BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Energy Efficiency and Conservation Program	:	Docket No. M-2020-3015228
Petition of PPL Electric Utilities for Approval of its Act 129 Phase IV Energy Efficiency and Conservation Plan	:	Docket No. M-2020-3020824
Petition of PECO Energy Company for Approval of its Act 129 Phase IV Energy Efficiency and Conservation Plan	:	Docket No. M-2020-3020830
Petition of Duquesne Light Company for Approval of its Act 129 Phase IV Energy Efficiency and Conservation Plan	:	Docket No. M-2020-3020818
Joint Petition for Consolidation and Approval of the Act 129 Phase IV Energy Efficiency and Conservation Plan of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company, and West Penn Power Company	:	Docket No. M-2020-3020820 Docket No. M-2020-3020821 Docket No. M-2020-3020822 Docket No. M-2020-3020823

COMMENTS OF KEYSTONE ENERGY EFFICIENCY ALLIANCE REGARDING ACT 129 PHASE IV ENERGY EFFICIENCY AND CONSERVATION PLANS

January 22, 2021

Introduction

The Keystone Energy Efficiency Alliance (KEEA) is Pennsylvania's trade association for the energy efficiency (EE) industry. Our membership, comprised of seventy companies, ranges from small local firms to large multinational corporations and operates across the value chain of energy efficiency. We engage our membership and policymakers in support of the fastest growing segment of the clean energy industry. The policy we promote at the state and local level expands the market for energy efficiency.

Act 129 is Pennsylvania's largest and most foundational program to advance energy efficiency. In the first three phases of the law, Electric Distribution Companies (EDCs or Companies) installed thousands of LED lights, smart thermostats, and efficient appliances, and incentivized the construction of thousands of high-efficiency homes. These measures delivered benefits worth more than an estimated $9 billion and expanded Pennsylvania's energy efficiency (EE) industry to more than 71,000 jobs by 2019. On June 18 of 2020, the Pennsylvania Public Utility Commission (PUC or the Commission) issued its Final Implementation Order for Phase IV, setting the targets and the rules of the road for this new stage of the program.

Over the five-year period of Phase IV, Utility investments required by the law will total nearly $1 billion, a timely and vital injection of funding into the EE industry, which reliably creates more jobs than any other energy sector. Therefore, it is essential that the Commission ensure programs fully comply with the Implementation Order and its intent. KEEA has identified the following plan areas that the Commission should require the Companies to improve upon prior to their certification:

1. Require Truly Comprehensive, Whole-Building Programming
2. Prioritize Deeper, Longer-Lived EE Measures
3. Incentivize the Continuation of Programs Beyond Energy Savings Targets
4. Adjust Programs for Impacts of the COVID-19 Pandemic and the Growing Demand for EE Workers
5. Adopt a Fuel-Neutral Policy
6. Coordinate Programs with the Anticipated Influx of Regional Greenhouse Gas Initiative (RGGI) Funds

1. Require Truly Comprehensive, Whole-Building Programming

Truly comprehensive, whole-building solutions provide long-term energy-use savings and measurable social benefits. The American Council on an Energy Efficient Economy (ACEEE) defines "comprehensive" programs as those which "seek to maximize the installation of energy efficiency measures in existing homes while also assuring that building durability and occupant health and safety are fully addressed."[1] Truly comprehensive programs not only produce lasting energy-use savings, but they confer additional benefits to customers, such as high levels of customer support and immediate savings that deepen over time with the implementation of additional measures[2]. A whole-building approach considers both the comfort and the safety of the indoor environment, simultaneously addressing energy needs and health hazards like asthma. With proper investment, these benefits can last for years.[3] Many residential customers are unaware of the comprehensive picture of their energy and the connection between improved efficiency and improved home comfort. Truly comprehensive programs can educate customers about these benefits and effectively combine the building envelope or shell improvements with other efficiency measures in a way that is economical and improves not only energy-efficiency, but also the comfort of their home.

