

**Testimony of Rich Selverian, President of MaGrann Associates and President of the
Keystone Energy Efficiency Alliance**

Before the PA House Consumer Affairs Committee

September 1, 2015

Thank you, Chairman Godshall, Chairman Daley, and members of the committee for the opportunity to testify today on an important issue: energy efficiency. My name is Rich Selverian, President of MaGrann Associates, and President of the Keystone Energy Efficiency Alliance (KEEA).

By way of background, KEEA is a non-profit, tax-exempt 501(c)(6) trade association dedicated to informing the public and decision-makers on the energy efficiency industry in Pennsylvania, and to advancing policies that will help grow our state's energy efficiency and advanced energy economy. KEEA advocates on behalf of energy efficiency and advanced energy professionals on the local, state, and federal levels.

KEEA comes before the House Consumer Affairs Committee today representing our association of 50 members and individuals working in building energy efficiency. Many of our members are registered with the Public Utility Commission as Conservation Service Providers. My own company, MaGrann Associates, started as a small business, has operated successfully for more than thirty years and now has offices here in Pennsylvania at the Philadelphia Navy Yard, as well as in New Jersey, Ohio, Kentucky, Washington, DC, Hawaii, and New York. Our members deliver energy efficiency programs in Pennsylvania and across the country.

I appreciated the opportunity to participate in a similar hearing back in February, 2014, on Act 129's energy efficiency and conservation programs, and I look forward to providing the committee with an update on the success of those programs, and KEEA's outlook on energy efficiency moving forward in Pennsylvania.

In developing, refining, and extending Pennsylvania's Act 129 energy efficiency and conservation programs over the past six years, Governors Corbett and Wolf have both pointed out that energy efficiency is a business that improves the competitiveness of Pennsylvania's economy and is part of our state's energy leadership across the country. Similarly, the General Assembly has acted in a bipartisan way to grow this economy as well.

We look forward to working with leaders on both sides of the aisle to continue this positive momentum that is creating jobs and drawing businesses to Pennsylvania.

Testimony Overview

Today I'm going to share insights on how we can make our economy stronger through pro-business policies on energy. So far, programs initiated by Act 129 have generated nearly \$2 billion of benefits to Pennsylvania electric customers and demonstrated a significant positive return on investment for each \$1 spent.¹ ² KEEA has been an active participant in the PUC's management of Act 129 energy efficiency programs over the last six years. Our members look forward to continuing to work through PUC processes to improve programs, while continuing to supply customers with dependable energy efficiency.

Today I underscore seven main points about how energy efficiency is vitally linked to Pennsylvania's economy:

1. In Pennsylvania, energy efficiency companies have seen job creation largely due to smart policy.
2. The economic benefits of energy efficiency have been widespread.
3. There is significantly more energy efficiency to gain in PA.
4. We are just starting to see the potential of the utility programs.
5. Utility energy efficiency programs work when they engage all customer classes.
6. Changing the program to support opt-outs would only help the few at the expense of the many.
7. The PUC has responsibly managed these programs.

Who are we?

Let me first give a face to our industry. We in the energy efficiency industry work in roles that improve the energy and financial performance, as well as, comfort and environmental impact of residential, commercial and industrial facilities. We are electricians, engineers, trained technicians, financial analysts, construction workers, facility managers, software developers,

¹ Governor Corbett, *Pa State Energy Plan*, January 2014 (28). Available: <http://energy.newpa.com/wp-content/uploads/2014/01/PA-State-Energy-Plan-Web.pdf>

² Act 129 Statewide Evaluator, *Annual Report for Program Year 5*, February 27, 2015. Available: http://www.puc.pa.gov/Electric/pdf/Act129/SWE_PY5-Final_Annual_Report.pdf

and other specialists. As a result of Pennsylvania's utility energy efficiency programs, many of our businesses have launched new offices in Pennsylvania. Over twenty businesses currently implement utility energy efficiency programs as a result of Act 129. Businesses include ICF International, DNV-GL, CLEAResult, Ecova, Opower, Honeywell, Franklin Energy, and SmartWatt. Here in the Keystone state we have hired new staff, and signed multi-year contracts with sub-contractors to bring cost-effective energy efficiency to Pennsylvania. These businesses employ, directly and indirectly, thousands of Pennsylvanians and put hundreds of millions of dollars into our economy. We can articulate the value of these programs from a technical, cost and customer satisfaction perspective.

