Presentation appears to lump all these costs together;[13] sometimes it seems to pull out specific costs in limited ways without explanation;[14] and sometimes it uses imprecise alternative categorizations that conflate and duplicate these categories in confusing ways.[15] The discussion of time-varying rates, for instance, never distinguishes whether the time-varying rates being discussed are proposed for (or appropriate for) generation, transmission, or distribution service.[16] The discussion of demand charges also does not explain whether such charges are being considered for transmission or distribution service, or both, despite the fact that demand charges for each purpose might be designed differently and might have different effects.[17] Slide 22 appears to attempt to

[12] *See* slides 7, 14, 17, 19 & 22.
[13] *See, e.g.*, slide 4 (referring to customer energy expenditures) and slide 9 (referring to "rates" generally).
[14] *See, e.g.*, slide 7 (identifying "delivery costs" as an element of total energy expenditure) and slide 11 (presenting information on "transmission" costs).
[15] S*ee, e.g.*, slide 10.
[16] *See* slides 13-16.
[17] *See* slide 77.

"disaggregate" customer bills, but does not distinguish between these fundamental categories.[18] This lack of precision is concerning and has the potential to lead to poor recommendations and analysis that is not attuned to the way specific policy and rate levers affect overall system costs, customer behavior, or are even accessible absent federal action or new state legislation. The IRWG should ensure that its analysis is precise and rigorous in assessing rate options for the various types of service that end-use customers take. Without this level of rigor, the resulting analysis will not lead to implementable action and could lead to misleading or even harmful results.

Even putting aside those fundamental concerns, implicit reliance on "embedded costs" in the Presentation is concerning for several reasons.

First, it is not clear what the Presentation means by this term, or whether the term is used consistently or with any degree of rigor – policy recommendations should not be made on such an indefinite foundation. For instance, on slide 7, the reference is an ambiguous suggestion that there are distribution system ("delivery") costs that are not currently collected through fixed charges but are somehow "embedded." However, on slide 14, a large portion of overall customer electricity costs are shown as "embedded," implying that "embedded costs" are those that are "unavoidable" but providing no clarity as to whether this means avoidable in a long-run sense (i.e., infrastructure investment that may or may not become necessary in the future and thus could be avoidable for future ratepayers) or in some other sense (perhaps generation costs that could be avoided by reducing load in a specific period). Then, on slide 17, "embedded distribution costs" is apparently used to refer to costs that are currently recovered through demand charges that are used for many non-residential customers in Massachusetts to account for the cost of using the distribution system.

[18] Slide 22's statement that "embedded costs" are "primarily distribution system costs," is in direct conflict with the recent assessment of the DPU that it is "premature and inefficient to remove all variability from distribution rates, as demand costs are not entirely fixed." *National Grid,* D.P.U. 23-150 at 510.

Confusingly, such charges often make up the majority of distribution costs for such customers and are often thought of as covering all of the non-embedded costs of providing distribution service to such customers. And on slide 19, "embedded costs" seems to be used in yet another way: to reflect some concept of unavoidable costs associated with serving distributed energy resources ("DER"), which is never elaborated upon or explained. Finally, on Slide 22, "embedded" costs are portrayed as a portion of "today's" bill that reflects "sunk" costs, or perhaps all costs that "have already been incurred." Slide 22 indicates these are "primarily distribution system costs" but does not explain why transmission system costs would not be included in this definition.[19] It also does not explain how there could be "avoidable" or "forward-looking" costs in "today's" bill.

Second, it is not universally accepted that there is a category of "embedded costs" analogous with the potentially broad meanings implied in the Presentation that should be collected through a fixed charge. In Massachusetts, "embedded costs" has typically referred to those costs that are allocated in a cost study to the cost of serving a new customer independent of that customer's usage.[20] In Massachusetts, these costs serve as the starting point for setting a customer charge, the fixed charge portion of most customers' bills. As described above in Section II, Massachusetts has generally not adopted an approach in recent years of accepting that additional costs of service should be collected through fixed charges. Instead, Massachusetts has emphasized efficient rates. Thus, to the extent "embedded costs" is being used as a term to support collecting additional costs through fixed customer charges, that approach is inconsistent with Massachusetts precedent. For reasons explained above, increasing fixed customer charges also has significant downsides.

