OCTOBER 11, 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 Questions

Dear IRWG Members,

The American Council for an Energy-Efficient Economy ("ACEEE") welcomes this opportunity to provide comments and recommendations on E3's Long-Term Rate Strategy Study (Study).

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.

ACEEE is highly supportive of the creation, purpose, and objectives of the IRWG and we hope to see other states replicate this stakeholder process as they grapple with strategies to reform rate design for their climate and equity goals. After reviewing the questions for the Study, we suggest a few items for consideration:

General

What are the biggest challenges Massachusetts faces in aligning electric ratemaking with long-term decarbonization mandates?

Affordable access to clean electricity generated primarily by wind and solar – variable energy resources with minimal marginal operating costs - is the most important element for reaching Massachusetts' long-term climate protection requirements. Guaranteeing affordable access to that clean electricity is also critical for households that have historically faced the highest energy burdens, the percentage of their income spent on energy. There are thus two primary challenges Massachusetts faces: a) keeping the overall cost of generating, transmitting, and delivering additional clean electricity as low as possible; and b) prioritizing low-income households and underserved communities in the transition off fossil fuels. There is also one major opportunity: using as much of that cheap clean electricity as efficiently as possible when it is abundant.

How should the state address these challenges in future ratemaking practices?

Energy efficiency and demand flexibility are vital tools to help lower the overall cost of the electric system, particularly in the face of increasing electric demand and low-marginal-cost variable energy resources. Avoiding the need for new generation, transmission, and distribution infrastructure, which is built to accommodate peak system demands, reduces costs borne by ratepayers. Electricity ratemaking should provide appropriate signals to enable households and business to achieve all cost-effective energy efficiency and demand flexibility to minimize those system peaks. This requires innovative new approaches to electricity ratemaking. At the same time the state should guarantee that historically over-burdened and underserved communities are not negatively impacted by any change in electricity rates, and in fact are first to benefit from those changes.

How well do current ratemaking mechanisms and rate design accommodate new technologies like electric vehicles, heat pumps, and other distributed energy resources (DERs)?

Historic approaches to ratemaking do not appropriately value the benefits of electric vehicles, heat pumps, weatherization, and other technologies that improve energy efficiency and/or enable demand flexibility in ways that lower system peaks. Static volumetric rates based on the average cost of delivered electricity over the course of an entire year – or multiple years – also do not send sufficient signals to increase efficient electricity use when clean electricity is cheap and abundant. Grouping most residential customers in the same rate class also ignores important differences in how usage amounts and times impact system costs. For example, while households with efficient heat pumps can use large amounts of electricity in the winter, most of that is outside of current peak periods, which the state recognized in decisions approving new rates for Unitil and National Grid customers using heat pumps.

How can ratemaking help alleviate affordability concerns as Massachusetts transitions to a decarbonized grid?

Ratemaking can and should guarantee that historically energy-burdened households do not face higher costs in the transition off fossil fuels.

What are the most critical long-term goals that ratemaking needs to support in Massachusetts between 2030 and 2050?

Decarbonization and energy affordability, particularly for historically energy-burdened households.

What specific ratemaking changes would you prioritize to achieve these goals?

There are two primary changes necessary to achieve these goals: a) a shift to seasonal, time-of-use rates that accurately reflect both the high costs of infrastructure to meet system peaks and the low marginal cost of clean electricity, particularly for new energy-efficient and demand-flexible technologies; and b) a guarantee for low-income households that their energy costs will not increase during the transition.

What is the role for stakeholders (e.g., consumers, environmental groups, industry, utilities, etc.) in shaping electric ratemaking in Massachusetts?

Fully incorporating the input of stakeholders – especially those who have been historically marginalized in decision-making – is critical to ensure support for achieving these goals, and ultimately full utilization of the benefits of both clean electricity and energy-efficient and demand-flexible technologies.

Regulatory and Ratemaking

What changes to current regulatory and ratemaking frameworks (e.g., performance-based ratemaking, multi-year rate plans, etc.) could best support decarbonization and grid modernization?

There are two primary changes necessary to achieve these goals: a) a shift to seasonal, time-of-use rates that accurately reflect both the high costs of infrastructure to meet system peaks and the low marginal cost of clean electricity, particularly for new energy-efficient and demand-flexible technologies; and b) a guarantee for low-income households that their energy costs will not increase during the transition.

How can the state balance the need for cost recovery (for grid investments) with the goal of maintaining affordable rates for all customers?

By providing price signals that fully reflect the characteristics and benefits of both clean electricity and energy-efficient and demand-flexible technologies. The state must also ensure that customers have affordable access to those technologies, particularly those who have been historically underserved.

Are there specific reforms or mechanisms that could help achieve this balance?

There are two primary changes necessary to achieve these goals: a) a shift to seasonal, time-of-use rates that accurately reflect both the high costs of infrastructure to meet system peaks and the low marginal cost of clean electricity, particularly for new energy-efficient and demand-flexible technologies; and b) a guarantee for low-income households that their energy costs will not increase during the transition.

Rate Design

What types of rate designs (e.g., time-of-use pricing, critical peak pricing, etc.) should we consider analyzing that can help manage peak demand, promote distributed generation, and accelerate electrification?

There are two primary changes that should be studied: a) a shift to seasonal, time-of-use rates that accurately reflect both the high costs of infrastructure to meet system peaks and the low marginal cost of clean electricity, particularly for new energy-efficient and demand-flexible technologies; and b) a guarantee for low-income households that their energy costs will not increase during the transition.

How should advanced metering infrastructure (AMI) be leveraged to create new rate designs that reflect real-time grid conditions?

