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## **Testimony of Art Olson to the Pennsylvania State Senate regarding HB-2354 and the EPA's proposed Clean Power Plan**

August 21, 2014: Wilkes University, Wilkes-Barre, Pennsylvania

Chairman Yaw, Senators and Committee Staff Members, good morning and thank you for giving me with this opportunity to address the Environmental Resources and Energy Committee. My name is Art Olson, and I am here today on behalf of Keystone Energy Efficiency Alliance (KEEA) to submit testimony on the value of energy efficiency to utility ratepayers, businesses, and customers in Pennsylvania and express support for Pennsylvania following the direction of the EPA's Clean Power Plan.

I am the Director of Business Development for SmartWatt Energy (SmartWatt), a for-profit corporation with its headquarters in Albany, NY and offices in Scranton, Philadelphia and Pittsburgh as well as over a dozen other locations across the US. SmartWatt is a leading provider of turnkey energy efficiency solutions for commercial, industrial and institutional customers across the country. Our extensive design-build expertise enables us to very effectively apply a wide array of both proven and emerging energy efficiency technologies to design, install and commission comprehensive energy efficiency projects. We have 37 employees within the Commonwealth of Pennsylvania, providing energy efficiency projects for customers like General Dynamics, Rieter Textiles, Cardone Industries, Pepsi Bottling, Thomas Jefferson Hospital System, and Amazon that reduce energy costs and provide a host of other benefits that improve their competitive standing in national and international markets.

I serve on the Board of Directors of KEEA, 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 advocates on behalf of Pennsylvania's energy efficiency and renewable energy professionals on the local, state, and federal levels.

KEEA supports Pennsylvania following the EPA's Clean Power Plan. In my personal experience, my 40 years of work throughout the energy industry have shown me that investment in clean, efficient sources of energy is the optimal path to cost containment, system reliability, and economic development for Pennsylvania's citizens. The Clean Power Plan will strengthen Pennsylvania's economic competitiveness and will create jobs.

My testimony will detail four important ways Pennsylvania will benefit from this Plan:

1. The Clean Power Plan permits Pennsylvania to tailor its implementation plan to leverage our lowest-cost resources available, making this easily to comply with.
2. If we do this right, it won't cost Pennsylvania to meet the goals of the Clean Power Plan – instead it will pay.
3. The Clean Power Plan will create jobs in Pennsylvania.
4. Pennsylvania's Act 129 Program framework and the energy utilities are well positioned to springboard energy efficiency program delivery.

Finally, KEEA recommends that the best solution for Pennsylvania is collaboration between PA-PUC and DEP to develop a state implementation plan, not wait for a federal plan.

**First, the EPA Plan is achievable for Pennsylvania.** A diversified approach to compliance will strengthen Pennsylvania's economy, create jobs, and benefit electric ratepayers in the long term. The Plan can thus utilize the Commonwealth's most cost-effective resources while increasing fuel diversity and strengthening energy reliability

EPA's proposed standards recognize the potential for energy efficiency's to contribute 22 percent of all targeted carbon pollution reductions in Pennsylvania. KEEA supports the Clean Power Plan's inclusion of demand-side energy efficiency as one of four major pollution-reducing tools available to the States. As I will discuss shortly, this balance makes sound economic sense and will bring Pennsylvania into compliance through application of readily available, modern-day technologies.

Demand-side energy efficiency has proven to be a cost effective way to reduce carbon pollution associated with electricity generation in Pennsylvania. From 2009 until 2013, demand-side energy efficiency provided great economic benefit to ratepayers. The Act 129 Statewide Evaluator found that Pennsylvania's electric ratepayers received more than \$4 billion in benefits from Act 129's Phase I Programs—that's \$2.40 in benefit for every dollar invested in energy efficiency.

Pennsylvania has been blessed with a well trained work force, a dedicated network of qualified energy efficiency service providers, and utilities that have delivered high quality programs for all classes of customers on time and under budget. To ensure that this investment continues to provide these economic returns, the Public Utility Commission has already put in place appropriate, objective checks and balances to verify PA-129 Program results and ensure that the utility program structure will continue to serve Pennsylvania well to meet EPA Clean Power Plan goals.

**Second, if we do this right, it won't cost Pennsylvania to meet the goals of the Clean Power Plan – instead it will pay.** When energy efficiency is done under an effective, comprehensive plan, with appropriate management oversight and EM&V, as it currently is done in Pennsylvania, energy efficiency doesn't cost—it pays!

The benefits from demand-side energy efficiency can be seen all over Pennsylvania. Efficiency saves ratepayers money by meeting energy needs without the construction of costly new generation capacity and also reduces the need for costly transmission and distribution (T&D) infrastructure, the cost of which are born by the ratepayers, and are also becoming increasingly unpopular among local residents.

Efficiency saves ratepayers money by lowering utility bills. Not only do the program participants benefit, but all 5.3 million utility ratepayers see wholesale electricity market benefits that provide capacity and wholesale price savings for the citizens of the Commonwealth as a whole.

EPA has estimated that utility bills will be an average of eight percent lower in 2030 than they were in 2012 as a result of the effective application of this versatile approach to compliance. Such a reduction in total system cost is only possible if states leverage demand-side energy efficiency to the greatest possible extent in their SIPs.

Further, making use of energy efficient investments in our buildings and homes provides consumers with greater price stability. As energy efficiency results in less electricity use in a home or a business, the ratepayer is insulated from volatility in electricity prices that result from fuel price spikes. Pennsylvanians were exposed to tremendous electricity price volatility during 2014's winter polar vortex, when the cost of fuel for generators increased dramatically. Customers who were able to use energy efficiently, consumed less of it during this critical time, and were therefore less exposed to the price spike than were customers who had not undertaken energy efficiency improvements prior to that event.

