



Pennsylvania
**Department of
Environmental Protection**

April 7, 2025

Pennsylvania Public Utility Commission
Attn: Secretary Rosemary Chiavetta
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

Dear Secretary Chiavetta:

The Pennsylvania Department of Environmental Protection (DEP) appreciates the opportunity to comment on the Pennsylvania Public Utility Commissions Act 129 Phase V Tentative Order (Docket Number M-2025-3052826). At DEP, our mission is to protect Pennsylvania's air, land, and water resources and to provide for the health and safety of its residents and visitors, consistent with the rights and duties established under the Environmental Rights Amendment (Article 1, Section 27 of the Pennsylvania Constitution). The Commonwealth of Pennsylvania must take bold action to equitably lower energy bills, reduce air pollutants, and develop a clean and resilient energy portfolio. The enclosed comments broadly focus on our support for PUC's call for collaborations between EDCs and DEP energy programs and the need to set robust energy efficiency targets. Please find DEP comments enclosed.

If you have any questions, please feel free to contact David Althoff Jr., Director, Energy Programs Office, by e-mail at dalthoff@pa.gov or by telephone at 717.783.0542.

Sincerely,

A handwritten signature in cursive script that reads "Jessica L. Shirley".

Jessica Shirley
Acting Secretary

Enclosure

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Energy Efficiency and Conservation Program
Tentative Implementation Order
Docket Number M-2025-3052826

**COMMENTS OF THE
PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

The Pennsylvania Department of Environmental Protection (DEP) appreciates the opportunity to comment on the Pennsylvania Public Utility Commission's (PUC) Energy Efficiency and Conservation Program Tentative Order (TO).

Climate change threatens Pennsylvanians by fueling increasingly common and severe weather events that impact our energy sector. These hazards further challenge the problems DEP is working on to address energy affordability and reliability in commercial, industrial, and residential contexts while actual and forecasted electricity demand increasingly strains our grid. Furthermore, these affordability and reliability challenges often disproportionately affect communities of color, low-income communities, the elderly, and the medically vulnerable. The Commonwealth of Pennsylvania must take bold action to equitably lower energy bills, reduce air pollutants, increase our skilled workforce delivering energy efficiency and conservation measures, and deploy a clean and resilient energy portfolio.

Bold action necessitates strong partnerships through braided programming, robust consumption reduction targets, and innovative approaches to demand reduction. The below comments focus on DEP's strong support for PUC's call for collaborations between Electric Distribution Companies (EDCs) and DEP's energy programs. The comments also call for stronger consumption reduction targets, especially for low-income consumers who disproportionately face both energy and climate impact burdens.

1. Coordination with Existing and New Programs

In the TO, PUC lists energy programs within Pennsylvania and suggests a variety of different pathways that the EDCs could consider coordinating to deliver accelerated energy conservation. DEP agrees with the PUC that successfully braiding programming can create synergy and supports this call to coordinate.

In the strongest possible terms, DEP supports the proposed \$5M allocation for ASHRAE Level 2 energy audits for multi-family buildings. These funds will help implement deep energy retrofits for low-income multifamily housing through the Home Efficiency Rebate (HER) program. The HER program, funded through the 2022 Inflation Reduction Act, incentivizes a wide range of energy efficiency measures and building performance upgrades to achieve energy consumption reductions in residential housing units – DEP will focus this program on low-income multi-

family housing retrofits. To qualify for a HER rebate, multifamily houses must conduct an ASHRAE Level 2 audit -- the collective measures from a project must achieve at least 20% in modeled energy savings (with higher rebate amounts available for projects that achieve 35% or more energy savings). Allocating Act 129 funds towards these valuable energy audits ensures that DEP can support more projects with better results. Energy savings can also be leveraged through the Home Electrification & Appliance Rebate (HEAR) Program, which offers point-of-sale consumer rebates on the purchase of high-efficiency electric home appliances. We anticipate significant collaboration between the HEAR Program and EDCs as households move from electric resistance heating to heat pumps. Together, the HER and HEAR programs will add \$258M to transform the energy use of the Pennsylvania residential sector. With collaborations like the proposed \$5M allocation for ASHRAE Level 2 energy audits for multi-family buildings, we can work together with the EDCs to unlock even more durable energy savings that will help Pennsylvania families for years to come.

DEP hereby reminds the PUC that there are additional opportunities beyond HER and HEAR for robust collaborations. Two examples are the Solar for All (SFA) and the Reducing Industrial Sector Emissions (RISE PA) programs. SFA aims to increase the availability and accessibility of solar energy to low-income homeowners and disadvantaged communities across Pennsylvania through a \$156M award received from the Environmental Protection Agency (EPA). DEP estimates that SFA will provide solar installations for 12,500 households throughout Pennsylvania. RISE PA is a \$396 million statewide industrial decarbonization grant program funded through the EPA's Climate Pollution Reduction Grant. The purpose of this program is to offer grants for small-, medium-, and large-scale decarbonization projects at industrial facilities to reduce greenhouse gas (GHG) and co-pollutant emissions. While we understand that the Statewide Evaluator (SWE) was not able to estimate the impact of these programs on Phase V due to various uncertainties, DEP thinks it is still prudent to list these programs as potential collaborators within the TO and for EDCs to consider partnership with these programs as a part of their buildout of programs for Phase V.