[19] *See, supra,* n. 18 (explaining how the assertion that distribution system costs are fixed is contrary to recent DPU conclusions).
[20] *See, e.g., NSTAR Elec. Co.*, D.P.U. 22-22 at 478, 481 (Nov. 30, 2022).

Third, to the extent the presentation is attempting to make a distinction between "avoidable" and "unavoidable" costs, that distinction is neither explained nor justified. Without more explanation and analysis, this concept, and certainly not assumptions about the magnitudes of these relative categories, should not be used to steer policy. In the context of time-varying rates – slide 14 on such rates is one of the places the Presentation alludes to "embedded costs" – SEIA agrees that rates should send signals to customers to efficiently shift load to avoid infrastructure investment that would increase costs in the long-run. But the "embedded costs" concept seems contrary to this purpose. Price signals are sent through varying, not fixed charges, and shifting more cost recovery to fixed charges makes the price signals less effective at influencing behavior and driving down long-term costs. Moreover, the costs of the distribution system that exists today are collected through, and must be collected through, distribution rates today. But decades of ratemaking across jurisdictions has understood that simply because the costs currently being recovered are associated with investments already made does not mean that they should be recovered through fixed charges. Hopefully the intent of the Presentation is not to advance a fixed charge to cover all distribution system costs – a structure with obvious and manifold flaws that the DPU recently rejected in *National Grid*, D.P.U. 23-115. But at least in some places, for instance, slide 17, that does appear to be the thrust of the Presentation.

The use of the term "embedded costs" on slide 19 is especially problematic because it implies that DERs should be assessed a fixed charge reflecting "embedded costs" but does not provide any explanation for what these "embedded costs" are or how they could be determined. SEIA urges the IRWG to be cautious about assuming that DERs should face a currently unquantified but non-bypassable charge to reflect "embedded costs" that have not been clearly defined, explained, or justified. The value and costs of DERs to the electric system are complex

and contested. Nor do current rates account for benefits that DERs provide to the electric system at large and to other customers, such as reducing the need to make capacity upgrades. Yet the presentation did not recommend evaluating those benefits for incorporation into rates. Singling DERs out for fixed charges without any rigorous analysis is deeply concerning, potentially unjust, and likely to have a negative impact on the Commonwealth's clean energy goals.

Finally, it bears emphasizing that embracing a rate design construct where whole categories of costs – potentially the majority of costs recovered through rates – are considered fixed and recovered through fixed charges would significantly reduce the effectiveness of any time-varying or other dynamic rate designs. Those rate structures drive benefits by using price signals to change consumer behavior: reducing load during peak periods and adding load during times of high generation. This responsiveness is critical to managing the potential cost increases associated with energy system investments that will be needed to meet increased future demand – as slide 11 shows. But for the price signals of such rate designs to work, there must be a compelling value proposition for consumers to shift their load in grid-beneficial ways or to invest in DERs, and that may require a rate design that is working with the entirety, or a large majority, of the costs recovered through rates rather than a smaller subset of those costs. For example, the time differentials shown for a potential summer and winter time-varying rate on slide 14 only show variation in the "avoidable" costs while the "embedded costs" are assumed to be the same throughout the day. The differentials, particularly the summer differentials, are so small that they would largely be meaningless for consumers. It may be impossible to send signals of the appropriate magnitude to customers if such a significant portion of costs are arbitrarily roped-off from recovery through variable charges. For instance, to send the right signals to use electricity

during, for example, midday when solar resources are producing, the rate may need to be lower than what just the portion of the rate shown on slide 14 as "avoidable" could allow.

