



May 17, 2024

Sherri L. Golden
Secretary of the Board
Board of Public Utilities
44 South Clinton Ave., 1st Floor
PO Box 350
Trenton, NJ 08625-0350

RE: Building Performance Association Response to Request for Information *In the Matter of the Implementation of Federal Inflation Reduction Act HOMES (Home Efficiency Rebates) and HEEHR (Home Electrification and Appliance Rebates) Program* (Docket No. QO23100733)

Dear Ms. Golden:

Thank you for the opportunity to provide feedback regarding the program design for the Inflation Reduction Act Home Efficiency Rebate program (HOMES) and the Home Electrification and Appliance Rebate program (HEAR). The Building Performance Association (BPA) is a 501(c)(6) membership-driven industry association dedicated to advancing the home and building performance industry. BPA members will play a pivotal role in implementing the rebate programs, since contractors represent the primary source of information and advice for most homeowners performing energy efficiency improvements – and because of their direct work in homes to reducing household energy costs.

BPA submitted previous comments on January 12, 2024, in response to the technical conference sponsored by the Board of Public Utilities (BPU); we continue to support the recommendations made in those comments, and offer the additional recommendations in response to BPU request for information dated May 7, 2024:

- **Maximize Energy Efficiency** - BPU should **maximize efficiency** across all HOMES and HEAR projects, including by requiring envelope improvements before heat pump installations if the required assessment determines insulation is needed to maximize the efficiency and effective operation of the heat pump. Properly installed efficiency upgrades (insulation, air sealing, and more) reduce household energy use, utility bills, greenhouse gas emissions, and grid impacts. These measures can also increase home comfort and support successful corresponding equipment upgrades, including electrification projects.
- **Support Equity** - Low-income households face both high energy burdens and challenges accessing funding for energy-efficiency upgrades, and the BPU should leverage the HOMES and HEAR programs to reduce barriers to energy efficiency improvements for

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low-income households. The HOMES and HEAR programs should be mindful not to leave homeowners with higher energy bills post retrofit.

BPA's full, detailed response comments are enclosed with this letter. Thank you again for the opportunity to provide these comments, and we look forward to working with you on successful implementation of these crucially important programs.

Kara Saul Rinaldi
Chief Policy Officer
Building Performance Association

2. What would be the best analytical approach – measured or modeled – for calculating energy savings in multifamily buildings? Are there scenarios where one would work better than the other?

As described in more detail in our January 12, 2024, comments, BPA recommends that the BPU should offer both the measured and the modeled energy savings pathways to provide maximum flexibility for homeowners, building owners, and contractors.

The measured energy savings pathway¹ aligns incentives for homeowners, contractors, and aggregators because of the accountability for work quality and accurate savings predictions taken on by aggregators. It also allows for potentially higher rebates for homes with the highest energy usage, such as leaky, poorly-insulated homes. The modeled program complements the measured pathway by providing alternatives which can more easily braid with HEAR rebates for all appliances. Both pathways leverage historical energy data to ensure accuracy.

The congressional intent of the HOMES modeled pathway acknowledged that, while all energy models have challenges, energy models that are calibrated using household energy usage data are more likely to be accurate. The requirement to utilize the BPI-2400 standard for HOMES modeled projects therefore helps to ensure that contractors do not overpredict savings estimates. Historically, modeled savings estimates have had difficulty accurately predicting energy savings, as:

- Energy models struggle to capture many complex factors that determine energy savings, including household behavior or modifications made to home since their construction.
- Inputs to energy models can often be subjective such as the R value of existing insulation levels, particularly in areas of existing homes that are not easily accessible.

The BPI-2400 standard aims to ensure that contractors do not overpredict when making savings estimates. In addition, BPI-2400 requires the use of prior energy data, which helps to establish how that individual home uses energy and models the upgrade to correspond to that actual usage.

As the BPI-2400 standard is not designed for multi-family buildings, BPU will need to determine alternate and equivalent processes to model energy savings for multifamily properties. BPU should ensure that these approaches meet both the legal requirements of the statute that explicitly requires historical use data and ensure wide access to the program by all homeowners. This includes clear guidance to contractors that they must calibrate the baseline energy use of a home to that home's historical energy use, utilizing BPI-2400 or an equivalent methodology that utilizes the energy bills.

To maximize program uptake, BPU should implement both programs.

