

KEEA News

KEEA Member News

KEEA DEP Testimony

Testimony of the Keystone Energy Efficiency Alliance to the Department of Environmental Protection on the proposed Clean Power Plan

September 25, 2014

The Keystone Energy Efficiency Alliance (KEEA) is a non-profit, tax-exempt 501(c)(6) corporation dedicated to promoting the energy efficiency and renewable energy industries in Pennsylvania. With 65 member organizations and growing, KEEA is the premier trade association representing Pennsylvania's energy efficiency and advanced energy companies, entrepreneurs, and workers. KEEA thanks the Department of Environmental Protection for this opportunity to address the Clean Power Plan's proposed standards for existing power plant emissions.

KEEA strongly supports the Clean Power Plan and its inclusion of demand-side energy efficiency as one of four major proposed building blocks available to states under the EPA's Carbon Dioxide Standards for Existing Fossil Fuel-Fired Power Plants. Energy efficiency can rightly be viewed as an energy source similar to traditional energy sources, and is a carbon-free way to meet energy demand at the lowest compliance cost to consumers. Efficiency's inclusion in the Clean Power Plan alongside other clean, advanced energy technologies strengthens Pennsylvania's fuel diversity and offers Pennsylvania a broad range of options to meeting EPA's Proposed Standards. While the EPA has asserted that efficiency has the potential to contribute 22 percent of Pennsylvania's targeted pollution reduction under the Plan, efficiency's potential is actually higher. When EPA calculated the potential each state baseline, resources they included only existing energy efficiency potential from utility or state run programs in order to project percentages in the building blocks. This approach leaves significant voluntary energy efficiency assets unaccounted for such as performance contracting. Since energy efficiency it is the cheapest, fastest resource to deploy, it should be given greater consideration when Pennsylvania is developing its State Implementation Plan. No matter what the outcome of the final rules OR any legal challenges, KEEA urges DEP to begin the process of developing a Statewide Implementation Plan as soon as possible in order to ~~not~~ integrate the resources under EPA's building blocks.

The Department's White Paper points out that "EPA must recognize state leadership and authority to regulate pollutants within their borders and should ensure preservation of states' discretion in the development and implementation of flexible emission control programs that are consistent with Section 111 d provisions." KEEA asserts that the EPA proposed standards are among the most flexible ever developed and provides the states with significant leeway to develop a plan as long as the policies meet the targets. By including "outside the fence" building blocks, EPA takes the responsible approach by allowing lower cost options to participate in lowering emissions through the Best System of Emission Reduction (BSER). It is only if states submit a plan that doesn't meet the overall targets will the federal government step in and impose a plan. States have discretion in designing plans and can propose any mix of technologies and policies. The draft standards don't specifically require states to use the building blocks but we urge Pennsylvania to do just that. States need to take a leadership role in drafting a plan that takes up where EPA left off by providing additional guidance to both power plant operators and those businesses who can assist with mitigation strategies.

By eschewing a one-size-fits-all approach, EPA has enabled each state to utilize their unique resource mix to reach the goals. This flexibility allows for the least-cost resources in each state to participate.

I would like to take the next few minutes to share five of the major points we make with EPA and would like to share with the Department.

1. *Complement existing programs*- KEEA encourages EPA to seek ways to complement and build on existing renewable energy and energy efficiency state programs, so that states like Pennsylvania are able to fully leverage those investments. The foundation has been built in our state to ramp up quickly and efficiently to meet the EPA standards if we fully utilize these resources.

2. *Quantify reductions from efficiency investments* -KEEA asked EPA to clarify the methodologies that would be acceptable to EPA to demonstrate the reliability of energy efficiency. Pennsylvania has proven EM&V protocols for verifying energy efficiency in the marketplace through both the Act 129 programs and through PJM. Both energy efficiency and demand response are currently bid into PJM's forward capacity market and have been for the past several years. The energy efficiency industry has consistently been able to meet high standards for measurement and verification of energy efficiency products. Yet, our businesses would benefit from additional guidance from EPA in this area.

Pennsylvania has developed and tested one of the nation's most robust measurement and verification (M&V) protocols. The PUC updates and approves a Technical Reference Manual that attributes savings to energy efficiency measures, and amends the Manual to include new technologies regularly. In the Manual, savings values are rigorously developed and provide a highly credible guide for efficiency investment. KEEA can provide a copy of

the Manual to the Department or it is available on the PUC's website along with a more detailed description of these tools and processes if the Department is interested. In fact, the commission will soon to take public comments on a new draft of the manual as part of the development of PHASE III of Act 129 of 2008 planning process that is getting underway. The PUC also engages a statewide evaluator that reviews program performance, measures energy efficiency potential in the state by customer class and publishes a report to help determine program goals for each of the seven major EDCs' territories programs. This process has begun for Phase III. KEEA believes EPA's efficiency goal of 1.5% per year is achievable. Some states are currently meeting that standard now. Pennsylvania isn't that far behind and can ramp up to accomplish the goals.