IV. The Presentation does not adequately consider the impacts of proposals on distributed energy resources.

Massachusetts has been a national leader in supporting deployment of DERs, including solar PV and energy storage, and in implementing energy efficiency. Policies in these spaces have been pillars of the Commonwealth's efforts to reduce greenhouse gas emissions and transition to the clean energy future required under ambitious legislative mandates. It is unfortunate that the Presentation does not further consider the importance of preserving and advancing these policies through rate design in the future.

In fact, the draft Near Term Rate Strategy Report presented in August 2024 specifically excluded an analysis of the bill impact of various rate design proposals on DER customers, with the note that such an analysis would be included in the Long-Term Rate Analysis. However, that analysis of bill impacts for DER customers is not actually included in the draft Long-Term Ratemaking Study, making it impossible to fully assess the impact of the Presentation's proposals on DERs and DER deployment in the Commonwealth and very challenging to provide specific comments. This is concerning because it appears clear that the impact of the Presentation's approach for DER customers would be significant to the point that it is not clear that DERs would be economic for customers under the proposed structure, a result that could halt investment in the very resources needed to achieve the Commonwealth's climate goals.

As described above, fixed charges are inherently in tension with policies such as energy efficiency and distributed generation which encourage customers to reduce or eliminate their use of electricity. The IRWG should make sure that it does not inadvertently advance rate policies that would undermine proven and effective policies encouraging conservation and distributed

generation. However, the Presentation, by emphasizing very large increases in fixed customer charges and an ambiguous "embedded costs" concept that appears intended to further support shifting recovery to fixed charges presents a concerning future for distributed resources and conservation in the Commonwealth.

Given this straightforward concern, it is troubling that the Presentation does not do more to account for the significance of rate designs that are consistent with DER deployment and conservation. And when the Presentation addressed DER policies, the content was not reassuring. If the concept of "embedded costs" is taken seriously, then slide 14 could be indicating support for rate designs that dramatically reduce the value of distributed generation and conservation, especially in the summer, when the most solar generation occurs. Adopting rates along these lines could eliminate price signals that encourage customers to use less electricity or install distributed resources, driving up usage and the need for additional electric system infrastructure. Further, it is not clear how Massachusetts could meet its needs for clean energy generation (even putting aside anticipated needs to meet new load driven by electrification) if it dilutes incentives for distributed generation and conservation to this extent.

The slide specifically devoted to DERs, slide 19, is especially worrying. It seems to show fundamental misunderstandings about how net metering works in Massachusetts. Net metering displaces on site load, so its value is directly tied to the incremental cost of additional usage. It is also not accurate that all net metering facilities receive 60% of the value of exported energy. The value of net metering energy exports varies across different facilities. Moreover, many DERs are compensated through the SMART Program, for which the value of exported energy calculated differently.

Perhaps most concerning, slide 19 suggests eliminating other programs related to DERs and conglomerating all of those programs into rate design while also making that rate design unworkable for DERs. SEIA urges the IRWG to be extremely cautious about such an approach. Rate design is complex and subject to many limitations, along with specific regulatory process that are not necessarily conducive to quick change or policy refinement. Rate design is also constrained in that its fundamental purpose (at the state level) is to provide distribution companies recovery of costs and a reasonable rate of return. And rate design is further limited in that it is implemented only through customer utility bills, a narrow lens through which to implement policy. Thus, while rate design is a powerful tool, attempting to do too much through rates has significant risks for the effectiveness of policy over time as well as for political acceptance of rates.

V. The Presentation puts forth policies the Commonwealth has already employed as potential reforms; if it intends to address regulatory reform of this type, the IRWG should evaluate Massachusetts's actual experience.

Slide 23 of the Presentation is puzzling. It presents three "advanced ratemaking mechanisms" as "regulatory reforms [that] have the potential to better align utility and public interests." But those "reforms" – performance-based ratemaking, revenue decoupling, and multi-year rate plans/formula rates – have all been adopted in Massachusetts already.[21] Many of these "reforms," have been in place in the Commonwealth for multiple utility companies and for significant periods of time – long enough that multiple 5-year plans have been implemented and concluded.