Please note that DEP has discontinued our *Healthy Electrified Commercial Kitchen Rebate Program*. Therefore, this program should be struck from the list of programs that EDCs could coordinate with.

2. Stronger efficiency targets, especially for low-income consumers.

PUC proposes overall consumption reduction targets that are lower than the ones proposed in the final order for Phase IV for almost all EDCs. PUC has proposed marginally higher low-income EE targets (7.1% of the statewide MWh target) for Phase V than it did for Phase IV. DEP strongly believes the PUC should pursue more aggressive targets for each of the EDC service territories, especially as Pennsylvanians will likely face higher energy bills. DEP understands that Act 129 does not consider adjustments for inflation in the budget but expects a maturing

program to be able to innovate and deliver more benefits per dollar invested due to learned operational efficiencies and repeatable successes.

DEP understands that higher energy bills do not affect every household the same way -- many low-income Pennsylvania households already face “severe” energy burden. Energy burden is defined as the percent of a household’s median annual income (AMI) that is used to pay for electricity and gas bills. Households with a “high” energy burden pay more than 6 percent of their income on energy bills; a “severe” energy burden consists of 10 percent of a household’s annual income. The National Renewable Energy Lab’s (NREL) “ResStock Utility Bill Impact Dashboard” estimates that Pennsylvania families that earn 30% AMI or less pay an average of 30% of their incomes towards home energy costs while Pennsylvanians that earn greater than 150% AMI only pay an average of 2% of their incomes towards home energy costs. Higher energy burden is typically caused by lower housing quality and financial barriers to upgrading to more energy efficient infrastructure. These stark differences indicate that even more energy efficiency work is needed, especially within low-income communities.

As Act 129 matures into a fifth phase, we suggest a greater expectation be placed on EDCs to craft new and innovative ways to meet rigorous energy efficiency targets, even as low-cost tactics such as LED lightbulb deployments reach saturation. For most EDCs, Phase V consumption reduction targets are lower than in Phase IV -- DEP strongly believes PUC should pursue more aggressive consumption reduction and low-income goals for each of the EDC service territories.

Additionally, DEP deems it prudent to include multi-family (five units or greater) consumption reduction targets within the low-income segment. In implementing the DEP Home Energy Rebate programs, we understand the great need for building performance improvements in low-income multi-family buildings – these projects are often more complex and are thus typically avoided by current programming for easier and quicker projects.

3. Strong Demand Response (DR) Targets

Pennsylvanians face higher energy bills because of increased forecasted demand and peak capacity concerns. Innovative DR programming plays an important role in lowering coincident peak demand, which contributes outsized costs to energy bills and negative environmental externalities. Both energy efficiency and dispatchable DR program contribute to a more stable and resilient grid, which produces lower energy bills and a cleaner environment.

The Act 129 program did not establish peak demand reduction targets in its first two phases. However, in Phase III, peak demand reduction targets were made that could only be satisfied by dispatchable DR programming (such as load-shifting or virtual storage). In Phase IV DR targets were set that could only be satisfied with energy efficiency measures. As noted in the TO, there is currently no working framework moving into Phase V, which gives PUC an opportunity to create a program that is responsive to the higher energy prices Pennsylvanians may face. Load

controlling opportunities spurred by AI, batteries, and grid-connected smart devices allow for both efficiency and cost-lowering time-of-use planning. While LED lightbulb deployments are entering a time of saturation, smart grid-connected devices – like smart thermostats – will begin to reach penetration in the marketplace, where their benefits to the customer, the grid, and the environment can be fully realized. DEP supports beginning with the proposed ten percent budget allocation towards DR and its proposed framework that includes both summer and winter peaks. DEP believes that reduction of peak demand should become a larger part of Act 129 planning based on opportunities and technologies that will be at hand during the Phase V implementation.

In the past, we have offered support for program flexibility within Act 129 so EDCs can use their own judgement on how best to deploy funding. For this reason, we support the determination by the PUC that Phase V peak demand reduction targets may be satisfied with either coincident demand reductions from EE or load-shifting programs to allow for all options to be explored, developed, and deployed. We would like to see each EDC deploy a program for each technology type as identified in the TO: Commercial and Industrial Load Shifting, Connected Thermostat Optimization, Electric Vehicle Managed Charging, Domestic Water Heating Load Management and Behind the Meter Storage. The time is now to develop these programs and optimize them. Waiting until Phase VI to become proficient in these current tools via innovative program design delays the effective use of all the opportunities at hand.