1. In Pennsylvania, energy efficiency companies have created significant jobs largely thanks to smart policy initiated by this legislature. As stated by Governor Corbett's State Energy Plan in assessing the value of Act 129 programs, "As PA Electric Distribution Companies have met Act 129 goals they have helped foster the economic development benefits associated with the energy efficiency industry."³ Indeed, Pennsylvania's energy efficiency workforce is now 37,000 strong.⁴

Establishing utility energy efficiency programs is particularly a boon to our economy because it supports jobs that take place in state; not beyond our borders. Pennsylvania's Act 129 programs are a potent force for job creation; turning the dial back would lead to job loss and economic contraction, which is why, in June, KEEA applauded the PUC for extending these programs into a third phase.

2. The economic benefits of energy efficiency have been widespread. Taken together, Act 129's first and second phases will result in roughly \$2 billion in savings to Pennsylvania customers. And Pennsylvania's energy efficiency programs continue to demonstrate a significant positive economic return for every \$1 of investment. Not only do the recipients of these programs benefit, but all 6 million utility ratepayers see wholesale electricity market benefits. Energy efficiency measures not only produce annual energy savings, but by shifting the demand curve, also provide capacity and wholesale price savings for the

³ Governor Corbett, *Pa State Energy Plan*, January 2014 (29).

⁴ KEEA and E2, "Clean Jobs Pennsylvania: Sizing Up Pennsylvania's Clean Energy Jobs Base and Its Potential," November 2014. Available: <http://cleanenergyworksforus.org/wp-content/uploads/2014/11/CleanJobsPennsylvania.pdf>

Commonwealth. As a result, electricity prices decline resulting in extra dollars in the pockets of all electric ratepayers – business and residential alike.

A 2013 study of Ohio's energy efficiency impact on the electricity market found over \$3 billion in energy savings, \$880 million in wholesale price mitigation and over \$1 billion in capacity price mitigation, for a total of \$5.5 billion in savings for the period 2013 to 2020.⁵ KEEA would welcome a study from the Public Utility Commission on these "price suppression" effects in Pennsylvania, which so far have not been quantified or factored into the cost-effectiveness tests employed by the PUC.

In addition, increased energy efficiency has made our grid more reliable, which has benefited all Pennsylvanians. As everyone here knows, when we discussed this topic last February, winter had been particularly cold and electric demand for heating caused the grid to reach new seasonal peaks. PJM, the wholesale electric grid that includes Pennsylvania, experienced its historic winter peak on January 7 at 141,312 MW.

Fossil fuel-fired generation has been a traditional source of reliability, but recent extreme weather has revealed its vulnerabilities and the benefits of energy efficiency. Last winter's weather forced many fossil fuel plants to cut back due to their inability to run at full capacity in frigid temperatures. "At various times [on January 7], as much as 21% of PJM's 189,658 MW of installed capacity was forced out of service", according to PJM's CEO Terry Boston.⁶ Demand response resources were able to fill the gap with 2,029 MW.⁷ ⁸ KEEA has been engaged in the PUC's peak demand program proceedings and supported the inclusion of cost-effective demand response targets in the final order for Phase 3. Demand response, coupled with energy efficiency measures that permanently reduce peak load, are key tools to maintaining system reliability.

⁵ ACEEE, "Ohio's Energy Efficiency Resource Standard: Impacts on the Ohio Wholesale Electricity Market and Benefits to the State", April 30, 2013. Available: <http://www.aceee.org/research-report/e138>

⁶ "Executive Column: President and CEO Terry Boston", *PJM Inside Lines*, January 2014. Available: <http://www.pjm.com/about-pjm/newsroom/newsletter-notices/inside-lines.aspx>

⁷ "PJM Estimated Demand Response Activity January 7-8, 2014", *PJM*, January 14, 2014. Available: <http://www.pjm.com/Media/markets-ops/demand-response/pjm-cold-days-report-for-january-7-8-2014.pdf>

⁸ "PJM Grid Meets Month-Long Challenges of Cold January", *PJM News Release*, January 31, 2014. Available: <http://www.pjm.com/~media/about-pjm/newsroom/2014-releases/20140131-pjm-grid-meets-month-long-challenges.ashx>

3. There is significantly more energy efficiency to gain in PA. Through the first two phases of Act 129, the utility energy efficiency programs will ultimately result in customers saving over 7.5 million MWh.⁹ This is equivalent electricity to power over 700,000 Pennsylvania homes, 51,000 businesses, or 8,600 industrial facilities for a year.¹⁰ These savings create value for individual participants in the programs. For example, homeowners whose houses have been retrofitted with energy efficiency measures such as insulation, air sealing, and high efficiency equipment not only see lower energy bills each month, but also benefit from improved indoor air quality, enhanced durability of the building and the premium such assets can fetch in the real estate market.