As an initial matter, SEIA is not convinced that it is helpful for the IRWG to include these types of reforms in its already dauting scope. These "reforms" are themselves complex and subject to ongoing debates and decades of experience. They are also squarely within the DPU's expertise

[21] The DPU's recent Order in National Grid's rate case, D.P.U. 23-150, includes an evaluation of the performance-based ratemaking plan proposed in that case and citations to several precedents.

and heavily litigated elements of recent rate cases. SEIA encourage the IRWG to narrow its scope to rate design, and touch these types of regulatory reforms only as necessary to evaluate future rate designs.

If the IRWG pursues an assessment of these regulatory reforms, what would be helpful is not an identification of categories of "reforms" that are, in fact, already in place, but an evaluation of experience with these reforms in Massachusetts or elsewhere. SEIA is not convinced that these reforms, as implemented in Massachusetts have fully delivered on their promise. An effective analysis might indicate which types of reforms have been helpful in driving down rates or delivering other beneficial results, which have not, and how current practice could be improved. But, as stated above, SEIA cautions that this type of analysis would be difficult and time consuming.

VI. Conclusion

SEIA appreciates the IRWG's efforts to advance ratemaking policy in the Commonwealth. This is a daunting but worthwhile charge. The Presentation from October 28, 2024, makes clear that the efforts on long-term ratemaking remain in the early stages and that substantial further work remains to be done. SEIA looks forward to continuing to work with the IRWG to generate a work product that can guide rate design in the coming decades of significant energy transition for the Commonwealth.

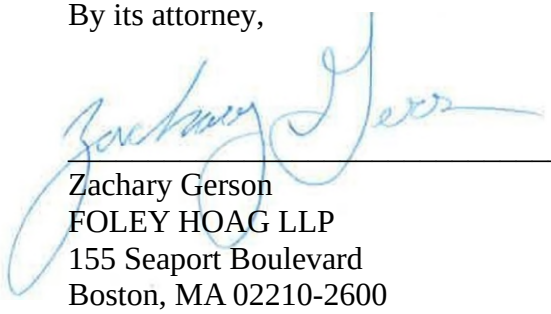
At this time, SEIA urges the IRWG not to rush a report or study on this important topic but rather to continue with stakeholder efforts so that the report or study that comes out of this process can effectively serve as a guide for future policy. As it currently stands, the Presentation is not ready to be put into final form. It lacks depth in applying general concepts to the Massachusetts situation, includes unexplained and concerning assumptions and misunderstandings of

Massachusetts policy, and suggests policy leanings that have significant downsides that have not been adequately explored. Far more consideration needs to be given to the downsides of increased fixed charges and the potential impacts of rate designs on other policies, such as those supporting DERs and energy efficiency.

Very truly yours,

THE SOLAR ENERGY INDUSTRIES ASSOCIATION

By its attorney,



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From: Sue Butler
To: Rates WG (ENE); Jessica Nahigian
Subject: Long Term Ratemaking Draft Study
Date: Friday, November 15, 2024 3:14:05 PM

TO: rates.wg@mass.gov

SUBJECT: Long-Term Ratemaking Draft Study

VIA ELECTRONIC FILING

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114
rates.wg@mass.gov

From Susan Farist Butler, RN, MSN, PhD
Congress on Health and Safety
Massachusetts Nurses Association

RE: Long-Term Ratemaking Draft Study

I respectfully submit the following comment in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

As you finalize your study, please ensure the solutions you present will result in the following outcomes:

Wealthier people will pay more for our energy system. Part of the funding streams or structure must be progressive such that people with less are paying less, and people with more are paying more. Not only do lower and middle-class customers already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses. As a person with more than I need, I consider it my responsibility to contribute to a better more equitable future.

Shareholders will cover more costs. Utilities should have a limited ability to recover any revenue shortfall as a result of lowering rates. This will encourage more careful investment management. Massachusetts has one of the highest rates of return on equity in the northeast, averaging between 10 and 11 percent. Shareholder profits should be questioned. This is the only realistic, appropriate reward structure. Good judgment should be rewarded and bad

judgment should not be. There is absolutely no reason for a utility to have a guaranteed rate of return on anything. It rewards laziness and shirking.

