

January 12, 2024

Submitted electronically

Sherri L. Golden
Secretary of the Board
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Re: Docket No. QO23100733, In the Matter of the Implementation of Federal Inflation Reduction Act HOMES (Home Efficiency Rebates) and HEEHR (Home Electrification and Appliance Rebates) Program.

Dear Secretary Golden,

On behalf of Opower, I am pleased to submit comments to the New Jersey Board of Public Utilities regarding the Home Efficiency Rebates Program (HOMES) and the Home Electrification and Appliance Rebates Program (HEEHR).

Opower is part of Oracle Energy & Water's business practice. We are a utility customer engagement and business intelligence platform, supporting utility decarbonization, affordability, and energy management efforts. We implement behavioral energy efficiency, demand response, and customer engagement programs for 174 utilities across the US and around the world, including programs in New Jersey. Following the important discussions at NJ Board of Public Utilities' Technical Conference to discuss the design of the program to implement the HOMES and HEEHR formula funding, Opower appreciates the opportunity to provide comments on integration with existing energy efficiency programs, and on the importance of robust customer outreach and education.

Please find our responses to a select subset of questions on the subsequent pages. Thank you for your consideration of these comments. Please reach out with any questions.

Sincerely,

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Customer Engagement is Key to HOMES and HEEHR Success

Opower's expertise is in the customer engagement and utility data access aspects of the HOMES and HEEHR programs. We know, from over 15 years of experience supporting utility energy efficiency and decarbonization programs, that successful customer engagement depends on targeting the right customers at the right time with the right message. We do this by leveraging data science, behavioral science, and thoughtful user design to personalize proactive customer communications. Partnership with utilities puts the BPU in the best position to leverage utility customer data and ensure personalized engagement. We hope that the BPU will incorporate these kinds of methodologies into its program design and implementation of the HOMES and HEEHR programs. We hope that the BPU will leverage the utilities, their existing programs and IT investments, and utility customer data to implement the rebate programs in an efficiency and secure manner.

Step 1: Identifying Customers and their Needs

The first step in outreach is identifying those in need. Focusing on disadvantaged communities as defined at the census tract-level has its benefits – it easily identifies and qualifies all households within the census tract as burdened and provides a swift way to target program resources. Relying solely on a census tract approach, however, has drawbacks. Households experiencing energy poverty outside of those census tracts will be overlooked. Census tract approaches tend not to work as well in rural areas due to local demographics and geography. In short, in a state like New Jersey, if the BPU was to only use a census tract-based approach, or only the Overburdened Communities designation, to identifying households in need, hundreds of thousands of households will likely be unobserved.

In New Jersey and across the country, Opower has worked with utilities to help them understand the energy affordability challenges faced by their customers. Our approach layers publicly available datasets on top of purchased proprietary datasets and data collected directly from customers to generate a suite of affordability metrics. Notably, we can assign an energy burden score to every household in a utility's territory. Understanding the energy burden at a household level, rather than at a census tract-level, is important to ensure that no households are left out. Time and again, we identified tens of thousands of energy burdened customers, if not more in larger utility territories, that would otherwise have been unseen using a census tract-only approach to identifying customers in need.

We encourage the BPU to work with utilities in New Jersey to identify energy burdened households and not rely solely on census tract or OBC approaches to direct program resources. A multi-pronged approach to customer identification will result in more equitable access to the HOMES and HEEHR programs.

Step 2: Proactive Customer Engagement

The customer experience should be at the forefront of HOMES and HEEHR program design and implementation. Heat pump manufacturers like to remind policymakers that households generally only replace their heating system once in a lifetime, when the old system breaks. The success of both programs, particularly the HEEHR programs, will rely on proactively engaging and educating customers,

and catalyzing them to apply for electrification rebates. Utility rebate program experience demonstrates that, oftentimes, financial incentives are not enough to make customers act. Barriers include low awareness of available rebates, upfront project costs, complex and time-consuming processes for applying for the rebates and completing the energy upgrade, and skepticism of promised savings for new technologies like air source heat pumps. The relatively low conversion rate of customers who complete a home energy audit and those who take the next step in actually retrofitting their homes is evidence that it takes more than rebate money for energy efficiency programs to succeed.