Advanced metering infrastructure is not primarily about creating new rate designs, but rather about enabling customers and other stakeholders to leverage those rate designs and other regulatory approaches to maximize benefits. Both customers and implementers of energy efficiency and demand flexibility can utilize the more granular information available about both when and where electricity is being used to optimize investments and shift loads.

Sincerely,

Mark Kresowik
Senior Director for Policy
mkresowik@aceee.org

GREEN ENERGY CONSUMERS ALLIANCE

October 11, 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 Study Kick-Off Presentation

Dear Interagency Rates Working Group Members,

On behalf of Green Energy Consumers Alliance, I am writing to submit public comment on the Long-Term Ratemaking Study Kick-Off Presentation ("Presentation"). Note that Green Energy Consumers is a signatory to a group letter to be submitted by the Conservation Law Foundation, LISC, and many others. We strongly support the contents of that group letter, but would make these additional, brief points.

I. Question: What are the biggest challenges Massachusetts faces in aligning electric ratemaking with long-term decarbonization mandates? How should the state address these challenges in future ratemaking practices?

- Ensuring that the electric ratemaking is not being done within a silo. Care and time must be taken to coordinate with other agencies and processes. Examples are Mass. DEP's work on a Clean Heat Standard, Mass Save, the Future of Gas (20-80), electric vehicle incentives for purchasing and infrastructure, etc.

- The balkanization of our electricity system greatly reduces the likelihood that we will land on a solid, state-wide policy framework for anything, including the sort of rate reform contemplated here. This process ought to be led by publicly accountable state officials, rather than by the distribution companies and competitive suppliers.

II. Question: How well do current ratemaking mechanisms and rate design accommodate new technologies like electric vehicles ("EVs"), heat pumps, and other distributed energy resources ("DERs")?

- Our prevailing rate structure is increasingly placing a headwind on the adoption of EVs and heat pumps - both of which are absolutely essential to meeting the Commonwealth's climate mandate. The default has been, "We have an idea to spend money on a public good, let's raise the systems benefit charge.". As a result, we have extraordinarily high rates, which are clearly an impediment to electrification. We have to break that cycle.

III. Question: How can ratemaking help alleviate affordability concerns as Massachusetts transitions to a decarbonized grid?

Additionally, it is obvious that fossil fuel prices will rise in years ahead if government gets serious about meeting the climate mandate. This is not limited to natural gas. Prices are likely to rise for heating oil, propane, gasoline, and diesel. The electricity rate structure allows policymakers a better opportunity to alleviate affordability concerns than in some of those other areas of the energy sector.

IV. Question: What are the most critical long-term goals that ratemaking needs to support in Massachusetts between 2030 and 2050? What specific ratemaking changes would you prioritize to achieve these goals?

Reference is made to the coalition letter that we have signed onto.

Also, as soon as possible, ratemaking ought to significantly reduce the volumetric rates charged to customers with electric vehicles and heat pumps. The DPU has recently ordered Unitil and National Grid to establish special winter-time rates for heat pump customers. That is good, but better would be requiring a single approach across all three EDCs. What is often lost in the typical process are these two points:

- The Commonwealth would see far greater uptake of EVs and heat pumps (and other energy programs) if there was a statewide approach.

- Aligning with the sublimits established pursuant to chapter 21N can best be accomplished by an analysis pro-actively produced by the IRWG and statewide technical sessions of the DPU. There is no rationale, other than accommodating the interest of EDC shareholders, to having each EDC put forth its own vision for rate reform. Furthermore, there will never be sufficient civic engagement if stakeholders are required to intervene in three sets of proceedings.

V. Question: What is the role for stakeholders (e.g., consumers, environmental groups, industry, utilities, etc.) in shaping electric ratemaking in Massachusetts?

First of all, thank you for allowing groups like ours to have this opportunity. Assuming that the IRWG work will be well-received by the DPU, it seems like our time could be well spent.

However, as mentioned above, it is naive to think that the public will be able to shape electric ratemaking if the DPU continues with the pattern of allowing the EDCs to lead the discussion, especially if there are really three discussions, one for each EDC.

VI. Question: What changes to current regulatory and ratemaking frameworks (e.g., performance-based ratemaking, multi-year rate plans, etc.) could best support decarbonization and grid modernization?

Reference is made to the coalition letter that we have signed onto.

VII. Question: How can the state balance the need for cost recovery (for grid investments) with the goal of maintaining affordable rates for all customers? Are there specific reforms or mechanisms that could help achieve this balance?

Reference is made to the coalition letter that we have signed onto.

I will add that with respect to electric vehicle adoption, it should not be taken as a given that increased EV adoption will lead to higher rates for everyone. That is not true in any state now and with well-designed managed charging programs, EVs can continue to help contain electricity rate increases.

VIII. Question: What types of rate designs (e.g., time-of-use pricing, critical peak pricing, etc.) should we consider analyzing that can help manage peak demand, promote distributed generation, and accelerate electrification?

Reference is made to the coalition letter that we have signed onto.

IX. Question: How should advanced metering infrastructure (AMI) be leveraged to create new rate designs that reflect real-time grid conditions?

Reference is made to the coalition letter that we have signed onto.

That concludes my comments.

