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April 7, 2025

VIA ELECTRONIC FILING

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120

Re: Docket No. M-2025-3052826 – Act 129 Phase V Energy Efficiency & Conservation Implementation Order

Dear Secretary Chiavetta:

Oracle Utilities Opower submits for filing the attached comments in response to the Tentative Implementation Order issued on February 20, 2025.

Thank you for the opportunity to weigh in on this important matter and appreciate the Commission's consideration of Oracle's comments. Please do not hesitate to contact me with any questions at carolyn.sloan@oracle.com.

Sincerely,

Carolyn C. Sloan

Carolyn Sloan
Senior Manager, Regulatory Affairs
Oracle Utilities Opower

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Introduction

Oracle Utilities Opower appreciates the opportunity to provide comments on the Public Utility Commission's Tentative Implementation Order. Oracle Utilities Opower brings artificial intelligence (AI) and behavioral science into the utility customer experience to influence action at scale. We implement behavioral energy efficiency (EE), demand response (DR), and customer engagement programs for 174 utilities across the US and around the world.

Our Act 129 Home Energy Report (HER) programs are some of our longest running – Opower has been a registered Conservation Service Provider implementing behavioral energy efficiency programs since 2009. In that time, over 2 million customers have received a Home Energy Report, and the programs have delivered about 5 TWh in electricity savings. That's enough electricity to power over half a million Pennsylvania homes for a year.

In the most recent full program year alone, Home Energy Reports reached over 1.3 million Pennsylvanians with personalized energy insights, ways to save energy, and information on how to continue their energy efficiency efforts through other programs. Home Energy Reports are not just a vehicle for low-cost energy savings at scale, they are also key for low-income customer savings, coincident peak demand savings, and promotion of other utility programs. In the first three years of Phase IV, HER programs have reached over 120,000 low-income customers with personalized messaging and recommendations for low- and no-cost ways to save. HERs have also delivered almost 25 MW of coincident demand savings across customer classes. Based on evaluated results, the HER programs also drive a 5-15% increase in participation in other Act 129 programs. As utilities work to meet their energy efficiency and peak demand reduction targets for Phase V, Home Energy Reports can play a key role in achieving cost effective savings.

Beyond Home Energy Reports, there are many ways the Act 129 programs can be strengthened and able to reach more customers. Oracle Utilities Opower respectfully requests the Commission consider the following recommendations.

Support Low Income Customers with Better Use of Data Analytics and Data Sharing

Utility run HER programs in Pennsylvania serve low-income customers with personalized reports geared specifically toward energy burdened customers. The reports contain energy insights and energy savings tips that are low- or no-cost and include marketing modules that

promote income qualified programs. Low-income HERs remain a critical low-cost measure that both saves energy and increases participation in other, deeper energy efficiency measures, both of which contribute to utilities low-income savings targets.

The Energy Efficiency and Peak Demand Potential Study notes, "many low-income households have yet to be reached" for participation in Act 129 programs. Being able to find vulnerable customers is the first step to increasing enrollment. Many programs currently rely on existing state and utility program participation data to know who to reach out to, but this leaves out customers who have not yet been identified as energy burdened. Even expanding to use census tract data, while helpful, does not go far enough to find and reach all the customers who could benefit from energy efficiency programs. In many cases, energy burdened customers are not aware of programs that may benefit them, *and* the utility can't proactively engage them because the utility doesn't have insight into the customers' needs.

Oracle Utilities Opower recommends the Commission support the use of enhanced data and predictive analytics to improve utilities' ability to find and reach customers who may be in need but are not already enrolled in any programs and don't live in a low-income census tract.

In a recent analysis of a utility in the Northeast U.S., we found that census tract data determined approximately 10% of the utility's population was energy burdened. By using additional data sources and advanced analytics, we discovered that nearly 20% of the utility's population was likely energy burdened.

By using best available technology to layer multiple data sets from the utility, government sources, state agencies and others, utilities can find customers that meet the 150% Federal Poverty Income Guidelines, while still observing strict data privacy standards. When tested against a census tract-based income approach, this approach is able to identify many more customers who were eligible for assistance – analysis of New York utility customers found that energy burdened customers could be found in almost every census tract, not just in those designated as low income. Another Northeast utility was able to identify 78% more limited-income customers leveraging Opower's data and analytics relative to the utility's existing approach. This kind of analysis can be used in tandem with other efforts such as geographic targeting and self-attestation to reach a wider group of customers who may benefit from low income HERs and other energy efficiency measures.

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Oracle Utilities Opower appreciates the Commission's acknowledgement that increased data sharing between the EDCs and state agencies is important for Phase V, and we note that this is especially important for ensuring that low-income customers get the full benefit of the programs for which they are eligible. A customer looking for assistance may start that journey via CAP, LIHEAP, energy efficiency, rate plans, or other offerings. Promoting more collaborative use of customer information within each utility and between the utilities and state agencies can help break down barriers between programs.