Proactively engaging customers must be part of the foundation of designing equitable HOMES and HEEHR programs. Outbound communications – digital and print – will be an important component of reaching customers who can benefit from the IRA rebate programs. Customers also need help getting the most accurate information about the environmental, health, and cost reasons to electrify their homes and appliances. The environmental, health, and cost impacts of electric appliances and energy efficiency are highly dependent on the age and condition of the home, the home’s load profile and household usage patterns (and the flexibility to shift usage), electric and gas rates, local pollution profiles, and available capacity at local distribution feeders (to not create reliability issues with additional load from electrification), among other factors. For these reasons, it is critical to leverage data analytics and customer’s utility data to provide personalized insights into the expected outcomes of home energy retrofits and electrification. Disaggregating a home’s energy profile can provide insight into the appliances and systems that use the most energy inside the home as well as more accurate information about the impact that an energy efficiency upgrade or electrification may have. While there are numerous ways to gain insight into a home’s energy profile, the BPU should consider taking advantage of the state and ratepayers’ investment in advanced metering infrastructure, where possible.

A proven way to overcome these barriers is to use personalized energy data insights to create a more informed and empowered consumer. Recently, Opower leveraged its affordability analytics and disaggregated energy usage insights to drive a nearly 3X rate of completion of home weatherization at a Northeast utility client. This pilot also found that customers who clicked on the personalized Opower-generated digital communications were 10X more likely to complete a weatherization project than those who received the mass marketing program promotion.

Step 3: Delivering a Positive and Impactful Customer Experience by Integrating HOMES and HEEHR with Existing Energy Efficiency Programs in New Jersey

Consumers in New Jersey will face the challenge of navigating myriad programs to improve the energy efficiency of their homes and pursue home electrification. The incentives, eligibility requirements, application requirements, and other aspects of the various programs will likely differ. For the average consumer, it will take a lot of effort to take advantage of every offer available to them.

The BPU is in a position to use a portion of its administrative funds through HOMES and HEEHR to stand up an online, consumer-facing one-stop-shop (“OSS”) for all energy efficiency and electrification programs. The OSS should be inclusive of federal-, state-, local-, and ratepayer-funded programs. It should provide consumers with personalized recommendations – based on known consumer and household attributes, household energy profiles, and information collected directly from the customer through the OSS site.

The BPU should also ensure that utilities in New Jersey are serving all residents equally, by working in lockstep to promote and disburse HOMES and HEEHR rebates. To achieve this alignment, the BPU should work to provide clarity on the topic of energy savings attribution. ACEEE has provided high level guidance on this issue and the importance of bringing utilities to the table to promote rebates.¹

Future Technical Conferences and Working Sessions

In future discussions on program design consideration for HOMES and HEEHR funding, the BPU should explore:

- Learning from utilities and EE implementers about opportunities to build onto existing programs to support HOMES and HEEHR.
- Leveraging existing utility and vendor data integrations to support efficient program operations and to avoid duplicate IT investments.
- Best practices to make use of utility customer data for the purposes of being able to segment and target customers, proactively engage them, and provide them with personalized insights to build trust and awareness in the programs.

Additional Considerations

The BPU should consider the following as you develop applications for the HOMES and HEEHR programs:

- The programs call for a wide range of program administration capabilities. The BPU should recognize that best-in-class solutions may need to be procured in a piecemeal manner rather than through a single implementer. Any requests for proposals should be structured to encourage solution-specific responses.

¹ "Regulators Can Encourage Utilities to Help Implement New Home Energy Rebates" ACEEE, Oct. 10, 2023.
<https://www.aceee.org/blog-post/2023/10/regulators-can-encourage-utilities-help-implement-new-home-energy-rebates>