Sincerely,

Larry Chretien, Executive Director

October 11, 2024

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Subject: Comments on the Interagency Rates Working Group Long-Term Ratemaking Study Kick-Off Presentation

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 Study Kick-Off Presentation ("Presentation"), the undersigned advocacy organizations respectfully submit the enclosed comments for your consideration. We thank you for committing to study long-term ratemaking options and for providing the opportunity to respond to initial questions about how to approach reforming regulatory mechanisms and rate design. We also extend our thanks to the E3 consultant team ("Consultants") for their efforts in preparing the forthcoming Long-Term Ratemaking Draft Study ("Draft Study"). We recognize the magnitude of such an undertaking and look forward to engaging with the IRWG and its Consultants on the Draft Study in upcoming months.

The Presentation posed a number of discussion questions, and we provide responses below. The overarching purpose of our comments is to urge the IRWG to prioritize addressing barriers to affordable electrification and reducing energy burdens[1] for low- and moderate-income ("LMI") customers in its study of long-term ratemaking options. We emphasize that to address the burden of high energy bills throughout Massachusetts, rate reform cannot happen in a vacuum. In its study of long-term ratemaking strategies, the IRWG should consider how rate design interacts with other areas of energy planning and discuss other reforms that should accompany rate reform.

I. Question: What are the biggest challenges Massachusetts faces in aligning electric ratemaking with long-term decarbonization mandates? How should the state address these challenges in future ratemaking practices?

Aligning electric ratemaking with long-term decarbonization mandates in a way that is affordable and achieves energy burden reductions for LMI households presents the biggest challenge for the Commonwealth. As discussed in more detail in response to Question IV below,

[1] The Federal Department of Energy (DOE) defines energy burden as "percentage of gross household income spent on energy costs." This term reflects the proportion of income a household spends on energy costs, with anything over six percent being considered a high energy burden.

addressing this challenge involves considering racial inequities when studying rate reform options; committing to significant customer education efforts; and designing protections for LMI customers, renters, affordable housing residents, customers who require high energy use for medical or health reasons, and any customers who are unable to electrify.

II. Question: How well do current ratemaking mechanisms and rate design accommodate new technologies like electric vehicles ("EVs"), heat pumps, and other distributed energy resources ("DERs")?

Current ratemaking mechanisms and rate design that uses high volumetric rate components do not accommodate—and may impede—the widespread adoption of new technologies like EVs, heat pumps, and other DERs. As the Near-Term Rate Strategy Draft Report states, "high volumetric rates could lead to bill increases for customers that adopt electric devices."[2] The Draft Report findings show home electrification results in bill increases for a variety of customers with gas-heated homes.[3] And for renters and low-income customers in affordable housing whose landlords currently pay for the building's gas heating, building electrification means heating costs shift to the tenant, resulting in significantly higher energy burdens. To avoid such consequences and promote the adoption of heat pumps, alternative rate design is needed. While switching to EVs may be a reasonable step for market rate customers under current rate design, the benefits are not sufficient to make buying a new EV feasible for most low-income customers.[4]

Without rate reform, Massachusetts will remain overly dependent on incentives and rebates for heat pumps and EVs, which are far insufficient to achieve the level of heat pump and EV adoption necessary for state decarbonization goals.

III. Question: How can ratemaking help alleviate affordability concerns as Massachusetts transitions to a decarbonized grid?

Ratemaking can and should help alleviate affordability concerns as Massachusetts transitions to a decarbonized grid. As discussed further in response to Question IV below, income-tiered rate structures—paired with specific protections for renters, affordable housing residents, and customers who cannot shift their energy use or electrify their homes—offer promising solutions for addressing affordability.

IV. Question: What are the most critical long-term goals that ratemaking needs to support in Massachusetts between 2030 and 2050? What specific ratemaking changes would you prioritize to achieve these goals?

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[2] Interagency Rates Working Group, Near-Term Rates Strategy Draft Report, at 6 ("Near-Term Draft Report").
[3] *Id*. at 25, 28, 35.
[4] *See, e.g.*, Jesse Vega-Perkins et al., *Mapping electric vehicle impacts: greenhouse gas emissions, fuel costs, and energy justice in the United States*, 2023 Environ. Res. Lett. 18 (Jan. 2023), https://iopscience.iop.org/article/10.1088/1748-9326/aca4e6.

Prioritizing equity and affordability should be a central goal of reforming ratemaking. Low-income customers already struggle to meet their essential needs and spend a higher proportion of their income on energy than high-earning households. While the average residential energy burden in Massachusetts is about three percent, it rises to about 10 percent for low-income populations and can reach as high as 31 percent for some.[5] Moreover, the Near-Term Rate Strategy Draft Report's findings show disproportionately high energy burdens affecting low-income, Black, Hispanic, Native American, and older adult households in the state.[6]

The Commonwealth is required to prioritize affordability and equity. Statutory ratemaking principles have shifted away from cost-causation to focus on "affordability, equity and reductions in greenhouse gas emissions to meet statewide greenhouse gas emission limits and sublimits established pursuant to chapter 21N."[7] Accordingly, the Commonwealth's ratemaking efforts must prioritize achieving our mandate of net-zero greenhouse gas emissions by 2050[8] in a manner that is equitable and that protects our most vulnerable communities, including environmental justice ("EJ") populations, low- and moderate-income ("LMI") households, affordable and subsidized housing residents, persons living with disabilities, and elderly persons. These priorities are reflected on the IRWG's webpage, which states, "Electric ratemaking and rate design must prioritize the reduction of energy burden and incentivize transportation and building electrification to facilitate the transition to a distributed grid."[9]

We emphasize that aligning ratemaking with affordability goals requires considering racial inequities. In general, Black and Brown households have higher utility expenses and higher energy use intensities than average American households,[10] and Black households, specifically, are more likely to experience a double burden—rent burden and energy burden—than other demographic groups.[11] Black households with children are more likely to be overburdened with energy costs as compared to all other demographic groups.[12] A recent study shows that "a statistically and economically significant energy burden gap" between Black households and non-Black households persists even after accounting for socioeconomic