Utilities will not be shut off, especially during the summer. No one should be disconnected from the system, regardless of season, and they definitely should not be charged to reconnect.

In particular, residents need permanent protection from disconnection when extreme heat is most likely. We already protect people from extreme cold by having a winter moratorium, which prohibits disconnections of low-income households from November 15-March 15 (and is usually extended to April 1). As temperatures rise and low-income people are less likely to have air conditioning, stopping utility shutoffs has become even more urgent. There should be a moratorium all summer and, if possible, all year. The utilities have an ethical obligation to protect customers from health risks like heat stroke and other dangers of summer heat. You should also be providing access to affordable air conditioners.

Nearly all or all eligible customers will receive discounts. Enrollment in discount rates should be easier, and there should be limited required proof of eligibility.

A MAPC analysis of the 2016-2020 American Community Survey microdata estimates only 28.3% of eligible households are on the existing discount R-2 rate. It is possible that under enrollment is higher in communities with higher percentages of residents of color. For example, the City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-eligible households. The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process. There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification). You can do alot better!!!

Customers will not be punished for going electric.

Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is counterproductive to our climate and justice goals. In future rate designs, customers should see bills decrease when they switch to clean heating and cooling. Gas is discounted and electricity should receive the same treatment. There should be no increase in the cost for switching to heat pumps.

Thank you for your consideration,

Susan Farist Butler , RN, MSN, PhD

MA Sierra Club Energy Committee and Faith Committee

Massachusetts Nurses Association, Congress for Health and Safety

MNA Cutler Award for Advocacy for Health and Safety, particularly Climate Health and

Safety

Susan Farist Butler, RN, MSN, PhD

MNA: Kathryn McGinn Cutler Advocate Award
for (climate) Health and Safety.
Unanimous vote by the MNA Board of Directors

Visiting Scholar, Climate and Morality
Harvard Divinity School
2020 to 2023 and continuing participation.

co-Founder, co-Principal Investigator
Laboratory for Probabilistic Reasoning
Psychology Department, Tufts University
2002 to 2023

Massachusetts Nurses Association, Lecturer
Congress on Health and Safety
1997 to present

Bio4Climate.org, Board Member
EastieFarm.com, Board Member
MA Sierra Club, Energy and Faith Committees
Martin House Farm, Committee Chair, NSCDAMA

Asst Director of Nursing for Education and Research
Erich Lindemann Mental Health Center
Dept of Mental Health and MGH, Boston
1980 to 1984

From: Susan Racine
To: Rates WG (ENE)
Subject: Long-Term Ratemaking Draft Study
Date: Friday, November 15, 2024 3:04:03 PM

Dear members of the Interagency Rates Working Group,

I am submitting comments in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

Electricity rates in Massachusetts are too high and are a significant barrier to our need to electrify our buildings and cars to reduce the risk of climate chaos and unhealthy communities due to air pollution. My home has been heated solely with an electric air source heat pump since 2020 and
my electric bills from November to March are 5 or 6 times higher than my gas bills for those months in the years we were using a gas furnace. This is a huge disincentive to doing the right thing for our communities and the children who will inherit the earth. The rates need to be adjusted.

I am in favor of a progressive electricity rate structure, charging more for electricity for households whose income is >120% of the state median income with higher charges for those in the highest income brackets.

I am in favor of limiting the utilities' ability to recover any revenue shortfall as a result of a change in rates. Shareholder profits should not be a priority.

I am in favor of a moratorium on shutting off utilities for low-income households in the hot summer months just as we do in the cold months of the year. We are experiencing more extremely hot days as a result of climate change and extreme heat is the most common cause of weather-related death in the US.

I am in favor of making it easier for eligible customers to enroll in discounted rate programs. These programs are not serving the people who need them. The City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-eligible households.

Thank you for your consideration of my comments.