To be considered truly comprehensive, Plans must be holistic, integrated, and take a whole-building based approach. Our neighboring state of New Jersey set an admirable example by requiring its Utility programs "to assess whole building structures and systems and encourage customers to consider a holistic approach to EE" as well as create opportunities for customers who are "unwilling" or "unable" to do so.[4] Following this model, Pennsylvania Companies should be required to offer one program per customer segment that consists of an in-home energy audit such as a Quick Home Energy Check Up (QHEC) or Home Performance with Energy Star similar to in New Jersey.

The Commission stated that in Phase IV Plans, Companies would be required to "include at least one comprehensive program for residential and at least one comprehensive program for non-residential customer classes".[5] To guide Companies toward creating these programs, the Commission lowered energy savings targets and raised allowable acquisition costs.

Despite these incentives, each Company Plan submitted failed to put forth truly comprehensive programs.

The Commission's intention that EDCs will meet savings targets through comprehensive whole-home measures and other longer-lived measures is clear. Throughout the Implementation Order, the Commission repeatedly emphasizes that Phase IV Plans must move beyond reliance on measures such as light bulbs and home energy reports, and increase their emphasis on measures such as building shells. Chairman Brown Dutrieuille, in her Statement, states that the "Tentative Order proposes that utilities design plans which provide more focus on comprehensive energy

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[1] https://www.aceee.org/files/proceedings/2016/data/papers/2_693.pdf, p. 2-9
[2] https://www.aceee.org/files/proceedings/2016/data/papers/2_693.pdf, p. 2-10 and 2-11.
[3] https://www.aceee.org/sites/default/files/pdfs/h2001.pdf, p. 6
[4] BPU Docket Nos. QO1901040, QO19060748 & QO17091004
[5] The Act 129 Phase IV EE&C Program Implementation Order. From the Public Meeting of June 18, 2020. Docket No. M-2020-3015228, p. 22

efficiency measures. This concept is a natural evolution from simple measures such as lighting to all-encompassing measures such as updating HVAC, weatherization, and water heating for a building."[6] We strongly applaud this sentiment.

To comply with the Implementation Order, KEEA recommends that Companies package measures into whole-building programs. In the Plans, the Companies offer a multitude of separate measures but no programs that package them together and offer a whole building assessment. Comprehensive whole home programs should consider all aspects of the building and build off one another. It is insufficient to simply offer a menu of all measures; Companies must offer and provide them in a digestible format that will encourage adoption and participation by residents and building operators, who typically are not energy experts.

2. Prioritize Deeper, Longer-Lived EE Measures

Comprehensive programming also has the benefit of creating deeper, longer-term savings. Measures that deliver low-cost first-year savings like those assessed by Home Energy Reports (HERs) have important attributes such as broad participation rates among customers and should remain part of the mix of measures. However, a single-minded focus on these basic measures diverts resources from investment in longer-lived measures that achieve much deeper energy savings. Those long-lived measures also provide important additional benefits and deliver sustained value for Pennsylvania electric customers, including non-energy, social and economic benefits like improved indoor air quality and housing affordability. A balanced program portfolio can also provide synergies that maximize the advantages of short-lived and long-lived measures, and their interaction can provide additional benefit.

The intent of the Implementation Order was to encourage Companies to move from short-lived measures like lighting to more longer-term and deeper measures, such as building envelope improvements like air sealing and insulation, heating and cooling upgrades and duct sealing, appliance upgrades that go beyond refrigerators and freezer replacements, new construction, and behavioral programs. In fact, the Commission explicitly stated in its Implementation Order that "the EE&C Programs have matured enough so that EDCs can increase their focus on more comprehensive measures, which tend to require greater implementation timeframes."[7]

While the Commission professed a desire for Companies' Plans to make investments in longer-lived measures, they took no policy action to ensure or incentivize that outcome. The Order itself does not provide mechanisms to ensure that EDCs invest in longer-lived measures. Past

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[6] https://www.puc.pa.gov/pcdocs/1658047.pdf
[7] The Act 129 Phase IV EE&C Program Implementation Order. From the Public Meeting of June 18, 2020. Docket No. M-2020-3015228, p. 7

experience tells us that, absent a policy change enacted by the Commission, EDCs during implementation will continue to prioritize measures that deliver low-cost first-year savings at the expense of the long-lived measures that the Order anticipates.