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[5] Kimberly Clark, *Reducing Energy Burden: Resources for Low-Income Residents*, Metropolitan Area Planning Council (Jan. 28, 2022), https://www.mapc.org/planning101/reducing-energy-burden-resources-for-low-income-residents/.
[6] Near-Term Draft Report at 16-21.
[7] M.G.L. ch. 25, § 1A.
[8] M.G.L. ch. 21N, § 3.
[9] Interagency Rates Working Group, Mass. Dept. Energy Res. & Off. Attorney Gen., https://www.mass.gov/info-details/interagency-rates-working-group (last visited Oct. 9, 2024).
[10] Marilyn A. Brown, et al., *The Persistence of High Energy Burdens: A Bibliometric Analysis of Vulnerability, Poverty, and Exclusion in the United States*, 70 Energy Research & Social Science, Dec. 2020, at 5, http://tinyurl.com/2p8adsv2.
[11] Diana Hernández, et al., *Housing Hardship and Energy Insecurity Among Native-Born and Immigrant Low-Income Families with Children in the United States*, 22 J. of Children and Poverty 2 (2016), https://www.tandfonline.com/doi/full/10.1080/10796126.2016.1148672.
[12] Marilyn A. Brown, et al., *The Persistence of High Energy Burdens: A Bibliometric Analysis of Vulnerability, Poverty, and Exclusion in the United States*, 70 Energy Research & Social Science, Dec. 2020, at 5, http://tinyurl.com/2p8adsv2.

inequality.[13] The study also shows that this gap is driven mainly by higher energy use for space heating in Black households as compared with others.[14] Researchers suggest that this greater space heating demand is "associated with self-reported needs for health services due to low indoor temperature."[15] This data underscores the need to consider the intersection of race and energy insecurity when designing long-term rate strategies, especially those strategies that will impact customers' bills during periods with extreme temperatures.

To achieve affordability goals, the state should explore certain ratemaking changes including an income-tiered structure or Percent-of-Income Payment Plan ("PIPP") to protect low-income customers from having to pay energy bills above what they can afford. Massachusetts can learn from models in other states like California. Such structures would also protect moderate-income customers, including those who fall just above the "low-income" threshold and have been burdened by high energy bills without the assistance of existing low-income discount rates. Income-eligible structures would need to be designed with an understanding of the differences in energy burden across different geographic areas, under different utility rates, and with different home and family types. They should also account for the range of low-income customer needs and experiences related to air conditioning and electricity use–while many low-income customers are on the lower end of energy consumption, others cannot shift or reduce their energy use for medical or health reasons. Accordingly, Massachusetts should explore strategies for capping bill increases for LMI residents. Further, income-eligible structures should be implemented consistently across the utilities and service territories, and barriers posed by income verification should be addressed.

Massachusetts should also consider special rates for renters and affordable housing owners/developers or operators, as raised in previous comments on the Near-Term Rate Strategy Draft Report. For example, renter discount rates could minimize bill impacts for renters who did not pay for space heating prior to their landlord electrifying the building. Also, special rates for affordable housing owners/developers or operators could reduce high energy burdens for affordable housing residents. Public, subsidized, and naturally occurring affordable housing programs provide affordable housing through rent subsidies and/or low rents for buildings in which heat is usually master metered. Allowing affordable housing owners/developers or operators to participate in discount rate programs on behalf of residents would reduce the number of individual households needing to seek relief from high energy burdens and reduce gentrification risks.

Other steps that should accompany these rate changes include protections for those who are unable to electrify in the near or long term due to budget or technical limitations or ineligibility for electrification measures. Electrification of LMI customers cannot be done all at once, so some will electrify later than others. Also, many renters, LMI households, and residents enrolled in affordable and subsidized housing programs are particularly susceptible to being left with gas heating systems. As more households and businesses electrify and the pool of gas

[13] Sosung Baik, et al., *Racial Disparities in the Energy Burden Beyond Socio-Economic Inequality*, 127(A) Energy Economics (Nov. 2023), https://www.sciencedirect.com/science/article/abs/pii/S0140988323005960.
[14] *Id*.
[15] *Id*.

customers shrinks, the rates of remaining gas customers will balloon. It is crucial that Massachusetts develops solutions for relieving energy burdens for these customers, too, not just those who are interested in and able to electrify.

The IRWG should also retain consultants who have a deep understanding of equity in ratemaking before concluding the study and making final recommendations. LMI customers and EJ communities should be included in these conversations, so that we do not land on recommendations that continue to leave people behind. Finally, customer education should be made a priority both during and after this IRWG study process.

V. Question: What is the role for stakeholders (e.g., consumers, environmental groups, industry, utilities, etc.) in shaping electric ratemaking in Massachusetts?

Consumers, environmental advocates, energy companies, and labor all have important perspectives and expertise regarding the electric distribution system, its associated costs, and its use and impacts by Massachusetts residents. Accordingly, it is important that these voices are heard throughout the ratemaking process and given weight in decisionmaking. Currently, interested parties can participate in the ratemaking process via intervention in proceedings at the Department of Public Utilities ("DPU"). However, more holistic rate reform is needed to provide consistency across different EDC service territories and ensure that electric rates are affordable, especially for LMI customers and members of EJ populations. Further, as Massachusetts transitions to a decarbonized energy future by economy-wide electrification, keeping electric rates manageable is key to achieving our climate goals in an equitable manner. As such, the DPU, IRWG, and other key players in ratemaking and rate reform must directly involve consumers and climate advocates in the ratemaking process and ensure their input is given equal weight as other interested parties.

