BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition to Approve	)	
Act 129 Phase III Efficiency	)	
And Conservation Program	)	**Docket Nos.**
for the First Energy Companies:	)	**M-2015-2514767, M-2015-2514768,**
	)	**M-2015-2514769, M-2015-2514772**
Metropolitan Edison Co., Pennsylvania	)	
Electric Co., Pennsylvania Power Co.,	)	
West Penn Power Co.	)	

COMMENTS AND RECOMMENDATIONS OF JOINT COMMENTATORS: PENNFUTURE, SIERRA CLUB, ENVIRONMENTAL DEFENSE FUND, AND CLEAN AIR COUNCIL

Introduction

Citizens for Pennsylvania's Future (PennFuture), Sierra Club, Environmental Defense Fund, and Clean Air Council (hereinafter "Joint Commentators") appreciate the opportunity to submit these comments in response to the Public Utility Commission's (Commission) Tentative Implementation Order on Phase III of the Act 129 Energy Efficiency and Conservation Program dated March 11, 2015.

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.

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

The public process for approval of this plan is deficient and must 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)."[2]

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."[3] We note once again that the Act contains a <u>clear and unambiguous</u>

[1] 45 Pa.B. 7078
[2] 66 PA.C.S. § 2806.1(2) *emphasis added.*
[3] Final Order C.1.b at 91.

requirement 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."[4]

Even if the commission were correct that the ability of the public to participate in prior phases was relevant, **the obstacles to effective public participation in this case are outrageous**. Here, a very short 20-day public comment period is being conducted on seven different detailed and lengthy technical documents during a period of time that encompasses two state holidays and other religious and cultural observances. 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, and associated testimony, let alone all seven of the EDC's plans.

[4] 1 Pa.C.S. § 1921(b).

The commission must 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 while not delaying the start date of Phase III.

The savings projected in Phase III EDC plans must include savings beyond avoided cost of generation

We note that the proposed plan includes O&M benefits in addition to projected savings in gas and water costs. While we appreciate the step towards compliance with the 2016 Final Total Resource Cost (TRC) Test Order, we note that in accordance with the joint motion of commissioners Cawley and Witmer approved at the June 11, 2015 meeting,[5] the final TRC Order required the inclusion of all fossil fuel savings and was not limited to natural gas savings.

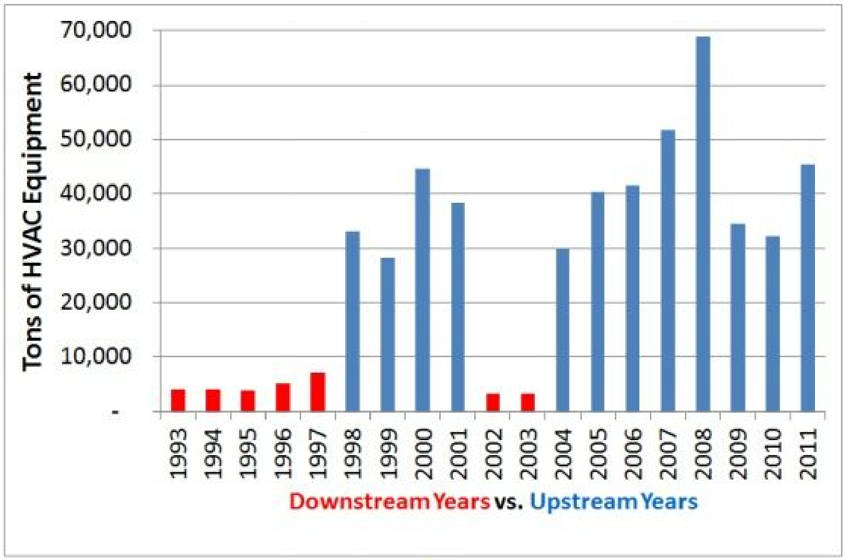
Specifically, the Commission stated that "including fossil fuel and water savings as avoided costs in the 2016 TRC Test is consistent with our inclusion of other quantifiable cost savings, such as O&M savings." Consequently, **the plan must be revised to include savings from fossil fuels such as coal, oil, and propane in addition to those savings from natural gas.**

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

The plan should provide more support for upstream measures

According to *Table 3 Program Delivery Channels*[6] in the proposed plan, upstream or midstream measures are included in very few programmatic categories. In a number of other categories they are listed as "potential" measures with no commitment. Reliance on downstream measures like rebates compromises the effectiveness and cost effectiveness of programs because many consumers neglect to pursue rebates or consider them as part of their purchasing decision,[7] and manufacturers and distributors, in turn, do not see the market signals associated with these purchases. An upstream, or midstream, approach that results in immediate savings at the point of sale "more effective because a small number of manufacturers and distributors are in a position to impact a larger magnitude of decisions to purchase and install high efficiency equipment."[8] The table below dramatically illustrates the relative success of upstream programs compared to rebates on HVAC systems installed in California between 1993 and 2011.[9] While this shows results from a California program, there is no reason to believe the outcome in Pennsylvania would be substantially different.

[6] Proposed Plan at 14.
[7] R. Sondhi and G. Arnold, *The End of Prescriptive Rebate Forms? Massachusetts Moves Upstream* (2014) *available at:* http://aceee.org/files/proceedings/2014/data/papers/4-618.pdf
[8] J. Linn, A. Patenaude, and J. Stasack, *Swimming Upstream: Commercial HVAC Efficiency and Industry Allies* ACEEE: American Council for an Energy Efficient Economy. ACEEE, 16 2010.
[9] D. Cornejo, *Upstream & Midstream Programs for the Commercial & Industrial Sector*, 2013 Southwest Regional Energy Efficiency Workshop (Nov. 22, 2013) (*available at: http://swenergy.org/Data/Sites/1/media/events/regional-workshops/2013/presentations/16_Cornejo_Upstream_11-22-13.pdf*).