¹ As laid out under IRA Sec. 50121(c)(2)(A)(iii), Sec. 50121(c)(2)(B)(iii), and Sec. 50121(c)(2)(C)(iii).

4. Does this approach address the unique needs of our state in terms of: a. the need for efficiency and electrification upgrades in multi-family buildings? b. the need for efficiency and electrification upgrades in low- to moderate-income households?

Underserved communities bear the brunt of poor home performance. According to a 2020 report published by ACEEE, low-income households spend 8.1% of their income on energy costs, on average, in comparison to 2.3% for non-low-income households.² This high energy burden correlates closely with race, as well. Nationally, Black households spend 43% more of their income on energy costs than their white, non-Latinx counterparts; Latinx households spend 20% more; and Native American households spend 45% more.³ These vast energy burden gaps will be critical to address via the Home Energy Rebate programs.

Though low-income households face the largest energy burdens, substantial upfront costs make home performance and electrification upgrades extremely challenging. When facing equipment failure during a heat wave or a cold snap, low-income homeowners are often forced to use high-interest credit cards or payday loans for a unit replacement to cover upfront costs for replacements, making high-efficiency, higher-end equipment unattainable.

Low-income households, by definition, lack financial resources. But low-income and disadvantaged households aren't just short on funds—they're also short on time, access to technology, reliable transportation, and social supports, all of which help households navigate complex application processes. BPU should engage with existing local community and neighborhood organizations, nonprofits, and trusted local media sources to spread the word about programs, including for non-English speakers.

5. Do you believe the proposed budget allocations for the M-RISE Program and the CP-HEAR Program are appropriate?

The proposed budget allocation may miss opportunities to effectively align HOMES funding with the Weatherization Assistance Program. In our January 12, 2024, comments, BPA recommended that BPU should work with the Department of Community Affairs to braid Weatherization Assistance Program (WAP) funding with the Home Energy Rebates to ensure there is maximal coverage and no overlap between the energy measures used for the programs. WAP has a decades-long history serving communities and knows the populations well, including disadvantaged communities.

By allocating 100% of HOMES program funding and 85% of HEAR program funding into the M-RISE program for multi-family buildings, BPU may miss opportunities to maximize energy savings and emissions reductions. Single family homes use approximately 3.5 times the energy, on average, as multifamily units,⁴ and some leaky and poorly insulated homes may use well

² American Council for an Energy Efficient Economy, "How High are Household Energy Burdens?" September 2020. <https://www.aceee.org/sites/default/files/pdfs/u2006.pdf>.

³ Ibid.

⁴ The DOE HOMES Measured Path Incentive Payment Calculator data shows that single family homes use 121 MMBTU per year while multifamily units use 34.3 MMBTU per year.

above the average. By identifying low-income single-family homes with high energy usage, BPU could maximize both energy savings and equity.

The proposed budget allocation would also exclude single family homes identified by the WAP from eligibility for further support from the IRA Home Energy Rebates. BPU should ensure that some funding remains available for single-family units, particularly those identified by the WAP as good candidates for further energy efficiency or electrification upgrades.

BPU's proposal to target multifamily affordable housing properties is important but may reduce potential impacts of the program on single family homes. Notably, affordable multifamily housing received substantial funding via the Department of Housing and Urban Development (HUD) Green and Resilient Retrofit Program (GRRP), also passed in the IRA, which focuses on energy resilience (along with water and climate resilience) in eligible HUD-assisted multifamily properties. BPU should ensure NJ's home energy program funding supplements and does not supplant existing programs, including GRRP.

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6. Do you have any other concerns regarding this approach or additional ideas for consideration?

BPA reiterates the recommendations from our January 12, 2024, comment, and highlights the below recommendations as particularly relevant to the proposed program design:

Weatherization Prerequisites for Heat Pump Installation

BPU should adopt DOE's envelope-first Home Energy Rebate recommendations to protect consumers from significant increases in energy bills.⁵ Per DOE's Program Recommendations page, "DOE strongly recommends states require that [weatherization] need[s] be met before any mechanical or appliance upgrades are considered. For example, states should consider requiring all cost-effective envelope upgrades prior to the installation of efficient equipment." This is particularly important for multifamily buildings, where the building owner may not be responsible for the energy bills, potentially putting tenants at risk of higher bills.