The PA PUC has done the research on opportunities for growth. As the PUC's independent evaluator concludes, Pennsylvania could economically save 11.8% of electricity between now and 2020.¹¹ In the PUC's Phase III plans for 2016 – 2021, it has directed electric utilities to make energy efficiency improvements resulting in 5.1 million MWh savings, equivalent to 3.5% grid-wide savings across PA.¹² Thus, the state could make many more cost-effective investments in energy efficiency that would economically benefit all ratepayers.

These improvements are greatly needed in Pennsylvania. The recent recession led to reduced demand for electricity, but this is short-lived. In the longer term we see demand for electricity increasing, which, unchecked, will require new generation capacity and will undoubtedly lead to increased electricity prices. For Pennsylvania's 6 million electricity customers affected by Act 129, energy efficiency is a dependable and responsible cost control method that is being deployed across the state.

4. We are just starting to see the potential of the utility programs. The economics of electricity in PA have changed since 2008, particularly with plentiful, low cost natural gas, but the Act 129 energy efficiency programs in the Commonwealth continue to be cost-effective. This reflects the latest market analysis, which puts energy efficiency far below electric generation on a

⁹ Act 129 Statewide Evaluator, *Annual Report for Program Year 5*, March 4, 2015.

¹⁰ Calculated from Act 129 Statewide Evaluator, *Commercial & Industrial End Use & Saturation Study*, April 18, 2012 (4). Available:

http://www.puc.pa.gov/electric/pdf/Act129/PA_CI_Baseline_Report2012.pdf

¹¹ Act 129 Statewide Evaluator, *Market Potential Study*, May 2012. Available:

http://www.puc.pa.gov/electric/pdf/Act129/Act129-PA_Market_Potential_Study051012.pdf

¹² Act 129 Phase 3 Final Implementation Order. June 11, 2015. Available:

http://www.puc.pa.gov/filing_resources/issues_laws_regulations/act_129_information/energy_efficiency_and_conservation_ee_c_program.aspx

levelized cost-basis.¹³ When utilities initiate energy efficiency programs, consumers benefit. As a result, twenty utility programs around the country now spend over 2% of revenue on energy efficiency. The 2% revenue spending cap on Act 129 limits the potential of our programs to achieve all cost-effective results for Pennsylvania and our state has not yet adopted efficiency goals for its natural gas utilities. Pennsylvania's consumers will save on their bills if efficiency programs are expanded, and we are just starting to see this potential with Phase II just underway.

Investments in energy efficiency are growing nationwide and Pennsylvania's consumers stand to benefit by new technologies that make energy saving even easier. On February 12th of last year, NRDC and the Edison Electric Institute, the trade association and policy voice for investor owned utilities, set the goal to achieve all cost-effective utility energy efficiency across the country.¹⁴ This development underscores the national focus on utilities' saving customers' money through energy efficiency. As their programs develop, our PA utilities could be doing more to make energy cheaper for Pennsylvanians. At the same time, the state should also consider policies, such as performance incentives or shared savings, which align utility business models with the achievement of greater energy efficiency investment.

5. Utility energy efficiency programs work when they reach all customer classes.

The Ohio report discussed earlier found that wholesale electricity savings accrue to both participants and non-participants of utility-sponsored energy efficiency programs. Act 129 is currently equitable because all customer classes pay a small rider on their electric bills. If one class of customers were excluded from paying, they would still receive the wholesale electricity savings. The savings achieved are significant: Ohio's utility energy efficiency programs save customers \$5.5 billion in avoided energy expenditures and reduced wholesale energy and capacity prices by 2020.¹⁵

¹³ Lazard, *Levelized Cost of Energy, Analysis Version 7.0*. 2013. Available: http://gallery.mailchimp.com/ce17780900c3d223633ecfa59/files/Lazard_Levelized_Cost_of_Energy_v7.0_1.pdf

¹⁴ EEI/NRDC *Joint Statement to State Utility Regulators*, February 12, 2014. Available: http://docs.nrdc.org/energy/files/ene_14021101a.pdf

¹⁵ ACEEE, "Ohio's Energy Efficiency Resource Standard: Impacts on the Ohio Wholesale Electricity Market and Benefits to the State", April 30, 2013. (iv)

6. Changing the program to favor one customer class would help the few at the expense of the many. Allowing large commercial and industrial customers to opt out must be avoided. In some states, industrial customers have complained that utility energy efficiency programs duplicate what they already do. Understandably, not all customers will experience equal benefits and costs from utility energy efficiency programs. But this segment represents a significant portion of all economic energy efficiency, which on the whole, is untapped. Industrial customers account for roughly 25% of Pennsylvania's electricity demand at more than 41,000 premises across the state.¹⁶ This customer class is essential to the functioning of Act 129.