We recommend that the plan be revised to pursue upstream measures.

Additional discussion of financing mechanisms is needed and on-bill financing and repayment options should be included.

We agree with the provision in the plan that Conservation Service Providers (CSPs) are expected to educate customers regarding financing programs and further agree that customers should be encouraged to use "all available financial resources to help offset some of their capital outlay to undertake energy efficiency improvements."[10] We note, however, that the plan includes a very limited discussion of what programs will be made available to consumers. Furthermore, EDCs have options in addition to those mentioned in the plans, such as on-bill financing and

[10] Proposed Plan, Sec. 9.2.2

repayment, that "provide convenient mechanisms for utility customers to implement energy-efficiency improvements to their properties with no upfront costs, leveraging the existing utility billing system to manage the repayment of a loan obtained to cover the costs of the improvements."[11] The commission's working group on on-bill financing found that these programs were effective tools to increase program participation and deployment of efficiency measures, particularly when they are used in conjunction with other program.[12] **We recommend that the plan be modified to include on-bill financing and on-bill repayment**.

Residential Program

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

The proposed plan targets for the number of CFL bulbs in the period 2017-2019 is too large[13] given version 2 of the Department of Energy's eligibility criteria for Energy Star lamps. Released in draft final form on December 5, 2015,[14] version 2 is intended to replace the current standards on January 2, 2017, and 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 phaseout of CFLs in favor of LEDs.**

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[11] Staff Report, On-Bill Financing Working Group, Docket M-2012-2289411 (Oct. 31, 2013).
[12] Id. at 6.
[13] Proposed Plan, Appendix D-3.
[14] 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

The plan provides for rebates of up to $5.00 on specialty CFL bulbs, and predicts thousands will be installed each year through 2020. **We recommend ceasing support for specialty CFL bulbs immediately as LED alternatives are more cost-effective in nearly all cases.**

PY 2019 includes the first six months of 2020, however the PY 2019 lighting measures do not appear to adequately account for the impacts of EISA,[15] 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. Such results indicate market transformation has already occurred and programs that further incentivize purchases of appliances will suffer from high free ridership and achieve little additional savings.

This is particularly true in the case of televisions where a modeled rebate may be 0.1 to 1% o

We recommend revising the proposed plan to remove support for the following appliances and invest instead in efficient appliances that have not reached market transformation.

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

Appliance Category	Energy Star Market Penetration[16]	Deployment per year[17]	Modeled Rebate[18]
Televisions	99%	13,000	$4
Notebook Computers	93%	<500	$3
Dehumidifiers	89%	1,500	$25
LCD Monitors	88%	500	$4
Refrigerators (CEE Tier 1)	75%	3,850	$50

We also note that the Proposed plan lists "computers" but makes no distinction between notebook computers where Energy Star models have the indicated 93% market penetration and desktop models for which Energy Star models have only a 24% market penetration. **We recommend clarifying language be added to the proposal that limits the rebate to desktop models only.**

Commercial Program

The plans should include direct install programs for commercial and industrial customers.

Direct install programs provide immediate improvement in energy efficiency and result in higher installation rates than relying on end-users to install measures. This is particularly true for smaller businesses and those that lack dedicated staff, or expertise, to address efficiency issues

[16] ENERGY STAR® Unit Shipment and Market Penetration Report Calendar Year 2014 Summary (2015).
[17] Proposed Plan, Appendix D-3.
[18] *Id.* at Appendix D-2.

in their facility. In addition to higher participation rates, direct install programs can provide more reliable reductions as measures are installed by trained and experienced installers. **We recommend the plan be modified to include direct install measures for commercial and industrial customers.**

The commission did not alter how the TRC test using net savings was calculated. In doing so, it stated "...that this may put direct install programs at a disadvantage relative to rebate programs. We proposed that EDCs be required to provide evidence of any such difference in their program filings, so that the Commission can consider whether direct install programs are disadvantaged." [19] From our review of the program filings, it is unclear whether or not direct install programs have been disadvantaged. **We recommend the plan be modified to contain sufficient evidence for the commission to properly consider these impacts.**

The plans should include account management for large C&I customers

Mr. Edward C. Miller, Manager of Development & Compliance in the Energy Efficiency Department of First Energy Service Company, testified that poor participation in Phase II C&I programs was one of the considerations in eliminating those programs from Phase III.[20] We believe that for large C&I Customers, direct account management can help overcome barriers to participation and will enhance energy efficiency.

[19] 2016 TRC Test Order at 48, Docket No. M-2015-2468992 (Jun. 11, 2015).
[20] Testimony of Edward C. Miller at 11.

While the phase III plan references "key account managers" and states that CSPs will be tasked with "developing/supporting customers' continuous improvement activities," we believe the plan should provide more details on how this will be implemented.

There should be more emphasis on tailoring the plan to meet the needs of small commercial entities

We agree that "getting enough customers to participate in the program"[21] is a challenge associated with the small commercial sector. As such we appreciated that "[w]ell established and innovative marketing and outreach techniques will be used to promote the participation in this program."[22] However, that description does not give sufficient information to allow stakeholders to properly evaluate the program. The proposed plan also does not sufficiently distinguish the differences between the small and large commercial programs.

Many of the elements discussed above, such as increased use of direct install measures, account management (for larger customers), and on-bill financing and repayment can be used to increase program participation in this sector. **We recommend the plan be modified to include these elements and clarify how this differs from the plans for large commercial customers.**

[21] Proposed Plan at 64.
[22] Id.