Sincerely,
Susan Racine, MD
Co-Chair of the Board
Greater Boston Physicians for Social Responsibility

48 Mount Vernon St.
West Roxbury, MA 02132
sracine@gbpsr.org
Facebook I Twitter I Instagram I LinkedIn

From: Susan Worgaftik
To: Rates WG (ENE)
Subject: Long term rates presently being considered
Date: Thursday, November 14, 2024 8:50:59 AM

Friends,
As you complete your study of long term electric rates, I would respectfully like to make the following comments:

1. Please ensure that electricity is not shut off especially during the heat of the summer months and the cold of winter. As we move toward an electrified heating and cooling future, the cost of such shut offs could be severe for low income people. Instead, use the balancing of rate payments (see #2) to ensure that all people in the Commonwealth are able to be warm in the winter and cooler in the summer.

2. Rates should be based upon the wealth of the user. Those households that have incomes above 120% of the state median income are able to absorb higher energy rates. A portion of the money that comes from this income based graduated system could be set aside for the payment of electricity bills of those unable to pay their bills at peak times.

3. Utilities should have a limited ability to recover any revenue shortfall as a result of lowering rates. This will encourage careful investment management. As Massachusetts has very high rates that result in rates of return of 10% or more, it is reasonable that shareholders take on the risks of revenue shortfall as do investors in other businesses.

4. The mechanisms for consumers to take advantage of discounts should be easy and transparent. As many eligible consumers should be able to take advantage of such discounts as possible.

Thank you for considering my comments to this important process.

Sincerely,
Susan Worgaftik
45 Forest Avenue
Greenfield, MA 01301

From: Sydney Engel
To: Rates WG (ENE)
Subject: Long-Term Ratemaking Draft Study
Date: Friday, November 15, 2024 2:04:56 PM

VIA ELECTRONIC FILING

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114
rates.wg@mass.gov

RE: Long-Term Ratemaking Draft Study

As a healthcare provider deeply aware of the health harms posed by gas utilities—both from indoor emissions and their contribution to climate change—I believe affordable electricity is a critical health equity issue. I respectfully submit the following comment in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

In finalizing your study, I urge you to prioritize solutions that achieve the following outcomes:

1. **A Progressive Energy Funding Structure**
   The funding model must be progressive, ensuring that people with lower incomes pay less, while those with greater resources contribute proportionally more. Lower- and middle-income households already struggle with affordability, while wealthier customers often have higher energy consumption and should bear greater responsibility for excessive use.

2. **Increased Accountability for Shareholders**
   Utilities should have limited ability to recover revenue shortfalls by raising rates. This approach will incentivize careful investment management. Massachusetts currently has some of the highest rates of return on equity in the Northeast, averaging between 10% and 11%. These profit margins warrant closer scrutiny to ensure shareholders, rather than customers, cover more costs.

3. **Year-Round Protections Against Utility Shutoffs**
   No one should face disconnection from utilities, regardless of the season. Existing protections during winter months must be expanded to include extreme heat during the summer, as low-income households are less likely to have air conditioning. Utility shutoff moratoriums are essential during periods of extreme weather and should ideally be in place year-round. Reconnection fees should also be eliminated.

4. **Streamlined Enrollment for Discounted Rates**
   Enrollment in discount programs must be simplified to ensure that nearly all eligible customers benefit. A MAPC analysis of the 2016–2020 American Community Survey

microdata reveals only 28.3% of eligible households currently use the R-2 discount rate, with even lower rates of enrollment in communities with higher percentages of residents of color. Simplified processes, such as self-verification of income, can significantly improve participation.

5. **Affordable Electric Options for Gas-to-Electric Transitions**
   Preliminary findings from the Interagency Rates Working Group show that switching from gas to electricity currently results in a rate increase. This discourages necessary transitions to clean energy and undermines climate and equity goals. Future rate designs must ensure that customers switching to electric heating and cooling experience a decrease in their utility bills.

These measures are vital for addressing health inequities tied to energy access, affordability, and climate resilience. Thank you for your thoughtful consideration of these recommendations.