VI. Question: What changes to current regulatory and ratemaking frameworks (e.g., performance-based ratemaking, multi-year rate plans, etc.) could best support decarbonization and grid modernization?

A variety of changes are worth exploring, as different mechanisms may support decarbonization and grid modernization in different or complementary ways. It will be especially important for the IRWG to study specific examples of changes that have been made in Massachusetts and elsewhere, and to analyze what has and has not been effective.

Regarding performance-based ratemaking mechanisms ("PBRMs"), utilities in Massachusetts have already begun to implement performance-based rates, but there is a question of their efficacy. The IRWG should evaluate whether the PBRMs currently used deliver more new benefits to customers, especially when compared to any increase in utility rates. Regarding performance incentive mechanisms ("PIMs"), the IRWG should review other states' efforts to use PIMs to drive better enrollment of LMI customers onto discount rates, and then use this information to develop PIMs that deliver superior customer and environmental services at reduced costs.

As stakeholders, we want to be able to have clear, productive discussions about any proposed changes including but not limited to PBRMs and PIMs. Therefore, the study should lay out concrete and detailed proposals so that such discussion is possible.

VII. Question: How can the state balance the need for cost recovery (for grid investments) with the goal of maintaining affordable rates for all customers? Are there specific reforms or mechanisms that could help achieve this balance?

The Commonwealth can and should balance cost recovery with affordability for all customers. In determining strategies for striking this balance, we encourage consideration of reforms discussed in our responses to Questions IV, V, and VIII.

VIII. Question: What types of rate designs (e.g., time-of-use pricing, critical peak pricing, etc.) should we consider analyzing that can help manage peak demand, promote distributed generation, and accelerate electrification?

The IRWG should analyze time-varying rates ("TVRs"), including time-of-use pricing and critical peak pricing. When determining possible ratios of peak to off-peak prices for TVRs, the IRWG should make sure to account for all important contributors to electricity price—including energy type, capacity, transmission, distribution, and more—to ensure savings to the system.

At the same time, the IRWG should consider the kinds of measures that would need to accompany implementation of TVRs. For example, the analysis should consider the gradual introduction of TVR options to ensure that vulnerable customers, including LMI households, EJ communities, elderly and disabled populations, and people with limited English proficiency or other communication limitations are not harmed. Relatedly, strategies for outreach and customer education about TVRs need to be developed and prioritized alongside the rate design itself. Any evaluation of TVRs should also account for impacts on electricity-dependent households (e.g., people who use medical devices, including air conditioning, that require electricity to operate[16]) and households that cannot take advantage of TVR rates (e.g., people who work night jobs or at non-traditional hours).

Additionally, as the IRWG analyzes TVRs, it should consider potential impacts of TVRs on incentives for solar-owning customers who can respond to price signals—for example, by using batteries to load shift—changing the effectiveness of net metering as a solar deployment incentive for upper income customers. The IRWG should also prioritize incentive signals that will be meaningful for low-income customers and factor in the role that community solar can play in reducing low-income customer bills.

IX. Question: How should advanced metering infrastructure (AMI) be leveraged to create new rate designs that reflect real-time grid conditions?

[16] *See* Lee V. White & Nicole D. Sintov, *Health and Financial Impacts of Demand-Side Response Measures Differ Across Sociodemographic Groups*, 5 Nature Energy 50-60 (Jan. 2020), https://tinyurl.com/yc5nm4nk.

In evaluating how AMI can be leveraged to reform rates, we encourage the IRWG to consider elements of TVR implementation discussed in our response to Question VIII.

X. Conclusion

We thank the IRWG and its Consultants for their commitment to study long-term ratemaking options and seek input from stakeholders during that process. Redesigning rate structures for the long-term, especially as AMI becomes available, is critical for protecting our most vulnerable residents while also advancing our decarbonization mandate. As we have discussed, we urge the IRWG to prioritize affordability and equity in the Long-Term Ratemaking Study. We look forward to reviewing the Draft Study and continuing to engage with the IRWG on these issues.

Very truly yours,

Jocelyn Lee, Associate Attorney, Conservation Law Foundation
Priya Gandbhir, Senior Attorney, Conservation Law Foundation
Amy Boyd Rabin, Vice President of Policy, Environmental League of Massachusetts
Lindsay Griffin, Regulatory Director, Northeast, Vote Solar
Cindy Luppi, National Field Director, Clean Water Action
Mary Wambui, Asset Manager, Planning Office for Urban Affairs
Kyle Murray, Director, State Program Implementation, Acadia Center
Emily Jones, Deputy Director, LISC Massachusetts
Larry Chretien, Executive Director, Green Energy Consumers Alliance
Ben Underwood, Co-CEO, Resonant Energy
Rachel Heller, Chief Executive Officer, Citizens' Housing and Planning Association (CHAPA)
Judith Diamondstone, Organizer, Renewable Energy Worcester
Julie Curti, Director of Clean Energy, Metropolitan Area Planning Council (MAPC)
Roger Luckmann, Co-Chair Legislative Team, Elders Climate Action Mass
Sarah Krame, Staff Attorney, Sierra Club

From: Wool, Joel
To: Rates WG (ENE)
Subject: IRWG Rates Comment - BHA
Date: Thursday, October 10, 2024 8:18:30 PM

To whom it may concern:

The Boston Housing Authority writes to comment on one of the important questions considered by the IRWG.

Question: How can ratemaking help alleviate affordability concerns as Massachusetts transitions to a decarbonized grid?

