

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition to Approve)	
Act 129 Phase III Efficiency)	
And Conservation Program)	Docket Number. M-2015-2515375
for Duquesne Light Co.)	
)	

**COMMENTS OF JOINT COMMENTATORS: PENNFUTURE, SIERRA CLUB,
ENVIRONMENTAL DEFENSE FUND, KEYSTONE ENERGY EFFICIENCY
ASSOCIATION, 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, we respectfully 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).”¹

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.”² We note once again that the Act contains a clear and unambiguous 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

¹ 66 PA.C.S. § 2806.1(2) *emphasis added*.

² Final Order C.1.b at 91.

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."³

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.

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.

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

³ 1 Pa.C.S. § 1921(b).

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,⁴ 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.**

Residential Programs

The proposed plan should include residential lighting measures

An over-reliance on residential lighting measures, especially continued reliance on CFL bulbs, results in excess free-ridership and diverts resource from more comprehensive programs, but an upstream lighting program can be a cost-effective method to achieve reductions. In our model portfolio we proposed 13 percent of the total reductions coming from lighting sources,⁵ finding this allowed for both savings from lighting and investment in more comprehensive measures.

The data provided by Duquesne supports this analysis as upstream lighting programs proposed in the commercial and industrial sectors have a TRC ratio of 2.2.⁶ This exceeds the proposed TRC ratio for all elements of the residential program with the exception of appliance recycling. **We**

⁴ See Joint Motion of Commissioners Cawley and Witmer, Docket No. M-2015-2468992

⁵ Comments of PennFuture et. al., Model Portfolio at 17, Docket. No. M-2014-2424864 (April 27, 2015).

⁶ Proposed Plan at 137.

therefore recommend that Duquesne consider adding an upstream lighting component to its residential program.

The plan should provide more support for upstream measures

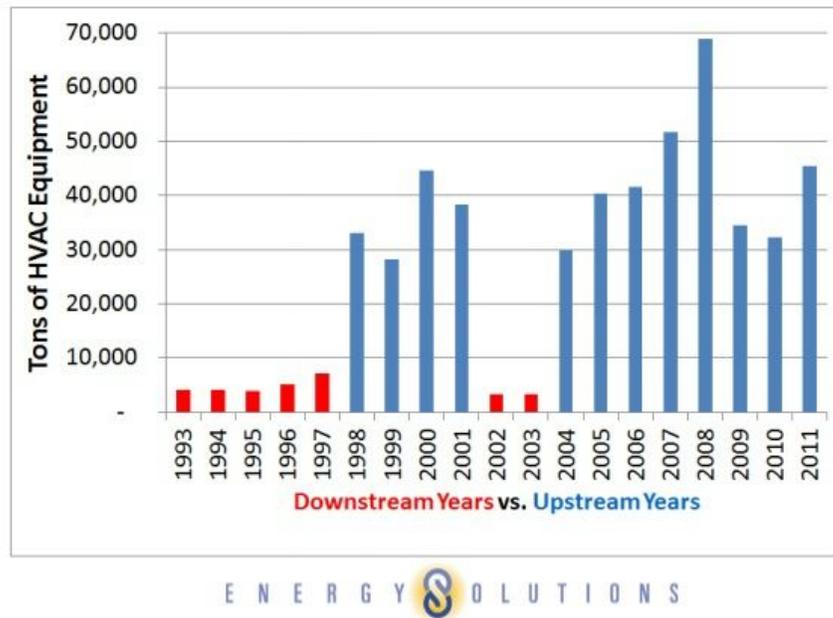
The proposed plan's residential energy efficiency program (REEP) relies on rebates to motivate customers to replace appliances.⁷ Reliance on downstream measures like rebates compromises the effectiveness and cost effectiveness of programs because many consumers neglect to pursue rebates or consider them as part of their purchasing decision,⁸ 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."⁹ The table below dramatically illustrates the relative success of upstream programs compared to rebates on HVAC systems installed in California between 1993 and 2011.¹⁰ While this shows results from a California program, there is no reason to believe the outcome in Pennsylvania would be substantially different.