Sincerely,

Sydney Engel, FNP-BC

sydneyhengel@gmail.com

From:	T Stephen Jones
To:	Rates WG (ENE)
Cc:	Jess Nahigian
Subject:	Long-Term Ratemaking Draft Study
Date:	Friday, November 15, 2024 2:38:11 PM

TO: rates.wg@mass.gov

SUBJECT: Long-Term Ratemaking Draft Study

VIA ELECTRONIC FILING

Interagency Rates Working Group
c/o Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114
rates.wg@mass.gov

I am a public health physician who is very concerned about the impact of utility behaviour, particularly rates and help for people with less money and less influence.

As a public health physician, I am deeply concerned about the onrushing climate catastrophe.

In an unprecedented 2021 joint editorial, Call for Emergency Action to Limit Global Temperature Increases, Restore Biodiversity, and Protect Health, 200 health and medical journals, urged world leaders to cut heat-trapping emissions to avoid **". . . catastrophic harm to health that will be impossible to reverse**;"[1] [bolding added]

The editorial also states

> We are united in recognizing that only fundamental and equitable changes to societies will reverse our current trajectory.
>
> The greatest threat to global public health is the continued failure of world leaders to keep the global temperature rise below 1.5° C and to restore nature. Urgent, society-wide changes must be made and will lead to a fairer and healthier world.

We need to dramatically reduce the burning of methane (as "natural" gas) to slow the onslaught of climate change and climate chaos.

I respectfully submit the following comment in response to the Interagency Rates Working Group's (IRWG) invitation to submit public comments on the Long-Term Ratemaking Draft Study.

As you finalize your study, please ensure the solutions you present will result in the following outcomes:

Wealthier people will pay more for our energy system. Part of the funding streams or structure must be progressive such that people with less are paying less, and people with more are paying more. Not only do lower and middle-class customers already face their own challenges with affordability, but wealthier customers generally have increased energy consumption and should be paying for excessive uses.

Shareholders will cover more costs. Utilities should have a limited ability to recover any revenue shortfall as a result of lowering rates. This will encourage more careful investment management. Massachusetts has one of the highest rates of return on equity in the northeast, averaging between 10 and 11 percent. Shareholder profits should be questioned

Utilities will not be shut off, especially during the summer. No one should be disconnected from the system, regardless of season, and they definitely should not be charged to reconnect.

In particular, residents need permanent protection from disconnection when extreme heat is most likely. We already protect people from extreme cold by having a winter moratorium, which prohibits disconnections of low-income households from November 15-March 15 (and is usually extended to April 1). As temperatures rise and low-income people are less likely to have air conditioning, stopping utility shutoffs has become even more urgent. There should be a moratorium all summer and, if possible, all year.

Nearly all or all eligible customers will receive discounts. Enrollment in discount rates should be easier, and there should be limited required proof of eligibility.

A MAPC analysis of the 2016-2020 American Community Survey microdata estimates only 28.3% of eligible households are on the existing discount R-2 rate. It is possible that under enrollment is higher in communities with higher percentages of residents of color. For example, the City of Malden estimates the R-2 discount rate is only serving 1 in 6 income-eligible households. The dismal levels of enrollment, despite outreach efforts, affirm the need to simplify and ease the process. There are a number of studies showing fraud is limited when people are asked to vouch for their own income (self-verification).

Gas customers will not be punished for going electric.
Preliminary findings of the Interagency Rates Working Group concluded that, currently, switching from gas to electricity will result in a rate increase. This is counterproductive to our climate and justice goals. In future rate designs, customers should see bills decrease when they

switch to clean heating and cooling.

Thank you for your consideration,

T. Stephen Jones, MD
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Florence MA 01062
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[1] Atwoli L, Baqui AH, Benfield T, et al. Call for Emergency Action to Limit Global Temperature Increases, Restore Biodiversity, and Protect Health. N Engl J Med. 2021 Sep 5. DOI: 10.1056/NEJMe2113200. https://www.nejm.org/doi/10.1056/NEJMe2113200