3. *Enable intrastate agency collaboration* - KEEA suggests that EPA adopt an approach that allows air regulators to easily incorporate Public Utility Commission analysis into a SIP. It is understandable that air regulators may not be as familiar with the best approaches for integrating non-traditional or "outside the fence" options for complying with air quality issues but this is a great way to continue diversifying our resource mix at the lowest possible cost to consumers.

4. *Consider Demand Response* -KEEA suggests that the EPA consider Demand Response for inclusion in the Clean Power Plan's Best System of Emissions Reduction (BSER). If EPA does not include Demand Response, we suggest there is enough flexibility in the EPA's design for states to add it as a compliance option.

5. *Consider regional state approaches* -KEEA asks DEP to engage with other states early in the process in order to examine whether a regional planning approach makes the most sense for Pennsylvania. Because our energy efficiency businesses work in multiple states and a regional approach benefits not only our businesses but benefits all consumers by lowering the cost of implementation. Because of our businesses work in multiple states business will naturally be attracted to states that provide a "plug and play" set of rules across state boundaries. The time may be right for Pennsylvania to consider joining the Regional Greenhouse Gas Initiative (RGGI). RGGI already has the infrastructure and rules in place that are proven to work and are transparent. KEEA understands Pennsylvania was reluctant to join RGGI in the past.

Importance of Act 129

Pennsylvania Act 129, under which the seven major electric distribution companies (EDCs) in the state have been implementing energy efficiency programs since 2009, provides Pennsylvania with a fully-developed and tested framework that Pennsylvania can quickly expand. Act 129's framework is a natural mechanism for achievement pursuant to the Plan, as Act 129's timeline dovetails perfectly with the Clean Power Plan's deployment schedule. The third phase of implementation under the Act will begin in June of 2016, the

same month that state implementation plans are due to EPA. As we prepare for the third phase of Act 129 implementation, the Pennsylvania Public Utility Commission (PUC) is conducting a review of performance to date, extract lessons learned, and use them to iterate Pennsylvania's efficiency programs. It is natural for these improvements to be incorporated into Pennsylvania's Clean Power Plan SIP, which will be drafted during the same period. Pennsylvania can—and should—leverage this concurrence to facilitate development of the SIP.

Pennsylvania's energy utilities are well positioned to serve as springboards for energy efficiency program delivery. The seven EDCs that conduct energy efficiency programs under Act 129 have dedicated and experienced staff that can capably deliver efficiency programs. Additionally, several Pennsylvania natural gas utilities have voluntarily developed energy efficiency programs. Philadelphia Gas Works, Columbia, and UGI have invested in staff and program development, and are actively helping their customers save energy and money on their utility bills.

We believe that the current draft standards are achievable even for fossil fuel heavy states such as Pennsylvania, and its enactment will strengthen Pennsylvania's economy overall, create new clean energy jobs, and benefit electric ratepayers. Pennsylvania has a history of successful implementation of greenhouse gas-reducing energy efficiency programs upon which it can build through our Act 129 programs and AEPS. The proposed Clean Power Plan carbon dioxide intensity reduction for Pennsylvania is 31 percent. This is well within reach for Pennsylvania. Pennsylvania will likely achieve half of its goal through existing efforts such as required under Pa Act 129, the AEPS and through currently scheduled power plant retirements.

Under Act 129 of 2008, Pennsylvania saved 5,430,370 megawatt-hours (MWh) of electricity from 2009 until 2013, which equated to 3,431,140 tons of avoided carbon dioxide emissions, according to Pennsylvania's Act 129 statewide evaluator. These reductions have been independently verified. They found that Pennsylvania's electric ratepayers received more than \$4 billion in benefits from Act 129's first implementation phase—that's \$2.40 in benefit for every dollar invested in energy efficiency. Pennsylvania invested more than \$800 million in demand-side energy efficiency from 2009 to 2013, and has built the framework to continue to benefit Pennsylvania's ratepayers Under Act 129's Phase I (2009-2013), one kilowatt-hour saved by energy efficiency cost ratepayers \$0.0325. In 2013, the average retail cost of one kilowatt-hour of generated electricity was \$0.1260 for residential ratepayers. Efficiency offered a 74 percent discount over generated electricity in 2013. Demand-side energy efficiency is the cheapest option available to meet Pennsylvania's energy needs. KEEA understands that DEP is not responsible for rates but it is our hope that DEP is working closely with the PUC on comments to EPA as well as developing a SIP.

