BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition to Approve	)	
Act 129 Phase III Efficiency	)	
And Conservation Program	)	**Docket Number. M-2015-2515691**
for PECO Energy Co.	)	
	)	

COMMENTS OF JOINT COMMENTATORS: PENNFUTURE, SIERRA CLUB, KEYSTONE ENERGY EFFICIENCY ALLIANCE, NATURAL RESOURCES DEFENSE COUNCIL, ENVIRONMENTAL DEFENSE FUND, AND CLEAN AIR COUNCIL

Introduction

Citizens for Pennsylvania's Future (PennFuture), the Natural Resources Defense Council (NRDC), Keystone Energy Efficiency Alliance (KEEA), Sierra Club, Environmental Defense Fund, and Clean Air Council (hereinafter "Joint Commentators") appreciate the opportunity to submit these comments in response to the submission of PECO's Act 129 Phase III Energy Efficiency and Conservation Plan.

PennFuture is a membership based non-profit advocacy organization focused on energy and environmental issues that impact Pennsylvanians. We work to create a just future where nature, communities, and the economy thrive. We enforce environmental laws and advocate for the transformation of public policy, public opinion, and the marketplace to restore and protect the environment, safeguard public health, and reduce the consequences of climate change within Pennsylvania and beyond.

The Natural Resources Defense Council (NRDC) is a nonprofit environmental organization with more than 1.4 million members and online activists, including nearly 54,000 in Pennsylvania. Since our founding in 1970, our lawyers, scientists, and other environmental specialists have worked to protect the world's natural resources, its public health, and the environment. NRDC's top institutional priority is curbing global warming emissions and building the clean energy future—a priority that can be advanced by ramping up investments in energy efficiency via strengthened programs such as those administered under Act 129.

Sierra Club is a non-profit environmental organization whose mission is to explore, enjoy, and protect the wild places of the Earth and to practice and promote the responsible use of the Earth's resources and ecosystems. The Sierra Club currently has 24,049 members in Pennsylvania, most of whom receive electricity service from one of the EDCs required to offer efficiency services under Act 129. These members have a strong interest in both the success of energy efficiency programs and in protecting wild places and their ambient environment from the effects of air, water, and other pollution from electrical generation.

Environmental Defense Fund's mission is to preserve the natural systems on which all life depends. Guided by science and economics, we find practical and lasting solutions to the most serious environmental problems. With more than 1,000,000 members, we work to solve the most critical environmental problems facing the planet. This has drawn us to areas that span the biosphere: climate & energy, oceans, ecosystems and health. Since these topics are intertwined, our solutions take a multidisciplinary approach.

Clean Air Council is a member-supported environmental organization serving the Mid-Atlantic Region. The Council is dedicated to protecting and defending everyone's right to breathe clean air. The Council works through a broad array of related sustainability and public health initiatives, using public education, community action, government oversight, and enforcement of environmental laws.

We continue to support Act 129 and believe that a well implemented program will protect public health and the environment while promoting economic growth and ensuring affordable electricity is available to our citizens. With that in mind, and pursuant to the notice published in the *Pennsylvania Bulletin* on Saturday, December 12, 2015[1], we submit the following comments.

General Comments

Phase III EDC Plans should include savings beyond avoided cost of generation

The joint motion of commissioners Cawley and Witmer approved at the June 11, 2015 meeting[2] required that non-electricity benefits such as fossil fuel savings and O&M benefits be included in the TRC test. PECO stated that non-energy benefits are included in its qualitative screening criteria for program measures.[3] However, PECO's Phase III plan does not claim fossil fuel savings or O&M benefits in any of its Phase III programs. We would like to see how each program is benefiting from non-electricity savings. **Per the Commission's Order, we recommend the plan be revised to include fossil fuel savings and O&M benefits.**

The public process for approval of this plan is deficient and should be improved

The commission has failed to schedule a public hearing as required under Act 129 of 2008 which says:

"The commission **shall conduct a public hearing on each plan** and allow for the submission of recommendations by... members of the public as to how the electric distribution company could improve its plan or exceed the required reductions in consumption under subsections (c) and (d)."[4]

When the lack of public hearing was raised in response to the tentative order, the commission replied that "[t]he Joint Commentators have failed to present any facts demonstrating that interested parties have not been able to participate in prior hearings on EDC EE&C Plans under the established process."[5] We note once again that the Act contains a <u>clear and unambiguous requirement</u> to hold a public hearing. It does not grant the commission the authority to substitute its judgment for that of the Legislature as to what level of public participation is adequate. The interpretation of the commission is, therefore, contrary to the Commonwealth's *Statutory Construction Act* which says “When the words of a statute are clear and free from all ambiguity, the letter of it is not to be disregarded under the pretext of pursuing its spirit.”[6]

Even if the commission were correct that the ability of the public to participate in prior phases was relevant, the obstacles in the way of effective public participation are exacerbated in this case by a very short 20-day public comment period that is being conducted on seven different detailed and lengthy technical documents during a period of time that encompasses two public holidays. The length of time provided by the commission is barely long enough to thoroughly review the hundreds of pages of one of the EDC’s Phase III plans, let alone all seven of the EDC’s plans.

