

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

En Banc Hearing on Alternative :
Ratemaking Methodologies : **Docket No. M-2015-2518883**
:

COMMENTS OF THE KEYSTONE ENERGY
EFFICIENCY ALLIANCE, CLEAN AIR COUNCIL,
AND NATURAL RESOURCES DEFENSE COUNCIL

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I. INTRODUCTION

The Keystone Energy Efficiency Alliance (“KEEA”) along with the Clean Air Council (“CAC”) and Natural Resources Defense Council (“NRDC”) are pleased to submitted these Comments to the Public Utility Commission (“PUC”) in response to its docket on Alternative Ratemaking Methodologies. KEEA has already submitted written testimony in this Docket and presented oral testimony during the March 3 *en banc* hearing held by the PUC. KEEA’s Comments address the issues identified by the Commission in its secretarial letter, and at the *en banc* hearing.

II. DISCUSSION

KEEA strongly supports the adoption of revenue decoupling complimented by performance incentive mechanisms (“PIMs”) in order to better align utility financial interests with more robust investments in Energy Efficiency & Conservation Programs (“EE&C”) and other advanced demand-side resources such as advanced metering (“AMI”) and distributed generation (“DG”). Such a mechanism would address the issue of revenue erosion currently facing every Pennsylvania utility and provide new sources of revenues for utilities that invest in resources that benefit all ratepayers, suppress prices, avoid costly T&D upgrades, prepare for the utility of the future, and ensure that the Commonwealth reaches more of its cost-effective advanced energy efficiency potential. Revenue decoupling and PIMs have been used by a wide range of states to great success. KEEA believes that success can be replicated in the Commonwealth, and is happy to provide the Commission with new and additional information as it evaluates alternative ratemaking methodologies.

1. Revenue Decoupling Complimented by Performance Incentive Mechanisms Will Better Align Utility Incentives with the Implementation of Energy Efficiency and Conservation Programs

Those states with the most robust investment in advanced energy resources employ three tools: (1) energy efficiency and resource standards; (2) some form of revenue decoupling; and (3) PIMs. Unfortunately, Pennsylvania currently employs only one of these tools; our Act 129 EE&C programs. While Act 129 has been successful, its incremental targets are decreasing, and it provides little incentive for utilities to exceed its performance targets, which serve more as

ceilings to investment, rather than floors. As a result, Pennsylvania is leaving a significant amount of cost-effective EE&C potential on the table, to the detriment of the Commonwealth's ratepayers and growing advanced energy and energy efficiency industry. The adoption of revenue decoupling and PIMs would go a long way to better incentivize EE&C programs and other advanced energy resources by removing the throughput incentive that dissuades utilities from investing in low-cost demand-side resources while providing new sources of revenues for investments in advanced energy resources.

The most recent State Wide Evaluator (SWE) Report found that Phase II EE&C programs resulted in cumulative annual energy savings of 2 million MWh a year, for a cumulative benefit of nearly \$1.2 billion, with a benefit/cost (b/c) ratio of more than 1.6 to 1 for every dollar invested in energy efficiency.¹ Further, these goals were achieved at a lower than expected resource acquisition cost, and total program spending.² KEEA is proud of these numbers, and believes that this success indicates the place of energy efficiency and other advanced energy resources as the lowest-cost option to meet Pennsylvania's energy needs. However, the 1.6 b/c ratio indicates that there is much more cost-effective energy efficiency savings to be had, but is not pursued because utilities do not have adequate incentive to do so. Further, PY6 spending was \$216.8 Million, or 9% lower than the \$240 million budget.³ This is in addition to total Phase I spending, which had a total budget cap of \$978 million, but only saw spending up to \$803 million.⁴ While some would posit that meeting Act 129 targets at lower than expected costs makes the program a success, it also means that potential benefits were left on the table. For example, at a b/c of 1.6, the lack of investment to the 2% budget cap deprived ratepayers of \$388 million in benefits. This outcome indicates that Act 129 savings targets are treated as ceilings to investments, not floors, and that energy-efficiency is treated as a program cost, not the least-cost energy resource that it is. The lack of incentive to make cost-effective investments in advanced energy resources is reflected in Pennsylvania's national rankings.

¹ ACT 129 SWE PHASE II PROGRAM YEAR 6 FINAL REPORT, at 9 (Feb. 28 2016).

² *Id.* at 13-14.

³ *Id.* at 9.

⁴ ACT 129 SWE PHASE I FINAL ANNUAL REPORT, at xx (Mar. 4 2014).

Compared with all 50 states, Pennsylvania ranks 28th overall for utility funded programs.⁵ Further, the Commonwealth ranks 24th in total program spending as a percentage of statewide EDC revenue, 26th in net incremental savings, and when compared to other states with long term EE&C goals, Pennsylvania ranks 19th out of 24 states.⁶ Thus, even though Pennsylvania ranks 5th in total program spending, this is a reflection of the amount of electricity produced and consumed in the Commonwealth, rather than an affirmation that Pennsylvania's advance energy investments are realizing their full potential.

PA utilities have an incentive to increase sales between rate cases to increase earnings, and invest in supply-side resources, even though investments in demand-side resources would be more prudent. Revenue decoupling and PIMs remove this barrier to investment, and has had great success in the states with the most robust advanced energy programs.