The cost of efficiency is predictable over time; it is not reactive to weather events or market forces; it is not vulnerable to supply disruptions in the same way that generation is. Efficiency is therefore an affordable and desirable way to meet Pennsylvania's energy needs.

Demand Response programs have also played a significant role in meeting Pennsylvania's energy needs and containing rapidly escalating wholesale prices during the polar vortex of 2014. As electricity demand climbed in the coldest weather, 22 percent of Pennsylvania's generation capacity was offline, particularly natural gas and coal-fired power plants. Demand Response was critical to ensuring electrical system reliability during that time. In other times, such as hot summer days, Demand Response reduces the need for peaking generation plants, thereby preventing significant carbon emissions.

KEEA suggests that the EPA consider Demand Response for inclusion in the Clean Power Plan's BSER, and that it explore methods to credibly quantify the carbon pollution reduction potential of Demand Response consistent with the Plan's goals.

**Third, the Clean Power Plan will create jobs in Pennsylvania.** Of all compliance options, utilizing demand-side energy efficiency will yield the greatest number of job gains.

Utility energy efficiency programs represent a potent stimulus to the economy because the effort supports jobs right here, in-state, not beyond our borders, because most efficiency work occurs at the site where it's used. SmartWatt's payroll and benefits within the Commonwealth of Pennsylvania is suspected to be over \$2 million in 2014. Right now, SmartWatt's web site currently includes eight postings for new jobs in Pennsylvania; from electrical technicians, to foremen, to energy controls experts and engineers. Thanks to a highly-effective energy efficiency program structure, an engaged PA-PUC, capable utilities and motivated customers, we see almost limitless opportunities for energy efficiency in the Pennsylvania market. That drives demand for qualified people to fill those jobs.

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.

ACEEE projections call for 7,900 new efficiency sector jobs by 2020 and 16,600 jobs by 2030 if Pennsylvania utilizes demand-side energy efficiency to meet the Clean Power Plan's standards.

Such studies are anecdotally supported by KEEA's membership of 65 businesses and entrepreneurs in Pennsylvania. Many increased their Pennsylvania workforces substantially under Act 129 and have expressed that they expect significant continued growth as demand-side energy efficiency plays a key role in Pennsylvania's Clean Power SIP. Such jobs span a diverse set of functions, from construction to technology to marketing. These jobs are attractive to young Pennsylvanians looking for long-term careers in a growing field that serves their communities.

Pennsylvania is ready for the Clean Power Plan. Through Act 129, the state's seven major electric utilities have been implementing energy efficiency programs since 2009. The Act 129 framework provides a natural mechanism for achievement of the Clean Power Plan's goals, as the Act 129 timeline dovetails perfectly with the Clean Power Plan's deployment schedule. Phase III implementation under the Act is set to begin in June of 2016, the same month that state implementation plans pursuant to the Clean Power Plan are due to be submitted to the EPA.

Simultaneous development of PA-129 Phase III plans and Pennsylvania's Clean Power SIP will allow Pennsylvania to leverage this concurrence to facilitate development of a comprehensive SIP that includes demand side energy efficiency as well as supply resources to achieve the optimum mix that will **result in the lowest overall cost to Pennsylvania ratepayers**.

**Fourth, Pennsylvania's energy utilities are well positioned to springboard energy efficiency program delivery.** The seven Pennsylvania utilities have an experienced and dedicated staff capable of delivering cost effective energy 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. These efforts further support the PA-129 program framework to more effectively serve Pennsylvania ratepayers.

It is important that Pennsylvania develops a plan that best suits Pennsylvania's diverse energy resources at the lowest possible cost to ratepayers while providing the intended environmental benefits. KEEA encourages the Senate to seek ways to support DEP in the drafting of a SIP that compliments existing state programs so that Pennsylvania is able to fully leverage the Act 129 program delivery framework. Pennsylvania's customers as well as the utilities, investors, and program implementers have greatly benefitted from the vision and leadership provided by the PA-PUC in executing its Act 129 obligations. The PUC's leadership has been nationally recognized as representing best practices in energy efficiency program portfolio management.

**KEEA recommends collaboration between PA-PUC and DEP to develop a SIP, not wait for a FIP.** The PA-PUC's involvement will support the DEP in development of a Plan that takes best advantage of end use energy efficiency as the most cost effective component. This would in turn prevent EPA from asserting its own authority over Pennsylvania and imposing a federal plan which could result in a less flexible, less efficient, and more costly plan for the Commonwealth because it would fail to integrate Pennsylvania's diverse energy resources which would provide the lowest possible cost Plan.

At this time, it is unclear to KEEA whether the approach currently being considered by DEP would pass this test because it is not clearly a "win-win", least-cost strategy that integrates all of Pennsylvania's available energy sources, including energy efficiency and other advanced solutions.

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Chairman Yaw and Senators, thank you for this opportunity to discuss the many benefits Pennsylvania ACT 129 energy efficiency programs and Pennsylvania's energy efficiency industry can bring to addressing EPA's draft Clean Power Plan standards.

### **About the Keystone Energy Efficiency Alliance**

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. KEEA advocates on behalf of energy efficiency and renewable energy professionals on the local, state, and federal levels. By representing the interests of the clean energy industry in Pennsylvania, KEEA is growing the market for energy efficiency and helping the Keystone State secure a prosperous, sustainable tomorrow.

### **KEEA Member Organizations**

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/ CLEAResult	Pure Energy Coach
EMC <sup>2</sup> 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