We recommend that the commission schedule at least one public hearing on this plan to comply with the minimum requirements of the applicable law. We further suggest that the commission consider additional methods to engage potential stakeholders, including an extension of the public comment period and enhanced outreach efforts.

We would also like to see more details on PECO’s R&D budget. The costs appear to be front loaded with $8.7 million of the $20 million being spent in 2016 alone. We would like to see more specifics on what technologies or practices may be investigated.

We would like to see more information on the net-to-gross ratios. Each residential solution should have its own net-to-gross value. We are also surprised that the net-to-gross ratios do not vary much over the five years. They should change given that the price of LEDs are projected to fall during Phase III and PECO is still relying heavily on lighting incentives. We are wondering if PECO is considering the declining costs and incentives for LEDS in its TRC test.

Residential Program

The proposed residential program is, in many respects, an improvement from Phase II, but there is still room for advancement.

Residential Energy Efficient Products Program

Considering the market trend toward LEDs, PECO including a number of CFLS past 2017 is concerning. CFLs should be quickly phased out in Phase III. 2016 or 2017 should be the last year for standard CFLs. For the Residential EE Program PECO is offering an incentive of up to $2.50 for ENERGY STAR Screw-in CFL Bulb (Standard: Non-Dimmable) which would make the cost of the average CFL less than a $1.00 and even cheaper if they are purchased in a multiple package.[7] The price of CFLs will most likely continue to drop throughout Phase III and there will certainly be no need to offer an incentive for 475,049 bulbs in 2018, 427,544 in 2019, and 384,790 in 2020.

At the very least, the number of ENERGY STAR standard CFLs post 2017 is too large. If ENERGY STAR's draft final lamp spec is adopted as proposed, there may no longer be any ENERGY STAR CFLs in the market. On December 5, 2015, the Department of Energy released version 2 of its eligibility criteria for Energy Star lamps in draft final form.[8] This is intended to replace the current standards on January 2, 2017. That document specifies that low CRI Energy Star lamps must be shown to have a luminous efficiency at or exceeding 80 lumens per watt. If finalized as proposed, there may not be any Energy Star CFLs available on the market from 2017 on. **Thus, we recommend the plan be revised to accelerate the phase out of CFLs in favor of LEDs.** PECO should consider following PPL's lead in discontinuing CFL promotions in favor of LED technologies.

The majority of bulbs installed and provided in energy efficiency kits should now be LEDs, especially the more specialty types of LEDs such as 3 way bulbs which are commonly used in household lamps but are still much higher in price than incandescents. Specialty LED bulbs also perform better than specialty CFLs and are becoming more common in the market. **Thus, we recommend ceasing support for specialty CFL bulbs immediately as LED alternatives are more cost-effective in nearly all cases.**

We are also concerned about PECO supporting 10,000 HOU non-ENERGY STAR LEDs. Without ENERGY STAR certification, the performance of the lamps is uncertain. If ENERGY STAR's proposed lamp spec is adopted as proposed, this measure should be eliminated entirely. The proposed lamp spec would reduce rated life requirement to 15,000 allowing lower cost LEDs to qualify.

PY2019 includes the first six months of 2020, however the PY2019 lighting measures do not appear to adequately account for the impacts of EISA,[9] which requires that all general service lighting will reach an efficiency of 45 lumens per watt by January 1, 2020. This will impact the TRC calculations for lighting and combined measures, such as energy efficiency kits, that include lighting as a component. **We recommend PY2019 of the plan be revised to account for EISA in the last half of PY2019.**

On October 1, 2015, the EPA released its market penetration report for the Energy Star program.
Several of the categories of appliances included in this proposal already have significant market penetration. Where market transformation has already occurred, programs that further incentivize purchases of appliances will suffer from high free ridership and achieve little additional savings.

There are several types of appliances that PECO is providing unnecessary rebates for in Phase III. The lowest refrigerator tier rebate and dehumidifier rebate should be eliminated. According to the Energy Star Unit Shipment and Market Penetration Report for 2014[10], it is estimated that 89% of dehumidifiers in 2014 were ENERGY STAR rated so a rebate is no longer needed to move the market. At rebates between $10 and $75 and an expected 1,250 dehumidifiers over Phase III, removing the incentive would save at least $12,500 that could be used for more comprehensive measures or to help move the market for other appliances. We also recommend that PECO remove the incentives for non- ENERGY STAR Freezers and Refrigerators and put that money toward the ENERGY STAR Freezer and Refrigerator incentives. PECO could go even further and move more or even all of the planned ENERGY STAR Refrigerators to the Most Efficient refrigerators incentive. ENERGY STAR Refrigerators made up 75% of the market in 2014 so it no longer necessary to provide incentives. **We recommend revising the proposed plan to remove support for the above mentioned appliances.**

We are concerned that only 14% of low income customers out of 9,000 are receiving substantive measures. Low income customers need substantive changes to their homes more than they need a kit filled with light bulbs, a faucet aerator, and power strips that will do little to decrease their high energy bills. Inefficient HVAC systems and poor insulation in low income homes waste more energy than anything else.

