

JUNE 12, 2024

Via e-mail: board.secretary@bpu.nj.gov

Sherri L. Golden, Board Secretary
Board of Public Utilities
44 South Clinton Avenue, 1st Floor
P.O. Box 350
Trenton, NJ 08625-0350

**Re: B.P.U. Docket No. Q024020126: Request for information in the matter of
The 2024 New Jersey Energy Master Plan (EMP)**
Subject: Written Comment from the American Council for an Energy-Efficient Economy

Dear Secretary Golden,

The American Council for an Energy-Efficient Economy (ACEEE) is a nonprofit research organization based in Washington, D.C. that conducts research and analysis on 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 New Jersey.

ACEEE welcomes this opportunity to provide comments to the New Jersey Board of Public Utilities (NJBPU) in regards to the above-referenced Request for Information (RFI). We specifically provide response below to the Energy Master Plan (EMP) Strategy 3, Question 2 and Strategy 4, Question 2.

Strategy 3 of the 2019 EMP: The 2019 EMP stated that the NJBPU should continue to engage with stakeholders to determine opportunities for increasing accessibility to energy efficiency programs, as well as develop program structures and methods for evaluating program success and utility goal achievement that value priorities such as increased program accessibility for hard-to-reach customers. In the first three-year cycle of utility energy efficiency programs, New Jersey's electric public utilities and gas public utilities offered rebates and zero percent financing to encourage energy efficiency improvements statewide, with more favorable rebates and financing terms offered to lower-income customers.

2. What else should New Jersey do to increase education and awareness and address gaps in the accessibility of energy efficiency programs?

- ACEEE's 2023 Utility Scorecard shows that spending and savings for low-income customers is not only far below the scale of need, it also reveals that on average low-income households receive far less spending and far less savings from utility efficiency programs than their proportionate share of the population.¹ Public Service Electric & Gas (PSE&G) and Jersey Central Power & Light (JCP&L) were both at the bottom of major utility ranking on low-income savings per customer. Furthermore, PSE&G's percent spending on low-income programs relative to its total efficiency portfolio spending was also among the lowest. While JCP&L's spending on low-income programs as a percent of total efficiency portfolio spending was comparatively high, it makes little

¹ Specian, M., W. Berg, S. Subramanian, and K. Campbell. 2023. *2023 Utility Energy Efficiency Scorecard*. Washington, DC: ACEEE. [aceee.org/research-report/U2304](https://www.aceee.org/research-report/U2304).

difference because overall spending levels are still so low.² These findings point to a need for additional direction from NJBPU to require utilities to increase overall efficiency spending and savings for low-income customers. The 2024 EMP should include specific goals to substantially increase utility efficiency spending and savings for low-income customers, coupled with performance incentives tied to attainment of the targets.

- Low income customers face an array of barriers to participation in energy efficiency programs that should be systematically considered and addressed through the EMP and subsequent program design processes. These barriers include, but are not limited to, lack of awareness of program offerings, lack of funds for up-front costs, cumbersome eligibility determination processes, inadequate project coordination between program implementers, renter status, the need for pre-weatherization repairs, and language barriers. ACEEE has produced a wide array of research reports and tools for policy-makers to address these challenges that may be useful to NJBPU as it develops its 2024 EMP, including these recent publications:
 - *Toward More Equitable Energy Efficiency Programs for Underserved Households*³
 - *Adapting Energy Efficiency Programs to Reach Underserved Residents*⁴
 - *The Value of Prioritizing Equitable, Efficient Building Electrification*⁵
 - *Energy Equity for Renters Toolkit*⁶
 - *Retrofitting America's Homes: Designing Home Energy Programs That Leverage Federal Climate Investments With Other Funding*⁷

In addition to these resources, continued engagement with stakeholders, particularly those from low-income communities themselves, will be key to overcoming program design and program participation challenges that are limiting benefits from energy efficiency reaching households with the greatest need. Ultimately, efficiency programs for low-income customers should focus on the dual objectives of reaching as many households as possible (breadth) to ensure all customers benefit, and implementing deep efficiency improvements that will make a meaningful impact on household financing (depth) for those with the greatest need.

- The EMP takes an all-of-government approach that encompasses an array of utility- and government-funded programs, which can be an advantage for coordinating program delivery.

² *ibid*

³ Amann, J., C. Tolentino, and D. York. 2023. *Toward More Equitable Energy Efficiency Programs for Underserved Households*. Washington, DC: ACEEE. [aceee.org/research-report/b2301](https://www.aceee.org/research-report/b2301).