Boston Housing Authority recommends the IRWG engage a focus group of affordable housing, federally-assisted and state-assisted housing providers and voucher administrators.

The DPU has recently approved some rate proposals by select utilities to established tiered rates and heat pump rates. This approach offers strong potential for making electrification more affordable. There are nuances to this approach when considering both subsidized housing properties and also with voucher programs.

Affordable housing properties with owner-paid utilities may be on commercial rates as opposed to the fuel assistance rate. The IRWG should consider whether, given the housing crisis and the operating cost challenges faced by low-income housing, the discount rates could or should be available to housing serving extremely low-income individuals. If "heat pump" rates are implemented across the board, should these be available to commercial actors, or should low-income housing be treated differently than other commercial operators?

Federally and state-assisted public housing in particular suffer from operating budget challenges. Reduced rates (or "heat pump" rates) could greatly help support public housing, but federal operating support in particular may be scaled down unless rates are reduced due to a proactive action of the public housing authority. As such, **it is also worth consider whether rates are automatically applied or may be applied for or negotiated in certain discrete circumstances.** For example, HUD offers a rate reduction incentive for federal public housing (see https://www.hud.gov/sites/dfiles/PIH/documents/PIH_2024-31.pdf). The housing authority is not eligible for rate reduction (i.e. cost savings) for simply opting into a reduced rate OR for energy efficiency or conservation measures. Rather, the housing authority must proactively take action. The housing authority must (1) negotiate a reduced rate OR (2) undertake power purchase or conservation activities that **reduce the utility rate, not just consumption.** Optimizing rate design with regard to federally-assisted housing may improve ongoing federal support for public housing in Massachusetts.

BHA is also one of the largest administrators of the Section 8 Voucher program in Massachusetts. The utility allowance in Section 8 brings up different and unique issues. Today, BHA calculates a utility allowance based on utility costs in the utility, averaged across service territories. In theory, the utility allowance should shield households from cost increases due to electrification, and in some cases it has. When utility rate

structures are inconsistent in how they do or do not discount heat pump electric rates, this creates inaccurate allowances because the allowance may blend the average rate across each EDC and LDC and apply the averaged allowance across all territories served by the voucher program, which does not align with EDC and LDC service territories. BHA looks forward to ratemaking agencies and utilities in addressing optimal ways to design utility rates as well as input utility allowance data in ways that support affordable electrification.

Regards,

Joel Wool
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MAPC
METROPOLITAN AREA PLANNING COUNCIL

SMART GROWTH AND REGIONAL COLLABORATION

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October 11, 2024

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

Dear Interagency Rates Working Group Members,

Thank you for the opportunity to submit comments in response to the questions posed in the Interagency Rates Working Group (IRWG) Long-Term Ratemaking Study Kickoff Presentation from September 19, 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.

The Kickoff Presentation posed several discussion questions for soliciting input. MAPC has signed onto the joint responses to these questions submitted by the Conservation Law Foundation. In addition to those responses, MAPC would like to further expand on an overarching consideration not highlighted in that letter, particularly (1) consideration of how long-term ratemaking approaches are impacted by the expected transition to a winter peaking system by the mid-2030s, (2) mitigation of energy burden impacts on low- and moderate-income ratepayers after the transition to winter peaking, particularly those who have already electrified, and (3) outreach, education, and test year approaches in anticipation of the transition to winter peaking.

The Commonwealth's long-term strategies for achieving decarbonization mandates rely heavily on fossil fuel to electric conversions for building and transportation end uses. As estimated variously by the individual electric utilities in their Electric Sector Modernization Plans, ISO-NE, and other organizations, achieving the electrification milestones of these mandates will lead to a shift from a summer peaking electric grid to winter peaking sometime in the second half of the 2030s.

Discussions in the near-term strategy report focused on incentivizing electrification through rate designs that take advantage of the unused grid capacity currently available in the winter. As the shape of grid demand changes with greater electrification, responsive electric rate design will need to reflect winter peak impacts, likely necessitating increased winter electricity rates. This will both greatly increase energy burdens on customers who have already electrified and create a disincentive for residents and businesses that have not yet electrified to do so, creating further barriers to achieving the Commonwealth's decarbonization targets.

As such, future electric ratemaking has several critical goals, including: (1) maintaining a reliable, resilient grid through the transition to winter peaking while ensuring necessary investments needed to increase capacity for electrification and distributed energy resource integration can be made, (2) protecting residents—particularly low- and moderate-income residents—who have already electrified from seeing significant increases to energy burdens due to changes to rate design upon the transition to winter peaking, and (3) avoiding disincentives for further electrification due to winter peak-related rate design.

Future designs such as time-varying rates and critical peak pricing may be necessary to develop a responsive grid that can meet the energy service needs of a decarbonized future. However, for lower income residents, these new rate designs may be particularly burdensome as the system transitions to winter peaking. Residents already forced to choose between heating or cooling their homes and meeting other financial obligations will be further constrained when the choice of using electric heating during the coldest days of the year comes with even steeper cost burdens. Rate design that does not acknowledge these challenges risks exacerbating existing inequities in comfort and health that disproportionately impact lower-income households and people of color. As in the near-term strategy report where differing rate structures were analyzed for lower-income households, we urge the IRWG to also analyze variations in future rate design options under winter peaking conditions to assess the impact on lower-income households that have already electrified.

Additionally, we urge the IRWG to consider how communication, outreach, and education to residents will occur both upon the initial transition to future rate designs like time-varying rates or critical peak pricing and upon the transition to winter peaking. This could include shadow billing practices for test years, as well as requirements from utilities to leverage available advanced metering infrastructure (AMI) data to show residents what bills would have been for the previous 12 months using different rate options.