This is because the combination of strict savings targets, a firm budget cap, and steep mandatory penalties has historically led EDCs, when implementing the programs in the field, to prioritize only the measures that deliver the lowest possible cost first-year savings and yet allow them to avoid the penalty. The Commission should consider ways to change this incentive structure, such as reduced penalties or waived penalties for programs that successfully make longer-lived, deeper energy conservation improvements while achieving lower first-year financial savings.

KEEA recommends that the Commission stand by its stated intention for Phase IV plans and require Companies to clearly specify their projected energy-use savings from deeper, longer-lived measures. Moreover, the Commission should consider instituting a ratemaking or earning incentives to ensure Companies' continued investment in deeper, longer-lived measures.

3. Incentivize the Continuation of Programs Beyond Energy Savings Targets

The Commission set lower first-year savings targets for EDCs in Phase IV than Phase III because they projected that the Companies would replace lighting programs mostly with whole-building programs that place an emphasis on long-lived measures, such as insulation and HVAC equipment, that have higher upfront costs. While longer-lived measures can be more cost-effective over their lifespan than many short-lived measures, like lighting or behavioral programs, realizing the energy and cost savings may require more than a year.

The Commission simultaneously lowered the first-year savings targets but failed to enact policies to ensure investment does not decline with rollover and lowering, which would risk some programs "going dark." In this likely scenario, Companies will stop running programs when they reach their targets, rather than keep the program running for the full cycle. This means contracts will have to cease work and programs will have to restart again in the next cycle, creating inefficiencies and artificially stifling the potential of the programs. Across the prior phases of Act 129, we have consistently seen small business programs be closed once spending and savings targets are achieved. In addition, utilities have applied "excess" savings from current phases to support work in subsequent Phases, so targets clearly influence compliance behaviors.

KEEA recommends that the Commission should take action to ensure that Companies do not simply respond to lower savings targets by investing less and keeping a focus on shorter-lived measures. To do so, the Commission should prohibit companies from ending programs before the completion of the cycle, regardless of achieved targets.

4. Adjust Programs for the Impact of the COVID-19 Pandemic and Growing Demand for EE Workers

Act 129 was signed into law in October 2008, a month after the Lehman Brothers collapse that triggered the Great Recession. In 2009, electricity demand collapsed as economic activity stagnated. Despite this challenging environment, energy efficiency was a bright spot in the recovery, creating tens of thousands of jobs, driving rapid innovation with LED lighting technology, and delivering $4 billion in benefits to Pennsylvania electric customers through Phase I of Act 129.[8]

Likewise, the EE industry stands to be at the center of the recovery from the economic crisis brought on by the COVID-19 pandemic. However, EE industry and customers were not spared from the devastation of the COVID-19 pandemic. Bans on in-person work have halted operations for many energy efficiency companies serving the residential sector, and Pennsylvania is among the hardest hit states. In March and April, almost 18% of the national clean energy workforce filed for unemployment, according to federal data.[9] This trend is especially concerning given the increasing demand for skilled EE labor[10], soon to grow further in response to the expansion of the industry under Act 129 and via the expenditure of RGGI proceeds in Pennsylvania.

Despite these challenges, the energy efficiency industry continues to find creative ways to deliver energy efficiency savings to customers during this critical time. Behavioral programs that use science-based techniques to encourage conversion are delivering real energy savings as Pennsylvanians consume more energy at home. Energy efficiency vendors are using online marketplaces, virtual audits, and multi-channel marketing to build pipelines of customers in preparation of ramping up energy efficiency projects when on-site work resumes. Engineers and energy experts continue project design and development work for large commercial and industrial projects.

For the energy efficiency industry to fully contribute to the economic recovery and to ensure Act 129 programs can be implemented as intended, KEEA recommends that Companies:

- Adjust for the impact of COVID-19: Considering the substantial disruption COVID-19 has posed to energy efficiency programs, and the anticipated ongoing impacts on the energy efficiency and construction industries, KEEA recommends that the Commission convene EDCs, energy efficiency vendors, and other interested stakeholders to share and deploy best practices for implementing Phase IV energy efficiency programs in the new and ever-changing environment. EDCs should be required to compensate program

[8] Phase I Final Report, p. 16
[9] https://e2.org/reports/clean-jobs-covid-economic-crisis-april-2020/
[10] https://www.aceee.org/sites/default/files/pdfs/u2010.pdf, p. 3

implementers for the additional direct costs of any worker safety measures necessary to safely deliver services during the pandemic. This requirement should be forward-looking as well, and apply to any significant future program-disrupting events.