⁴ Mah, Jasmine, and R. Sussman. 2023. *Adapting Energy Efficiency Programs to Reach Underserved Residents*. Washington, DC: ACEEE. [aceee.org/sites/default/files/pdfs/adapting_energy_efficiency_programs_to_reach_underserved_residents_-_encrypt.pdf](https://www.aceee.org/sites/default/files/pdfs/adapting_energy_efficiency_programs_to_reach_underserved_residents_-_encrypt.pdf)

⁵ Fadali, Lyla, Michael Waite, and Paul Mooney. 2024. *The Value of Decarbonizing Equitable, Efficient Building Electrification*. Washington, DC: ACEEE. www.aceee.org/research-report/b2405.

⁶ Jarrah, Alexander, and Kate Tanabe. 2022. *Energy Equity for Renters Toolkit*. Washington, DC: ACEEE. www.aceee.org/toolkit/2022/11/energy-equity-renters-toolkit

⁷ Amann, Jennifer, and Kara Saul-Rinaldi. 2024. *Retrofitting America's Homes: Designing Home Energy Programs that Leverage Federal Climate Investments with Other Funding*. Washington, DC: ACEEE. www.aceee.org/white-paper/2024/05/retrofitting-americas-homes-designing-home-energy-programs-leverage-federal.

This is especially important for serving low-income households, for whom stacking and braiding program services may be required to complete meaningful home upgrades. This includes utility efficiency programs, pre-weatherization health, safety, and incidental repair programs, the federally-funded Weatherization Assistance Program, and soon energy efficiency and electrification rebate programs through the Inflation Reduction Act. To ensure the benefits from all these programs reach the households who qualify, a concerted focus on customer outreach and streamlining enrollment processes is also needed. Burdensome documentation requirements, language barriers, inadequate information, and lack of access to broadband are some of the factors that can limit program participation. Easing income verification and reducing the list of requirements to participate in programs aimed at assisting low-income households can enable greater participation and access to these services. Allowing multiple formats for presentation of documents such as online or in-person and through a single portal can help to further streamline the process for households.

- Expanding income eligibility thresholds for income-qualified efficiency programs could also help serve households that are energy burdened but who earn just above the limited-income program eligibility requirements.
- To effectively serve all communities among New Jersey’s diverse population, special focus is needed on language accessibility. This year, the New Jersey legislature passed a law requiring that vital government documents be made available in at least seven of the most commonly spoken non-English languages. The EMP should ensure that language access extend to all aspects of communication regarding energy efficiency programs, including outreach and marketing, as well as program enrollment documents. We also suggest partnering with trusted local community-based organizations to leverage the benefits of culturally appropriate non-English communication channels.
- Many homes are deferred from weatherization programs due to health and safety issues or incidental repair needs, without which it may be difficult or impossible to implement weatherization measures. As noted above, braiding and stacking program funds may be necessary to deliver effective improvement projects in low-income households. This should include incorporating funding for weatherization readiness improvements that address the health safety, and incidental repairs needed to proceed with more comprehensive efficiency projects.

Strategy 4 of the 2019 EMP: The 2019 EMP stated that the most cost-effective first steps in decarbonizing buildings are starting the transition for new construction to be net zero carbon and converting existing homes using baseboard electric heating, oil, and propane to modern, efficient heat pumps.

2. In addition to offering incentives to electrify existing oil- and propane-fueled buildings, as well as buildings heated with older and inefficient electric technologies, what else should New Jersey be doing to successfully achieve its goals of electrifying buildings heated with these technologies?

- Electrification is key to comprehensive decarbonization, and should be pursued in combination with energy efficiency efforts. Pairing weatherization and building electrification is an effective way to reduce energy usage, lower peak demand, and reduce emissions from the energy system. It can also improve health and comfort and deliver cost savings to customers. Since

there is no specific requirement for buildings to meet minimum envelope efficiency standards before electrifying, we recommend prioritizing buildings that are the most poorly weatherized to begin with. This is important because residents of poorly weatherized buildings could face much higher energy bills if they electrify compared to residents of buildings that meet a higher efficiency standard. Last month, ACEEE published a new report titled “The Value of Prioritizing Equitable, Efficient Building Electrification”⁸ that highlighted the societal benefits of electrifying low- and moderate-income households in the Northeast, while noting the need for supportive policies to ensure low- and moderate-income customers are able to electrify affordably.