Within this large customer class, individual companies may wish to totally revamp the program. But reason dictates that sound policy, benefiting the wide array of Pennsylvania's electric customers, should not be altered at the appeal of a select few, even if those few are among the state's larger electricity customers. These customers would continue to benefit from the wholesale price suppression effects, which is unfair to the 6 million customers who support the program. Though "self-direct" alternative programs for the most energy-intensive industries come with some benefits, they also have some disadvantages related to persistence of savings and free ridership. At the very least, a self-direct alternative would require rigorous measurement and verification.

7. The PUC has professionally and responsibly managed these utility programs. The PA Public Utility Commission staff and Commissioners should be commended for establishing sound processes to manage the Act 129 programs. All participants, including utilities, energy efficiency contractors and large energy users, are engaged in planned stakeholder workshops and rule-making to adjust and improve program design and results.

Conclusion: PA's decision to extend Act 129 energy efficiency programs will be positive for PA's economy and for all ratepayers

There is ample evidence that Act 129 programs are helping large energy users improve competitiveness in the marketplace. For example, one KEEA member recently worked with a manufacturer in Northeast Pennsylvania through PPL's Act 129 Large C&I Prescriptive program. This Pennsylvania business is a worldwide leader in manufacturing retail store display products.

¹⁶ Act 129 Statewide Evaluator, *Commercial & Industrial End Use & Saturation Study*, April 18, 2012 (4).

The company manages a plant with over 450,000 square feet and sought to dramatically reduce utility bills and improve the quality of light throughout the plant. As the result of an energy audit that identified the need for capital improvements, and the actual energy efficiency upgrade work, the company now saves \$81,794 on its annual utility bills and sheds 62kW of peak load. These savings help the company hire new employees, re-invest the savings in R&D, and compete globally. The KEEA member that performed the work started from the ground up in Pennsylvania, opening its doors here with just six employees and quickly growing to its current staff of over 30 workers.

Another KEEA company helped Pennsylvania's large commercial and industrial businesses realize significant energy savings through more than 3,500 energy efficiency projects, making these companies more profitable while also permanently reducing state-wide energy demand.

As utilities are currently designing programs to comply with their Phase 3 targets, some tweaks to program design may be appropriate to ensure that these programs work best meet customer needs. But programs in both Phase 1 and Phase 2 have been consistently shown by the PUC statewide independent evaluators to benefit all customer classes. Overall, Pennsylvania's economy has benefited with nearly \$2 billion in savings as a result of utility energy efficiency programs initiated from Act 129. According to the state's independent evaluators, Act 129 programs continue to generate a positive rate of return for each \$1 invested. Research has predicted savings could reach even \$8 for every \$1 invested in Pennsylvania.¹⁷ Twenty-five states across the United States have now initiated programs, many following in Pennsylvania's footsteps.¹⁸ The PUC has set a clear path forward for Pennsylvania to initiate a third phase of Act 129 and realize additional savings and economic growth.

Beyond the state's largest energy users, Act 129 programs have benefitted business and residential customers as well. After operating for less than four years in Pennsylvania, one KEEA member company alone helped PA customers save nearly \$45 million on their electric bills. As a result, the company grew, workers have good-paying local jobs, and thousands of Pennsylvania families have lower energy bills and more money in their pockets.

¹⁷ Governor Corbett, *Pa State Energy Plan*, January 2014 (33).

¹⁸ ACEEE, "State Energy Efficiency Resource Standards," April 2015. Available: <http://aceee.org/sites/default/files/eers-04072015.pdf>

The list goes on. And while each company is unique, the theme is the same. Smart advanced energy policies are attracting business to our state and reducing energy costs – a win-win for businesses and residents alike.

The success stories are many, but the message is the same. These programs are working for ratepayers and the economy, and we must continue to build upon this momentum.

KEEA supports the extension of these programs to achieve all cost-effective energy efficiency in Pennsylvania. KEEA supports the PUC's statutory authority to make program design changes and involve stakeholders in the process. In addition, KEEA supports the extension of utility energy efficiency programs to natural gas utilities. Early indications suggest that the economics of gas conservation benefit consumers in Pennsylvania. Finally, Act 129 should remain intact and is best left to the Public Utility Commission to handle program maintenance and modification to meet the changing needs of PA consumers. As utilities develop their plans as we speak, it is also important for stakeholders to suggest plan design that will maximize the energy efficiency benefits of each utility's programs.

Respectfully submitted,

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