Sealed

June 12, 2024

Secretary Sherri L. Golden
New Jersey Board of Public Utilities

Re: Docket QO24020126 - Sealed Comments on Energy Master Plan

Dear Secretary Golden:

Thank you for the opportunity to provide comments on New Jersey's 2024 update to the Energy Master Plan. These comments are provided by Sealed, a climate tech company on a mission to stop home energy waste. Sealed provides software and solutions to contractors, enabling them to install more home weatherization and electrification projects, grow their businesses, and make it easier for homeowners to have more comfort with less energy waste. Sealed serves as an aggregator of projects for residential energy efficiency rebate programs, handling all rebate processing and payment on behalf of contractors.

Sealed has over 10 years of experience with measured savings programs, which provide rebates based on actual, quantified savings by looking at energy usage before and after project installation. New Jersey can help improve reliability and lower consumer costs by making energy efficiency a real, measured resource that grid operators can rely on. And by valuing savings based on time and location, New Jersey can create an incentive structure to turn energy efficiency measures into essential components of Virtual Power Plants (VPPs) that lower peak demand and improve grid flexibility.

We thank the Governor and BPU and staff for their tireless work on energy issues in New Jersey, including by holding meaningful public engagement processes. We look forward to continuing to work with you on the EMP updates as well as on other issues.

Sincerely,
David Kolata
Vice President of Policy
Sealed Inc.

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Sealed Comments

New Jersey's Energy Master Plan (EMP) is critical for facilitating a coordinated, holistic approach to tackling greenhouse gas (GHG) emissions and spurring investments in clean energy. According to the EMP, residential buildings are one of the largest sources of GHG emissions in the state. Therefore, tackling residential GHG emissions remains an essential component of reaching the goals outlined in the Global Warming Response Act and other state energy goals. Residential energy efficiency and electrification rebate programs remain an essential strategy for encouraging home energy retrofits.

The BPU has an opportunity to increase the impact of energy efficiency programs by providing rebates based on actual energy savings, also known as measured savings or pay-for-performance. Measured savings programs evaluate energy savings before and after the retrofit is installed to measure actual energy savings. In measured savings programs, aggregators pay rebates immediately, so contractors and households do not have to wait during the measurement period. Aggregators then take on the performance risk of retrofit projects achieving the expected energy savings. If the savings are not realized, aggregators take the hit—not contractors or households.

New Jersey has two near-term opportunities to offer measured savings programs: the Inflation Reduction Act (IRA) Home Efficiency Rebates (HOMES/HER) Program as well as utility programs that are currently being shaped by the Triennium 2 process. To offer residential measured savings programs, we recommend the BPU:

1. **Offer the measured savings pathway of the IRA HOMES Program for single family homes.** Sealed's comments on New Jersey's IRA programs can be found in BPU docket QO23100733 here.

2. **Encourage utilities to stand up measured savings pilot programs through the Triennium 2 process.** This will allow New Jersey to transition to performance-based programs.

Measured savings programs can provide the following benefits to New Jersey:

- **Support grid reliability** as PJM and grid operators require that both demand-side and supply-side resources are quantified and verified. Both the EMP and Clean Energy Act emphasize managing and reducing peak energy demand. Residential energy efficiency is predictable, reliable, and comparatively inexpensive, and with proper program design it can serve as

the “base load” for Virtual Power Plants (VPPs). To date, energy efficiency has often been left out of the VPP and grid reliability discussions. But that’s only because energy efficiency has historically relied on energy models or deemed savings approaches, even though grid operators need measured results on both the supply and demand sides of the energy coin. To be valued as a true grid resource, energy efficiency must therefore be measured.

The IRA HOMES Program is a great opportunity to test out the grid benefits of measured savings. Specifically, the IRA HOMES Program requires that states value savings based on time, location, and/or greenhouse gas emissions. We encourage New Jersey to value savings on one or more of these factors, especially time or location. For example, New Jersey can reward energy savings during peak hours and high-demand days, as these periods present the greatest value for energy savings and are crucial for maintaining and improving grid reliability. The price of energy varies significantly during the day and throughout the year. Electricity on a hot summer afternoon is typically more expensive than the same amount of electricity used in the early hours of a cool spring morning. Directing load optimization efforts and efficiency improvements to these high-value times will not only lower costs for all customers but also offer direct advantages to program participants.

- **Ensures equitable program outcomes and improves affordability.** Energy efficiency programs that drive high-quality home retrofit projects are crucial for low-income families in particular. When project quality suffers, low-income communities typically suffer the most. The work must be done the right way the first time to avoid improperly installed equipment that can result in costly repairs. In addition, high-quality projects can ensure that households get the most health, safety, and comfort benefits of home energy efficiency improvements. Measured savings programs, by definition, transfer project performance risk from households and taxpayers to aggregators. Low-income and hard-to-reach households will greatly benefit from this transfer of risk. Additionally, measured savings programs reward high-quality retrofit projects that save as much energy as possible.

  As noted in the BPU’s second hearing on the EMP, “barriers to weatherization most frequently include asbestos and moisture issues, including mold, foundation leaks, and roof leaks.” While measured savings programs provide rebates for energy savings, programs can be designed to create dedicated funding for health and safety upgrades. This approach is a win-win for the state and consumers as New Jersey can get the grid benefits of measured savings while also addressing health and safety concerns.

- **Drives electrification and weatherization in tandem.** Measured savings programs provide rebates based on energy savings; therefore, they can drive adoption of heat pumps and weatherization in tandem, which reduces the need, and complexity, of having separate programs for electrification and weatherization.

- **Protects consumers and taxpayers** from waste, fraud, and abuse because rebates are provided based on actual, measured savings that can be verified. Many studies have demonstrated that deemed and modeled approaches do not typically realize the estimated energy savings, particularly for low-income households.[1] The measured pathway, on the other hand, is much more likely to significantly reduce energy burdens given the accountability for work quality taken on by aggregators.

- **Enables robust contractor participation** which is an important measure of market transformation. Today, contractors face a lot of friction when participating in programs, which creates soft costs for contractors, consumers, and programs. Soft costs can include the administrative time contractors spend to complete paperwork for programs as well as the cash flow impacts as a result of waiting for rebate payments. New Jersey can maximize the number of contractors that participate in rebate programs by offering measured savings.

- **Drives demand for high-quality contractors** as rebates are provided based on actual energy savings. In other words, contractors are incentivized to help customers achieve higher energy savings, creating a "race to the top" as contractors compete over who can do the best projects and get the best overall results.

We greatly appreciate the opportunity to provide comments on the EMP. In short, we encourage the BPU to offer residential measured savings as a strategy for both maximizing the value of energy efficiency investments while also reducing peak demand and improving grid reliability.

[1] Previous NYSERDA research shows that in houses with natural gas, realization rates of model-based savings range from 33% to 51%. See Table 12. *NYSERDA Residential Retrofit Impact Evaluation,* August 2022. https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Publications/PPSER/Program-Evaluation/Matter-No1602180NYSERDA-Retrofit-Impact-CEF-Report-FinalOctober2022.pdf Other studies of the California Advanced Home Upgrade Program (AHUP), Michigan Weatherization Assistance Program (WAP), and Illinois Home Weatherization Assistance Program found similar results.