⁷ Proposed Plan at 28.

⁸ 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>

⁹ 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.

¹⁰ 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 for residential programs.

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

We recognize that an element of the plan includes “providing guidance about alternative financing assistance.”¹¹ We note, however, that the plan includes a very limited discussion of what financial programs will be included. In addition to relaying information regarding financing programs from other sources, EDCs have options such as developing an on-bill financing and repayment programs that “provide convenient mechanisms for utility customers to implement energy-efficiency improvements to their properties with no upfront costs, leveraging

¹¹ Proposed plan at 82.

the existing utility billing system to manage the repayment of a loan obtained to cover the costs of the improvements.”¹² 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.¹³ **We recommend that the plan be modified to include on-bill financing and on-bill repayment.**

The Proposed Plan includes excessive rebates that fail to account for market transformation

Duquesne is providing unnecessary rebates for Consortium for Energy Efficiency (CEE) Tier 1 refrigerators and dehumidifiers in Phase III and those rebates should be eliminated. According to the Energy Star Unit Shipment and Market Penetration Report for 2014¹⁴, it is estimated that 89% of dehumidifiers in 2014 were ENERGY STAR rated so a rebate is no longer needed to move the market. Duquesne includes a \$20 rebate for these appliance, but does not project the number of devices they hope to incentivize nor do they explain how the free ridership issue will be addressed.

Similarly ENERGY STAR Refrigerators made up 75% of the market in 2014 incentives there are also likely to result in high free-ridership. One possible solution for refrigerators is to provide incentives for purchase of units that exceed ENERGY STAR standards (e.g. those

¹² Staff Report, On-Bill Financing Working Group, Docket M-2012-2289411 (Oct. 31, 2013).

¹³ Id. at 6.

¹⁴ 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.

certified at CEE Tier 2 and above). **We recommend the proposed plan be revised to include a projected number of each appliance model for which credit is being taken. We further recommend revising the proposed plan to remove support for appliances where market penetration exceeds 75 percent.**

Low Income Program

In its Low Income Whole House Retrofit Program, Duquesne includes Compact Fluorescent Lamps (CFLs) as a direct install measure, but does not specifically include LED lighting. Any inclusion of CFLs after January 2, 2017 is concerning. On December 5, 2015, the Department of Energy released version 2 of its eligibility criteria for Energy Star lamps in draft final form.¹⁵ 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 exclude CFLs and replace them with LEDs.**

Commercial and Industrial Programs

CFLs should be phased out of efficiency programs and be replaced by LEDs. As noted in reference to the low-income program above, there may not be any CFLs available after January

¹⁵ 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>

3, 2017. In spite of this, Duquesne's Express Efficiency Program still includes rebates for both CFL fixtures and CFL bulbs.

Duquesne's use of a 100 percent net to gross ratio for lighting measures is inappropriate

For both small and large commercial programs, Duquesne assumes a 100 percent net-to-gross (NTG) ratio for its upstream lighting measures.¹⁶ By comparison, A recent report from the Massachusetts program, based on supplier-reported data, found that CFLs had a 70 percent NTG and LEDs had a 75 percent NTG.¹⁷ **We recommend that additional analysis be conducted to establish a more reasonable NTG.**

Even if the TRC ratio is accurate in prior years, program year 5 includes the first six months of 2020, and must therefore adequately account for the impacts of EISA,¹⁸ 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 that include lighting as a component. **We recommend PY2019 of the plan be revised to account for EISA in the last half of PY2019.**

¹⁶ Proposed Plan tables 7B, 7C, pp. 152, 156.

¹⁷ Massachusetts Upstream Lighting Program Net-to-Gross Ratio Estimates Using Supplier Self-Report Methodology. (March 2015) *available at:* <http://ma-eeac.org/wordpress/wp-content/uploads/Upstream-Lighting-Net-to-Gross-Estimates-Using-Supplier-Self-Report-Methodology.pdf>

¹⁸ Energy Independence and Security Act of 2007. Pub. L. 110-140.