Other Benefits of demand response energy efficiency or end-use efficiency

I would like to touch upon a few other benefits of including end-use energy efficiency in our state implementation plan. 1. Energy efficiency should reduce the need for transmission and distribution (T&D) infrastructure construction and upgrades, which are difficult to site and expensive to ratepayers. 2. It reduces congestion pricing at bottlenecks in the T&D system. 3. Energy efficiency investments provide price consistency in a world of energy price volatility. Since efficiency results in less electricity use in a home or business, the ratepayer is partially insulated from volatility in electricity prices that result from fuel price spikes. For example, Pennsylvanians were exposed to tremendous electricity price volatility during 2014's winter polar vortex, when the cost of fuel for generators increased dramatically. No energy source is completely reliable 100% all of the time but the more efficient the building, the less energy it uses, the lower the customer cost which can serve to mitigate supply side volatility. Customers who were able to efficiently use energy consumed less of it during this time, and were therefore less exposed to price spike than were customers who had not undertaken energy efficiency improvements prior to the polar vortex. During that time, Demand Response also served a significant role in containing price escalation while literally making a large contribution to "keeping the lights on". During the coldest weather, 22 percent of Pennsylvania's generation capacity was offline, particularly natural gas and coal-fired power plants, as electricity demand climbed. Demand Response ensured electricity reliability during that time. In other times, such as hot summer days, Demand Response keeps highly-polluting peaking generation plants from being turned on, thereby preventing significant carbon pollution.

Even in communities that are experiencing flat or declining electricity demand growth, efficiency saves ratepayers money by lowering utility bills. Not only do the recipients of end use energy efficiency programs benefit, all 5.3 million utility ratepayers experience lower wholesale electricity prices. DEP and the PUC will be need to keep rate impacts top of mind when developing a plan. Integrating both end use energy efficiency and demand response will be key to responsibly managing early cost impacts. 5. The cost of efficiency is predictable over time; it is not reactive to weather events or vulnerable to supply disruptions in the same way as generation is.

No matter the route to carbon pollution reduction undertaken by Pennsylvania, jobs will be created in the state as a result of the Clean Power Plan if renewable energy and energy efficiency is included. Of all compliance options, utilizing demand-side energy efficiency will yield the greatest number of jobs. In January 2014, Governor Corbett stated in his State Energy Plan, "As PA Electric Distribution Companies have met Act 129 goals they have helped foster the economic development benefits associated with the energy efficiency industry, including 800 jobs since 2009". Studies have since indicated that this figure is likely much larger. Charles A. Goldman, et al., of the Lawrence Berkeley National Laboratory, conducted a multistate study that found 6.2 person-years of employment were

created in the energy efficiency service sector per \$1 million invested. By that metric, Pennsylvania may have created more than 10,000 jobs under Pa Act 129.

Pennsylvania's Act 129 programs are a potent force for job creation and the success of that legislation can be built upon by state policies favorable to energy efficiency expansion and investment. For example, ACEEE projections are for 7,900 new efficiency sector jobs by 2020 and 16,600 by 2030 if Pennsylvania utilizes demand-side energy efficiency to meet the Clean Power Plan's standards. Such jobs span a diverse set of functions, from construction to technology to marketing. These jobs are attractive to young Pennsylvanians, and they are ready for us to create these opportunities and are interested in innovation and technology in particular.

Finally, KEEA and its 65 member businesses would like to participate in any DEP stakeholders groups or other forums DEP plans to hold around the development of the SIP. We would also respectfully asks DEP to allow us to submit supplemental materials to this testimony in the very near future.



KEEA Member Organizations

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| AFC Financial Corporation | ICF International |
| Affordable Comfort, Inc. | Innovative Energy Corporation |
| Atlantic Energy Concepts | Landmark Service Company |
| Celentano Energy Services | MaGrann Associates |
| Clean Markets | MT Weatherization, Inc. |
| Conservation Consultants, Inc. | OPower |
| Conservation Services Group | PA Solar Hot Air |
| DA Virelli Contractors | PACE Energy and Climate Center |
| Delaware Valley Green Building Council | Penn State University |
| DNV-GL | Rosales Communication |
| Ecova | Performance Systems Development |

Efficient Home LLC	Princeton Green
EIC/Comfort Home	Pure Energy Coach
EMC ² Development Corporation	Quanta Technologies
Encentiv Energy	Robert Riker Construction
Energy Auditors	S. Murawski & Sons
Energy Coordinating Agency	Sellair
EnerNOC	SmartWatt Energy, Inc.
Environmental Life Academy	Square K Energy
Everblue Training Institute	Sustainable Futures Communications
FiberAmerica	Tech Reps Inc.
Franklin Energy Services	The Handyman Service
Green Tech Energy Solutions	Thomas G. Wells Construction
Ground Source HVAC	US Green Home
Hancock Software	Vernon Energy Training
Honeywell Utility Solutions	Warren Engineering