One of the best ways to ensure that projects result in lower energy bills is to promote comprehensive retrofits that combine energy efficiency and electrification.⁶ Contractors should be required to present customers with options for weatherization and envelope improvements which could reduce utility bill impacts. This requirement should include reasonable exceptions for homes built recently, which have received insulation and/or building envelope air sealing upgrades within the last 10 years, or which previously used electric resistance heating (which

⁵ DOE Program Requirements and Application Instructions, dated October 13, 2023, allows states to "require envelope upgrades prior to the installation of mechanical or appliance upgrades." p. 35-36. DOE's Envelope-First Home Energy Rebate recommendations are available at <https://www.energy.gov/scep/slsc/home-energy-rebate-program/maximizing-home-energy-performance-when-using-home-energy>.

⁶ Emily Levin, VEIC. "Equitable Electrification: Solving the Affordability Catch-22 for LMI Households that Heat with Natural Gas." <https://www.veic.org/clients-results/reports/equitable-electrification-solving-the-affordability-catch-22-for-lmi-households-that-heat-with-natural-gas>.

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should see energy bills decrease regardless of insulation upgrades).⁷ These safeguards will protect low-income and disadvantaged rebate recipients who, as noted above, bear disproportionately large energy burdens.

Contractor Qualifications and Certifications

Quality work begins with an organization's ability to support its workforce. Contractor firms should be evaluated based on their ability to manage the project's sales, design, scheduling, installations, and job close-out processes. Specific credentials of individuals will be dependent on job roles, the types of measures that the contractor firm is qualified to design and install, and the internal systems that the contractor has established to perform quality control and quality assurance.

Contractor certifications are invaluable tools to ensuring consistent quality in home performance and electrification projects. The AnnDyl Policy Group Contractor Survey provided contractors with a list of certifications and asked to select all that they would favor to be required of contractors to perform HOMES and HEAR projects. A majority of contractors surveyed (61 percent) noted they believed BPI Building Science Principles, Building Analyst, Infiltration, and Duct Leakage certifications should qualify contractors to perform HOMES and HEAR projects, while 30 percent selected ACCA and/or NATE certification for HVACR and 25 percent selected RESNET Home Energy Rating Specialist and Rating Field Inspector. Other responses included Home Energy Score assessor (18 percent), HEP Energy Auditor and Quality Control Inspector (18 percent), and Healthy Home Evaluator (13 percent).⁸

The vast majority of residential home performance, general construction, HVAC, or plumbing are small non-union businesses.⁹ The residential retrofit market has been particularly distanced from union activities due to lack of mutual benefit. Unions serving the commercial building space rely upon sets of standards, training practices, and credentials that are common across the country. Small businesses lack the resources to afford union participation, and there are no large “union only” jobs available to be bid on. Nonprofit industry associations (like the Building Performance Association) serve as centralized locations where contractors, advocates, trainers, State Agency representatives, utility providers, workforce development programs, community action agencies, and others can convene to communicate and fill gaps. For more information, see the Building Performance Association’s response to DOE’s workforce RFI [here](#), co-signed by over 150 other companies and organizations.¹⁰

⁷ U.S. Energy Information Administration, “U.S. households’ heating equipment choices are diverse and vary by climate region.” <https://www.eia.gov/todayinenergy/detail.php?id=30672>; U.S. Department of Energy, “Heat Pump Systems.” <https://www.energy.gov/energysaver/heat-pump-systems>.

⁸ AnnDyl Policy Group Contractor Survey (conducted November 15, 2022-January 6, 2023). <https://anndyl.com/wp-content/uploads/2023/09/AnnDyl-Contractor-Survey-Initial-Results.pdf>.

⁹ E4TheFuture, 2021 Energy Efficiency Jobs in America Report. https://e4thefuture.org/wp-content/uploads/2021/10/Energy-Efficiency-Jobs_2021_All-States.pdf.

¹⁰ The Building Performance Association (BPA) and Home Performance Coalition (HPC) submitted joint comments to DOE related to DE-FOA-0002885. Full comments available at <https://building-performance.org/wp-content/uploads/2023/01/1.26.23-BPA-HPC-DOE-Workforce-RFI-Response.pdf>.

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The BPU should ensure that contractor qualification requirements for the M-RISE, CP-HEAR, and HOMES and HEAR programs include high-quality, industry-relevant certifications as describe above, while also ensuring that the programs remain accessible to the full range of residential contractor businesses.

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