Testimony of Robert Altenburg
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before the House Consumer Affairs Committee
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Good afternoon Chairman Godshall, Chairman Daley, and members of the committee.

My name is Robert Altenburg, and I'm the director of the PennFuture Energy Center. We are a nonprofit environmental advocacy organization that seeks to protect the health and welfare of all Pennsylvanians as we grow our economy. We recognize that improving energy efficiency is critical to the success of that mission. As such, we appreciate the opportunity to testify here today.

Energy efficiency is the least expensive energy resource available. A study out of the Lawrence Berkeley Laboratory last year put the levelized cost of saved energy in Pennsylvania under 1.5 cents per kilowatt hour.[1] For comparison, the Energy Information Agency reports the levelized cost of new natural gas capacity—our next cheapest alternative—at more than 7.5 cents per kWh.[2]

Phase I of Act 129 was a Success

We don't need Lawrence Berkeley to tell us this. In Phase I of the Act 129 Energy Efficiency program, all of the participating electric distribution companies (EDCs) exceeded their final targets for both energy efficiency and demand reduction, and they did so while remaining significantly under budget.

The Public Utility Commission (PUC) appointed a statewide evaluator (SWE) that analyzed the costs and benefits of the program using a very restrictive Total Resource Cost (TRC) test. This test focuses on the avoided supply costs resulting from program actions and didn't consider health or environmental benefits. Even with these restrictions, the SWE found the program returned over 2.4 dollars in verified savings for every dollar spent. The program was cost-effective in every EDC, with the Duquesne and Penn Power territories doing especially well with programs that returned more than 3 dollars in verified savings for every dollar spent.

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[1]Billingsley et.al., *The Program Administrator Cost of Saved Energy for Utility Customer-Funded Energy Efficiency Programs* (March, 2014) *available at:* http://emp.lbl.gov/sites/all/files/lbnl-6595e.pdf.

[2]Annual Energy Outlook, 2015, (June 3, 2015) *available at:* http://www.eia.gov/forecasts/aeo/electricity_generation.cfm.

Actions in this phase also reduced our carbon pollution by over 3.4 million tons. In the context of the federal Clean Power Plan, that performance would equate to getting 6 percent of our annual target reductions with a program that not only pays for itself but nets an additional $800 million a year in savings.

Phase II is Exceeding its Goals

For Phase II, the PUC set individual targets for each EDC that averaged a 2.3 percent reduction and would save more than 3.3 million MWh of electricity over the three years of the phase. The EDCs' plans to meet these targets predict net benefits of almost $400 million over and above the program costs with a TRC ratio of 1.54. EDCs are well on their way to meeting and, once again, exceeding these goals. Data from the first year of Phase II shows all EDCs are more than a third of the way to their targets with TRC ratios that are on track to exceed the projected savings.

Phase III

For Phase III, the PUC extended the phase length from three years to five, with compliance determined by the cumulative results at the end of the phase. The PUC once again set individual efficiency targets for each EDC that average a 4.2 percent reduction over the five-year period or .84 percent annually. PUC also set demand reduction targets for all but one EDC that will result in an average annual potential savings of 430 megawatts.

Because the EDCs are still in the process of developing their plans to meet these targets, we don't know what the TRC ratios will be. But, we expect that the analyses will show, once again, that the programs will more than pay for themselves.

In setting these goals, the Commission considered a *Market Potential Study* released by the SWE this past February. This determined that **the amount of reductions that are cost-effective and achievable given adequate investments are more than double the Phase III targets**. The actual targets are based on a far more conservative estimate known as the "program potential." This is lower because Act 129 severely limits the amount of money that EDCs are allowed to invest in programs. As a result we only realize a fraction of the cost-effective measures available and consumers miss out on benefits that would pay for themselves.

The *Market Potential Study* further over-estimates costs and under-estimates benefits because it does not consider that EDC are permitted to roll-over excess reductions from Phase II. We agree with the Commission that allowing such a roll-over is better than an alternative where EDCs suspend efficiency programs as soon as the targets are met. But, the result is that, once again, we are not investing in all the available and cost-effective measures.

Changes to Consider

The structure of Act 129 requires that the benefits of the programs exceed the costs. But as we have seen, Act 129's spending cap means we can only achieve a fraction of what is cost-effective. It's actually worse than that. The legislation limits the spending under the EDC's

plans to 2 percent of the companies' total annual revenue as of December 31, 2006. Because of inflation, this is effectively a declining cap. **In real dollars, this cap is already 16 percent below the 2006 baseline** and could be almost 25 percent below that level by the end of phase III. With declining spending, it is not surprising that the annual targets of most companies in phases two and three under perform their original phase I goals.

This is a particularly serious issue in light of the Clean Power Plan. When we draft our state plan, if we fail to take full advantage of the cheapest and most cost-effective resource available, we will need to make up the difference elsewhere. And, those alternative are going to cost more. With this in mind, we make the following policy proposals:

Protect our existing gains—Any action that lowers the Act 129 budgets or lowers the EDCs' targets means that another program will have to do more. At a minimum, we should avoid weakening the program.

Consider removing the spending cap—The Act requires that the actions taken are cost effective using a very conservative TRC test. Having a spending cap in addition to this requirement ends up limiting the benefits we can obtain from this program.

Build on proven success—This program works for the electric utilities, and there no reason why the model can't be adapted for gas utilities as well. In fact, a program in the gas sector may have more cost-effective potential as it could also address wasted gas through leakage as well as efficiency improvements through better insulation and more modern heaters.

Rethink our rate designs—In our restructured market, our electric utilities are in the business of selling electric distribution services, not electricity itself. They should be paid a fair price for the service they provide, but the rate design should encourage energy efficiency not waste.

Conclusion

While there are a number of changes to Act 129 will result in a healthier environment and more cost savings for Pennsylvania's citizens. We recognize that changes in the electric power sector must be made with care. For that reason, we suggest a stakeholder process be initiated to review and make recommendations concerning any proposed changes. We at PennFuture would be happy to contribute to this process.

Thank You.