We thank the IRWG for this opportunity to comment. Future rate designs, particularly once AMI becomes available, has the potential to encourage more effective use of electricity to meet our decarbonization goals but must be thoughtfully designed to protect our most vulnerable residents. These challenges will be compounded as the grid transitions into winter peaking. We look forward to engaging with the IRWG on these issues as the long-term study progresses.

Sincerely,

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NRG Energy Comments on Long-Term Ratemaking Study Kick-Off
October 11, 2024

I. Introduction

NRG Energy Inc. ("NRG") thanks the Interagency Rates Working Group ("IRWG") for soliciting comments from stakeholders on the September 19, 2024 presentation made as part of the "Long-Term Ratemaking Study Kickoff."

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.

Below, NRG splits our responses between comments on the September 19th presentation (responding to slides 4 and 5) and responses to the questions that the IRWG posed on slides 6 and 7.

II. Comments on Slides 4 and 5 of the September 19th Presentation

1. On Slide 4, the IRWG lists as an objective: "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."

   Recommendation: The IRWG should expand the objective to also incentivize least-cost wholesale market and transmission-level outcomes. Combined, wholesale market and transmission costs far outweigh distribution-system costs. Focusing exclusively on distribution system upgrades would miss the opportunity to reduce rates and energy bills and make electrification more affordable.

   A pathway forward is through Time-Varying Rates ("TVR"). For example, ISO-NE has estimated that just 1 GW of peak demand reduction could reduce just transmission costs

by $750 million-$1.5 billion dollars.[1] ISO-NE stated "Consumer awareness of the nature and timing of peak load may help consumers participate in the reduction of peak loads to more manageable levels, which could save billions of dollars in transmission system upgrade costs." The $750 million-$1.5 billion would be incremental to avoided capacity, energy, and ancillary, and costs. Experience from TVR in other states suggest that properly designed TVR can reduce peak demand by 9%-14%.[2] Using the ISO-NE figures and in a scenario where peak demand would be 33 GW across ISO-NE without TVR, and all New England states implemented opt-out TVR for the electric distribution companies, peak demand would drop by approximately 5 GW to 28 GW**, translating to $3.75 B in customer savings just on transmission[3].**

2. Regarding Slide 5 and the "Purpose of the Long-Term Ratemaking Study," NRG filed extensive comments on this topic on May 31, 2024. For brevity, we will avoid repeating those recommendations in detail here, but the four-high level recommendations we provided most relevant to the long-term ratemaking study were:

   a) The Study Should Acknowledge and Take Account of Massachusetts' Restructured Marketplace
   b) The Study Should Summarize the Cost Drivers Behind The Major Components of a Customer's Bill
   c) The Study Should Specifically Contemplate How to Maximize Customer Control Over Their Bill and "Opt-Out vs Opt-In" as a Central Consideration of Rate Design
   d) The Study Should Prioritize Time-Varying Rate Analysis Over a Reallocation of Costs to a Fixed Customer Charge

   Relevant to the four recommendations above, we are pleased to see "cost of service" studies listed as part of the purpose of the long-term ratemaking study. Tying rates to cost causation on the retail and wholesale level is foundational to effective design, lowering rates, and reducing energy bills.

   We request that the IRWG review our May 31 comments as part of their review of the comments filed today. We also recommend that the long-term ratemaking study consider the experiences of other states and leverage the findings of other studies. In the Appendix of our May 31 comments, we provided a sampling of these studies.

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[1] 2024_02_14_pac_2050_transmission_study_final.pdf (iso-ne.com). P. 16-17

[2] PC44 Time of Use Pilots: End-of-Pilot Evaluation. Prepared for Maryland Public Service Commission. Prepared by The Brattle Group: Sanem Sergici, Ahmad Faruqui, Nicholas Powers, Sai Shetty, Ziyi Tang. IIOctober 4, 2021.

[3] Currently, at least one New England state, Maine, has an active proceeding to consider opt-out time of use Standard Offer Service rates. Maine Public Utility Commission, Docket No. 2024-00231.

III. Responses to Questions Posed by the IRWG on Slides 6 and 7

What are the biggest challenges Massachusetts faces in aligning electric ratemaking with long-term decarbonization mandates?

1. Currently, there is essentially no price signal for customers to reduce their consumption from the grid during periods of highest emissions or to reduce their consumption in a manner that will facilitate the orderly retirement of fossil fuel generation.[4]
2. Rates do not reflect cost causation, as consumption is priced the same for mass market customers during off-peak and on-peak hours. Therefore, customers have very minimal control over much of their electric bill and consume electricity during peak periods, which drives up total system costs, rates, and bills for all customers. This in turn makes electrification more expensive.

How should the state address these challenges in future ratemaking practices?

Please see NRG's previous comments. The Commonwealth should:

1. Comprehensively study cost causation in MA, looking at how consumption during different hours impacts electric (both retail and wholesale) and gas system costs, as well as short-term and long-term emissions considering the Commonwealth's decarbonization objectives. By short-term emissions, we mean how consumption impacts the type of generation that is dispatched and the emissions profile of that generation. By long-term emissions, we mean the ability to retire fossil fuel generation without compromising reliability. This is necessary for decarbonization, yet there is no price signal for customers to reduce their consumption during the periods where this generation is required.

2. Review the findings from other states (a sampling of which is provided in NRG's May 31 comments) to understand the approaches taken in those areas and the results; at a minimum, consider the optimal peak/off peak ratios, and opt-in vs opt-out.