- Grow the EE worker pipeline: The Commission and the Companies must begin building the EE worker pipeline now. Companies cannot offer only upstream incentives and incentivize customer uptake. They must simultaneously grow the workforce to perform and install these measures.

5. Adopt a Fuel-Neutrality Policy

KEEA recommends the Commission revisit its treatment of fuel-switching because it encourages electric-to-fossil fuel conversion even in circumstances when there is no total energy efficiency improvement, which is not an appropriate use of limited Act 129 dollars.

Energy efficiency can help accomplish a variety of public policy goals for the Commonwealth, including economic development, energy affordability, reduction of greenhouse gases and other air pollution, improved occupant health, and increased comfort using a variety of fuel sources. Policymakers need not specify the best fuel to achieve the outcomes, but simply state the desired outcomes and apply the policy in a fuel-neutral manner. This may have the market effect of favoring a fuel even though the policy does not do so explicitly. For example, a fuel-neutral policy regime that rewards occupant health, pollution reduction, and customer savings without specifying the fuel source may have the effect of favoring electric heat pumps over oil furnaces in a marketplace, since electric heat pumps are a more cost-effective method of achieving improved occupant health, pollution reduction, and customer savings than oil furnaces.[11]

Act 129 requires reduction in energy consumption in a cost-effective manner, without preferring fuel sources.[12] The Commission, however, has implemented a fuel-switching policy that explicitly favors natural gas and other fossil fuels over electricity even if that option fails to reduce energy consumption or is less cost-effective. This policy is inconsistent with the goals of Act 129 and should be updated to reflect a fuel-neutral stance that does not favor one energy source over others, especially at the expense of cost and efficiency.

6. Prepare for Coordination with the Anticipated Influx of RGGI Funds

It is likely that Pennsylvania will join RGGI in the next year. The state has the potential to earn at least $300 million annually in auction proceeds, and the draft RGGI regulations recognized

[11] The Economics of Electrifying Buildings, Rocky Mountain Institute, 2018, available at http://www.rmi.org/insights/reports/economics-electrifying-buildings/

[12] 66 Pa.C.S. § 2806.1(a)

that energy efficiency will be a key part of the RGGI investment. Advanced consideration of RGGI's impact on utility programs and Companies' flexibility to adapt to changes will be essential to maximizing the impact of Phase IV programs and filling gaps in Act 129 programming.

Companies should be required to continue their programs alongside RGGI programs to ensure that all savings are realized, and ratepayer money is spent most efficiently by utilities in Act 129 programs and the state in distribution of RGGI proceeds.

To be effective, cross-program coordination will be essential and in fact, it is required under the Act, which declared that Companies must "coordinate measures under this clause with other programs administered by the Commission or another federal or state agency."[13] Companies should likewise be required to facilitate the process of program providers synthesizing Act 129 and RGGI and where applicable, deploying Low Income Usage Reduction Program (LIURP) and Weatherization Assistance Program (WAP) funds to achieve higher-impact conservation measures and greater benefit to energy consumers.

KEEA recommends that EDCs and EE stakeholders need to be a part of this continued conversation on the distribution of RGGI proceeds. Because the auction proceeds process will occur during the five years of Phase IV, it is important that the Companies proactively plan to incorporate and coordinate with RGGI programs. Likewise, it is the role of the Commission to begin addressing such scenarios in these proceedings, starting by ensuring that Phase IV programs are designed to accommodate expansion.

Conclusion

Energy efficiency is the groundwork for Pennsylvania's clean energy future. The above recommendations are key in ensuring that the Companies can fully contribute to this transition.

Thank you for the opportunity to comment on these filings.

Respectfully submitted,

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[13] 66 Pa. C.S. § 2806.1(b)(1)(G).