DEP looks forward to reevaluating the efficacy of this proposed framework for an even more robust Phase VI deployment and warmly welcomes collaboration on furthering DR strategies throughout the Commonwealth.

4. Comprehensive Programs and Measures

In Section A.4.C of the TO, the PUC recommends that EDCs pursue a “comprehensive mix of measures,” ultimately proposing that each EDC’s EE&C Plan include at least one comprehensive program for residential and at least one comprehensive program for non-residential customer classes. Additionally, the PUC suggests that EDCs should determine for themselves which comprehensive measures are needed most in their service territories and that these comprehensive measures need not be cost-effective. DEP understands that the spirit of this suggestion is for EDCs to prioritize meaningful, deep energy efficiency retrofits within buildings, shifting away from take-home kits, energy assessments, and lightbulb installations.

In our April 28th, 2020, comments on the Phase IV TO, DEP agreed with this assessment, noting that “there is no one size fits all comprehensive approach,” and in those comments emphasized “implementing a comprehensive mix of whole building, direct install, and prescriptive program which have proven to be effective for the residential sector.” DEP again recommends that PUC propose more than one comprehensive program for residential and non-residential customer classes. DEP specifically recommends comprehensive programs like Passive House, US Department of Energy Zero Energy Homes, and Leadership in Energy & Environmental Design (LEED) that produce significant energy savings. The Pennsylvania Housing Finance Agency

(PHFA) incentivizes LEED and Passive House for affordable multifamily buildings in the Commonwealth, so it would be an effective complement and potential braiding opportunity for EDC's EE&C Plans to encourage those same programs as well. For the non-residential sectors (government & K-12 schools), DEP's Energy Programs Office has offered programs such as Building Operator Certification (BOC) and Building Retuning Training (BRT) and encourages the EDCs to explore partnership opportunities to further deploy these successful programs. Specifically, the Pennsylvania College of Technology's Clean Energy Center in Williamsport, PA serves as an instructor for both BOC and BRT training opportunities, and thus there are opportunities for collaboration with in-state educators. We understand that, in the past, some training programs did not pass the TRC test. However, we also are aware that the PUC recently authorized training under the Low Income Usage Reduction Program (LIURP). We encourage the adoption of training programs such as those identified herein into Phase V.

To best ensure that EDCs employ comprehensive measures that result in significant, and meaningful energy efficiency retrofits, DEP suggests that the PUC define the terms "comprehensive" and "direct-install," so that all EDCs are operating under the same paradigm. For example, a "comprehensive measure" could indicate that multiple weatherization, air sealing, and HVAC upgrades were attempted in a unit. Ideally, these improvements follow contemporary building science principles -- weatherize first, then electrify home appliances, and lastly add renewable energy generation (solar, wind, etc.) where practical. Providing a shared definition will provide clarity to all parties involved.

5. Application of Excess Phase IV budget

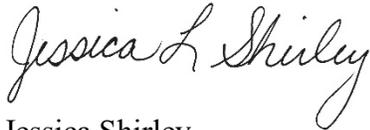
Starting in Phase II, the PUC allowed EDCs to carry over excess savings from one phase to the next. This allowance was to support continuity of programming throughout the entirety of the phase. This particularly makes sense with larger industrial projects that may take years to complete and deliver significant savings. Without carryover, these projects would likely not happen as often because they would otherwise provide too much uncertainty for the EDCs.

DEP generally agrees with the PUC on the importance of a smooth transition from Phase IV to Phase V and the importance of the EDCs specific programs not "going dark." DEP encourages the PUC to continue to suggest pathways for the EDCs to effectively expend Phase IV and Phase V budgets to obtain energy savings in excess of the targets within each performance period. Full utilization of the budgets to obtain the most savings as early as possible allows Pennsylvanians to enjoy the economic and environmental benefits of energy savings both immediately and the compounding effects of those reductions sooner in the years to come. DEP notes CAUSE-PA's 4-27-2020 comment on the Phase IV TO, which recommended that excess Phase III funds be allocated to support health and safety improvements that enable further EE measures -- we are supportive of this same idea for excess Phase IV funds.

In summary, the Commonwealth of Pennsylvania must take bold action to equitably lower energy bills, reduce air pollutants, and develop a clean and resilient energy portfolio – Act 129

plays a vital role in this. The enclosed comments broadly focus on DEP's support for PUC's TO and its call for collaborations between EDCs and DEP energy programs, especially the proposed \$5M allocation towards ASHRAE Level 2 energy audits for multi-family buildings. The comments also call for stronger consumption reduction targets, especially for low-income consumers who disproportionately face both energy and climate impact burdens. We look forward to continuing to evaluate the efficacy of Phase V implementation and being a partner for energy efficiency and demand reduction programs within the Commonwealth of Pennsylvania.

Sincerely,

A handwritten signature in cursive script that reads "Jessica L. Shirley". The signature is written in black ink and is positioned to the right of the typed name.

Jessica Shirley
Acting Secretary