3. Provide education to customers on how to control their energy bill.

4. Ensure that utilities have the backend systems in place to accommodate TVR.

5. Create opt-out TVR for basic service customers soon after AMI is deployed that send price signals tied to cost causation and strong peak/off peak ratios.

[4] Our understanding is that there has not been mass market participation in Clean Peak to date.

How well do current ratemaking mechanisms and rate design accommodate new technologies like electric vehicles, heat pumps, and other distributed energy resources (DERs)?

With no differentiation in rates for mass market customers between off-peak and on-peak hours, current ratemaking mechanisms are inadequate for accommodating these new technologies in a manner that lowers total system costs and emissions.

How can ratemaking help alleviate affordability concerns as Massachusetts transitions to a decarbonized grid?

If rates are tied to cost causation and there are strong price signals for consumers to reduce their consumption during the periods that have the highest impact on total system costs (electric retail and wholesale, gas) and emissions (short and long-term), then it should lead to lower system costs, which should lead to lower rates, which should lead to greater affordability.

What specific ratemaking changes would you prioritize to achieve these goals?

Opt-out time-varying default rates that align with cost and emission causation.

What is the role for stakeholders (e.g., consumers, environmental groups, industry, utilities, etc.) in shaping electric ratemaking in Massachusetts?

Each of the groups mentioned above will have an important role. While consumers will have an important role, we also must make it as easy as possible for them. Utilities will play an important role by providing the backend infrastructure to enable TVR. Environmental groups will help ensure that rates reflect the short and long-term impact on emissions.

In addition, competitive suppliers will play a critical role by providing innovative rate offerings to customers that can both benefit those individual customers but also total system costs, by educating and engaging customers to understand their usage, and by providing customers with the tools to control their bill and reduce consumption when desired.

How can the state balance the need for cost recovery (for grid investments) with the goal of maintaining affordable rates for all customers?

While some grid investments will be necessary, Massachusetts should be relentless in pursuing cost-effective alternatives to grid investments (e.g. managed charging EV programs, grid services programs that can be offered by utilities or suppliers, implementing opt-out TVR for basic service customers).

What types of rate designs (e.g., time-of-use pricing, critical peak pricing, etc.) should we consider analyzing that can help manage peak demand, promote distributed generation, and accelerate electrification?

Please see above and NRG's May 31 comments. We recommend time-varying-rate basic service pricing.

How should advanced metering infrastructure (AMI) be leveraged to create new rate designs that reflect real-time grid conditions?

AMI, if deployed with appropriate data sharing processes, will provide customers, their authorized suppliers, and their utilities with granular usage data that can be used for settlement purposes under TVR and for education and engagement (e.g. alerting customers to a peak period and the impact of consuming on their energy bills).

From:	Thad Culley
To:	Rates WG (ENE)
Subject:	Response to Scope of Purpose of Long-Term Study
Date:	Friday, October 11, 2024 2:24:55 PM

Sunrun appreciates the opportunity to continue to provide feedback on the scope and work of the Interagency Rates Working Group (IRWG). While the September 19, 2024 presentation on the long-term ratemaking study includes some promising direction, Sunrun has some concern that the scope of the study could be too broad, particularly as it concerns the review of "regulatory mechanisms." "Regulatory mechanisms' are described on slide 5 of the presentation to include reconciling mechanisms, performance-based ratemaking, performance incentive mechanisms, net metering, and revenue decoupling.

Given the complexity and potential controversy of many of the topics that fall under this category, Sunrun does not believe it is appropriate or feasible to attempt to address or assess the efficacy of these mechanisms for purposes of this report. The long-term study will be more useful to the Department of Public Utilities and to stakeholders if it is more tightly focused on exploring the universe of rate design options that balance the objectives of the IRWG. However, if inclusion of "review of regulatory mechanisms" is intended to provide a cursory overview of the existing landscape, Sunrun has no objection to their inclusion in a report provided that no recommendations for modifying those regulatory mechanisms are given.

One item that is not included in the scope of the "Purpose of Long-Term Ratemaking Study" is a review of cost allocation and cost of service methodologies. While this is also a complex and potentially controversial issue, rate making methodology involves intentional decisions by regulators that then dictate what "cost causing" activity is under a certain structure. The long-term study should consider the implication of shifting to winter peaking on existing cost allocation methodologies and whether there are new approaches that would help drive particular behavior and help mitigate the assignment of costs to the residential class as the system evolves to winter peaking. Cost of service methodology defining customer-related costs is also determinative of how much costs could or should be collected through a fixed charge. The value of this report will be much greater if it acknowledges limitations imposed on rate design by existing methodology and considers whether there are alternatives that are consistent with the overall purpose of the IRWG.

The long-term ratemaking study should also take note of the DPU's recent decision rejecting an optional electrification rate proposed by National Grid. In that order, the DPU noted that:

> General Laws c. 164, § 141 states in pertinent part that in all decisions or action regarding rate designs, the Department shall consider the impacts of such actions on the reduction of GHG emissions as mandated by G.L. c. 21N to reduce energy use and efforts to increase efficiency and encourage non-emitting renewable sources of energy. The Department finds the Company's proposed Electrification Pricing option addresses neither of these mandates; the proposal dissociates base distribution costs from usage, thereby reducing the incentive to conserve energy or increase efficiency relative to customers paying variable base distribution rates. Further, the Company has not proposed to limit enrollment to customers who have adopted beneficial electrification technologies and, as such, the proposal does not support increased efficiency. [Order in D.P.U. 23-150 at p. 509 (September 30, 2024).

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