- NJBPU’s Request for Information on the EMP focused on electrification of delivered fuels (propane and oil), but it is also important to consider electrification of natural gas. Governor Murphy’s Executive Order No. 317 initiated a process through which the future of natural gas will be considered.⁹ The elements included in that executive order should be reflected in the state’s EMP, particularly regarding future infrastructure investment, the potential for stranded assets, and the need to ensure low-income households do not ultimately bear the added financial burden of a gas system whose costs are spread across fewer customers. Future gas utility investments should be aligned with, and not conflict with, the state’s decarbonization goals, and current ratepayers should not be subsidizing natural gas hookups for new buildings. Looking forward, New Jersey should consider strategies to electrify neighborhoods, starting with those where the cost of repairing, replacing, or upgrading existing gas infrastructure is more expensive than electrifying. Many states, including California, Massachusetts, New York, Colorado, Illinois and Washington are actively exploring strategies to decarbonize through electrification, while avoiding further spending on gas infrastructure at risk of becoming stranded assets.
- It is also important to prioritize reducing energy waste from gas-fueled space and water heating through energy efficiency investments targeted at these end uses. However, gas system energy efficiency program dollars should be reserved for building envelope measures only, like insulation and air sealing, and not be used to incentivize the installation of new gas heating equipment. This is a no regrets strategy that will drive near-term greenhouse gas reductions from gas usage now, without compromising the ability to further decarbonize through electrification later. It will also ensure that efficiency savings are captured for the full useful life of the installed measures.
- There are unique considerations related to electrification of heating for low-income households,¹⁰ and cost implications for low-income households making the transition away from fossil fuels generally. Three critical elements we recommend NJBPU consider are 1) low-income customers must not be left behind to shoulder stranded asset costs during the transition from gas to electricity, 2) electrification program offerings for low-income households must be sufficient to cover the upfront cost of switching from propane, oil, and gas to electric

⁸ Fadali, Lyla, Michael Waite, and Paul Mooney. 2024. *The Value of Decarbonizing Equitable, Efficient Building Electrification*. Washington, DC: ACEEE. www.aceee.org/research-report/b2405.

⁹ New Jersey Governor Phillip Murphy Executive Order 317. 2023. <https://nj.gov/infobank/eo/056murphy/pdf/EO-317.pdf>

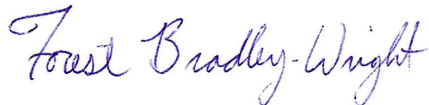
¹⁰ Kresowick, Mark, 2024, “Heat Pump Programs Can’t Keep Leaving Low Income Households Behind”, <https://www.aceee.org/blog-post/2024/02/heat-pump-programs-cant-keep-leaving-low-income-households-behind>

equipment, and 3) low-income households must also be protected from the potential for higher energy costs in the short term.

- New Home Energy Rebate Program funding through the Inflation Reduction Act will help to accelerate low- and moderate-income household electrification (particularly for multifamily affordable housing), though it may still be necessary to braid and stack funds from multiple program sources to make some projects happen.
- Unless steps are taken to ensure electrification is paired with efficiency upgrades, in some cases switching from gas to electric heat may lead to higher energy costs for low-income households in the short term. This can be remedied through policies that establish a commitment to ensure low-income customers do not pay more for energy when they electrify. Last year, ACEEE published a report exploring this subject titled “Equity and Electrification-Driven Rate Policy Options,” which included discussion on percentage of income payment plans (PIPPs) and rate designs that enable heating electrification.¹¹
- Finally, NJBPU should strive to maximize the greenhouse gas reduction potential of energy efficiency in the EMP. As such, we encourage consideration of the hourly carbon intensity of electricity, in addition to total energy savings and peak demand reductions. We recommend NJBPU use load and generation forecasts to determine which hours of the year the carbon intensity of electricity will be largest (i.e., hours with the highest emission rates). Energy efficiency measures that deliver savings during those high carbon intensity hours should be preferred. There are several methods for tracking carbon emission rates and avoided greenhouse gas reductions from energy efficiency (e.g., average, marginal, statewide, locational) and also uncertainties regarding what those emissions rates will be in the future. As a first step, consider simply tracking emissions avoided by energy efficiency measures using more than one of the methodology indicated above. Tracking provides a benchmark that can be used for future goal-setting. It also provides an early indicator of how well the energy efficiency portfolios are set up for decarbonization, and facilitates comparisons with other New Jersey decarbonization efforts. Tracking will allow utility and NJBPU staff to gradually gain experience with accounting methodologies that are not always straightforward and can highlight any data access gaps that may inhibit precision accounting in the future.

Thank you for the opportunity to provide comments regarding New Jersey’s Energy Master Plan. We look forward to continued engagement with the New Jersey Board of Public Utilities on these issues. Please contact us with any questions or if you would like to discuss these comments in greater detail.

Sincerely,



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¹¹ Yim, E., and S. Subramanian. 2023. *Equity and Electrification-Driven Rate Policy Options*. Washington, DC: ACEEE. <https://www.aceee.org/white-paper/2023/09/equity-and-electrification-driven-rate-policy-options>.