The number of air sealing and insulation measures is still low for Phase III. During all of PECO's stakeholder meetings, we discussed the need to move away from lighting measures and toward more comprehensive measures that will result in higher savings and greater efficiency in the home. One of the largest issues homes in Pennsylvania have is the lack of air sealing and insulation to prevent heating and cooling leaks and drafts throughout the home. Thus, PECO should be putting a greater emphasis on air sealing and insulation measures. Even further, PECO should provide all customers that receive insulation with air sealing and BPI mandated test-in/test-out air leakage measurements relative to MVGs.

We recommend that PECO include incentives for Wifi thermostats in addition to the incentive for Smart/Learning thermostats. Wifi thermostats allow homeowners to control the temperature of their home from their smartphone or computer. They are great for energy efficiency and convenient for consumers because if you forget to change your thermostat before you leave for the day, you can easily do so without running back home. The price of wifi thermostats is still high for some consumers, so an upstream incentive would be beneficial to move the market.

We echo EEFA's appreciation for the level of detail PECO has provided for its multi-family program and for making the program flexible enough to encourage participation from all types of multi-family housing. We also support EEFA's recommendation that "shell measures be made available as part of comprehensive installation packages for PECO's master-metered multifamily projects." In addition, we agree that PECO should provide more detail on the budget and savings expected for the multi-family program. During the multi-family working group session, we discussed coordinating better with other programs. For instance, PECO could coordinate with WAP implementation agencies for LI and multi-family activities. We also discussed outreach options including having the EDCs work more with groups such as the Housing Alliance and encourage information sharing amongst energy and housing organizations. In addition to PECO coordinating within its own territory, we would like to see greater coordination among the EDCs to although for better statewide consistency in program offerings including incentive levels and measure eligibility criteria. It would also be beneficial for PECO's customers if PECO's Act 129 program coordinated with gas efficiency programs, especially for new construction and existing home retrofit programs. At the very least, that coordination should involve exchanging data so that customers get a whole home energy audit even if they have gas heat. Gas heat makes up a significant component of home energy use in Pennsylvania. One option would be for PECO to encourage its CSPs to check the efficiency of the home's gas heating system while they are doing the whole home audit and charge a separate fee for their time going beyond the Act 129 program requirements and funding.

Commercial Program

PECO's Phase III plan does not breakdown the cost of support services among the large and small C&I categories and merely lists the total cost as $100 million. We would like to see the costs more clearly defined, especially considering the issue of the large industrial opt-out bill still floating around the General Assembly.

We applaud PECO for seeking to achieve 30% of C&I savings from CHP, but would like to see more details on how PECO will get those savings. We would also appreciate more detail provided to estimate savings by end use.

We are glad to see that PECO will provide account managers for its largest customers. We believe that for large C&I Customers, direct account management can help overcome barriers to enhancing energy efficiency.

---

[1] 45 Pa.B. 7078.

[2] See Joint Motion of Commissioners Cawley and Witmer, Docket No. M-2015-2468992.

[3] PECO Program Years 2016-2020 Act 129 - Phase III Energy Efficiency and Conservation Plan, 3.1.3.3 Applicability and Qualitative Screens, Nov. 30, 2015.

[4] 66 PA.C.S. § 2806.1(2) *emphasis added.*

[5] Final Order C.1.b at 91.

[6] 1 Pa.C.S. § 1921(b).

[7] Energy Star Certified CFL pricing at Home Depot, http://www.homedepot.com/b/Electrical-Light-Bulbs/ENERGY-STAR-Certified/N-5yc1vZbmbuZ12kxZ1z0tlzw/Ntk-SemanticSearch/Ntt-cfl%2Bbulb?Ntx=mode%2Bmatchall&NCNI-5&Ns=P_REP_PRC_MODE%7C0.

[8] ENERGY STAR® Program Requirements Product Specification for Lamps, Eligibility Criteria, *available at:* https://www.energystar.gov/sites/default/files/ENERGY%20STAR%20Lamps%20V2%200%20Draft%20Final%2012-04-2015.pdf.

[9] Energy Independence and Security Act of 2007, Pub. L. 110-140.

[10] U.S. EPA, ENERGY STAR® Unit Shipment and Market Penetration Report Calendar Year 2014 Summary, http://www.energystar.gov/ia/partners/downloads/unit_shipment_data/2014_USD_Summary_Report.pdf?caba-3e5e.