Participation data in particular is helpful in creating visibility into the full lifecycle for each customer's journey so that either the utility or state agency can reach a customer wherever they are. Ideally, no matter where a customer goes for assistance, the utility or state agency is able to share information with each other like what programs they applied for, whether they were approved, and whether their income was verified. Then the utility or state agency can use that information to target future outreach. If a utility does not know that a customer participated in a state program, they may not know they are energy burdened. If that data is shared, utilities can better target their outreach and enrollment efforts, and incorporate it into the advanced analytics discussed above.

Oracle Utilities Opower strongly supports the reintroduction of demand response programs in Phase V. In response to the Commission's questions in the Tentative Order on demand response, we offer the following recommendations:

- **Both coincident demand reductions from EE programs and demand reductions from DR programs should count** towards Phase V peak demand reduction targets. This allows utilities the flexibility to offer a wider array of programs and capture demand reductions from more customers.
- **Targets should be based on both summer and winter** demand reductions, as both provide value to customers and the grid.
- The Phase V peak demand reduction **framework should allow for event-based DR programs**, in addition to the proposed daily load shifting programs, to enable more peak reduction opportunities.

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Expand access to demand reduction programs for all residential customers by including behavior-based DR in addition to device control-based programs.

Despite being included in prior phases,[1] the Phase V potential study unfortunately does not consider Behavioral Demand Response (BDR), limiting DR potential benefits to only customers who have or can adopt a smart thermostat or other utility-controlled device.

Oracle Utilities Opower encourages the Commission to consider the use of behavior-based demand response options. Event-based behavioral demand response (BDR) programs have proven to be successful in Pennsylvania and are able to reach additional customers beyond those who adopt thermostats or other devices. These programs use behavioral messaging, with or without a financial incentive, to influence customer action and drive peak reduction without new devices. Because BDR traditionally operates on an opt-out basis and participation is free for customers, these programs do not require adoption of any new devices, and can achieve meaningful savings at scale without the need for an enrollment period before customers start saving.

BDR is measured using the industry gold standard randomized control trial, which enables direct measurement of event savings. Because the treatment group (which receives BDR messaging) of customers is statistically equivalent to the control group (which does not receive messaging), all energy savings in the treatment group can be ascribed to the BDR program, regardless of what other DR programs or events may be running. Demand savings from BDR have been verified and analyzed by various third party evaluators. Metropolitan Edison Company, Penn Power, and West Penn Power all offered a BDR program in Act 129 Phase III and had a combined PY12 participation of 281,928 households.[2] A recent New York potential study recognized the benefits of including behavior-based DR as a demand flexibility resource and showed significant potential for BDR – over 500MW in summer, and over 200 MW in winter.[3]

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[1] In the Pennsylvania Phase IV Demand Response potential study, the SWE found that the statewide DR potential for BDR was approximately 55 MW. See Phase IV Demand Response Potential Study (February 2020) at 12-13, available at https://www.puc.pa.gov/pcdocs/1656475.pdf.

[2] See SWE Annual Report: Act 129 Phase III and Program Year 12 (March 31, 2022) at 86-90, available at https://www.puc.pa.gov/pcdocs/1746475.pdf.

[3] See New York's Grid Flexibility Potential Volume 1: Summary Report (January 2025) at 47, available at https://www.brattle.com/wp-content/uploads/2025/02/New-Yorks-Grid-Flexibility-Potential-Volume-I-Summary-Report.pdf;

BDR is an ideal option for customers who cannot or do not wish to adopt new devices, including renters, those who do not want the utility to have direct control of their devices, and those for whom it is cost-prohibitive. Behavior-based daily load shifting programs are also in markets in other states, providing additional options for low-cost load shifting, especially for EV charging. Behavior-based programs, whether geared towards DR events or daily load shifting, should be considered alongside device-based programs to broaden participation and provide more options for demand reduction.

Home Energy Reports should be exempt from the 50/50 split of portfolio incentives vs. non-incentive costs.

Home Energy Reports are inherently different from other efficiency measures. Recipients can generate savings without any participant cost or rebated incentive – instead of a financial incentive, HERs offer a behavioral or educational incentive to participate in the form of paper or digital communications. As a result, it's possible that the costs associated with delivering that behavioral incentive (the entire program costs) could be lumped into "administration" despite actually being spent on the behavioral messaging for the customer. In many states, behavioral engagement is included in another category, either technical assistance or vendor costs (not administration). We recommend that the program cost for behavioral engagement be exempt from a portfolio's 50/50 calculation, or at a minimum, be divided between the incentive and non-incentive classifications.