In its 2015 Energy Efficiency scorecard, ACEEE conducted a survey of state's various efforts to address lost revenues and financial incentives to meet more aggressive EE&C targets. As of the study, 27 states have a PIMs in place for electric utilities, and 17 for gas utilities.⁷ As for decoupling, at least 15 have implemented decoupling for electric utilities, and 22 for gas utilities.⁸ In total, 40 states have at least some form of decoupling or PIM, Pennsylvania is in the group of 10 states who have neither.⁹ Moreover, 8 out of the 10 highest ranked states for energy efficiency performance employ full revenue decoupling.¹⁰ All of the top 5 highest ranked states, Massachusetts, Rhode Island, Vermont, Connecticut, and California have full revenue decoupling, with Massachusetts, and Rhode Island tied for first. Further, 8 out of the top 10 states have PIMs, including the top 5 states. Taken together, the data reveals a pattern; all of those states with the most robust advance energy performance do so through the use of EE&C programs, revenue decoupling, and PIMs.

⁵ ACEEE, THE 2015 STATE ENERGY EFFICIENCY SCORECARD, at 21 (Oct. 2015).

⁶ *Id.*

⁷ *See Id.*

⁸ *Id.*

⁹ *Id.* at 43.

¹⁰ *Id.*

Thus, despite the mandates contained in Act 129, there is a fundamental disconnect between utility incentives and the growing importance of energy efficiency and advanced energy resources. While Act 129 has been successful, it is clear that utilities have no incentive to go beyond their mandated saving requirement, leaving significant cost-effective EE measures on the table. This is largely due to the throughput incentive, which compels utilities to increase energy sales. The use of full revenue decoupling would remove these barriers and make utilities neutral with respect to investments, while PIMs would provide additional incentives for utilities to voluntarily exceed targets.

2. There are no Significant Statutory or Regulatory Barriers Associated with Alternative Ratemaking Mechanisms in Pennsylvania

The Commission can likely implement some form of full revenue decoupling mechanism and PIMs using its existing statutory authority. There are a number of statutory sources that give the Commission broad discretion to design innovative rates, including performance-based rates in lieu of standard ratemaking. Moreover, there is no explicit statutory prohibition on delinking utility revenues from utility sales. While Act 129's cost recovery provision does place limitations on retroactive recovery of EDC lost revenues, the prohibition is both unambiguous and narrow, and does not prohibit full revenue decoupling and PIMs. Thus, the Commission can implement such a rate design using its existing authority.

There are a number of sources of statutory authority that indicate that Commission has broad discretion to implement revenue decoupling and performance incentive mechanisms. First, Section 66 Pa. C.S. § 2806 (i) provides the commission with the authority to “use performance-based rates as an alternative to existing rate base/rate of return ratemaking. . . .” Moreover, 66 Pa. C.S. § 523 provides for consideration for actions or failure to act to encourage the development of cost effective conservation and load management program when determining just and reasonable rates. Further, 66 Pa. C.S. § 1319 (b) allows for the recovery of conservation and load management programs though “charges” so long as they are “prudent and cost effective.” Read together, it appears the General Assembly intended for the Commission to have broad discretion to to adopt innovative rate designs.

In addition to those provisions that relate to conservation and load management, there are no provisions in 66 Pa. C.S. § 1308, or anywhere else, that appears to preclude the Commission from adopting rate designs that remove the link between a utility’s allowed revenues and earnings and its customers energy consumption levels. Indeed, the Commission, utilities, and stakeholders have explored revenue decoupling before. First, in 2007 the DSR Working Group explored revenue decoupling and found that: “There was consensus that decoupling in and of itself is not expressly contrary to the provisions of the Public Utility Code”¹¹ Moreover, decoupling and other alternative rate design mechanisms were explored during the PUC’s American Recovery and Reinvestment Act Investigation, Working Group Final Report. While lost revenue recovery under Act 129 was an area of disagreement, the report did support the use of annual adjustment mechanisms to “true up” rates between rate cases to reflect changes in utility revenues and utility costs, with a cap on the amount of the increase.¹² Such an adjustment mechanism nearly identical to modified forms of full revenue decoupling already employed by other states. Further, the working group in that instance found that “the Commission could arguably instate this mechanism using existing statutory authority.”¹³ Finally, it is important to note that such a rate design was contemplated after Act 129 was enacted. Thus, the only potential barrier to revenue decoupling and performance incentive mechanisms are the cost recovery provisions of Act 129 that apply only to EDCs, not NGDCs.

Based on a plain language reading of 2806.1(k), and PUC’s interpretation of the statute, Act 129 does not appear to prohibit full revenue decoupling. Act 129 allows EDCs to recover “all reasonable and prudent costs” associated with the management of its EE&C Plan. 66 Pa. C.S. § 2806.1(k)(1). Further, EDCs can recover these costs through a reconcilable adjustment clause under 66 Pa. C.S. § 1307. Id. However, 2806.1(k)(2) precludes the recovery of “decreased revenues of an [EDC] due to reduced energy consumption or changes in energy demand.” The PUC has articulated that, “with respect to the recovery of revenues lost due to reduced energy consumption or changes in demand, we note that the Act clearly states that such revenue losses

¹¹ See REPORT ON CONSERVATION, ENERGY EFFICIENCY, DEMAND SIDE RESPONSE AND ADVANCED METERING INFRASTRUCTURE, Docket No. M-00061984, at 29 (June 6 2007).

¹² See PENNSYLVANIA PUBLIC UTILITY COMMISSION AMERICAN RECOVERY AND REINVESTMENT ACT INVESTIGATION, WORKING GROUP FINAL REPORT Docket No. I-2009-2099881, at 62. (Jan 24 2011) (citing 66 PA.C.S. § 501; 1308(d); 2806(i)).

¹³ *Id.*

shall not be a recoverable cost under a reconcilable automatic adjustment clause. 66 Pa. C.S. § 2806.1(k)(2).”¹⁴ Taken together, 2806.1(k) is unambiguous and narrow; lost revenues attributable to an Act 129 mandated EE&C program cannot be recovered through a specific 1307 automatic adjustment mechanism. However, what the prohibition describes are lost margin recovery mechanisms for mandated Act 129 EE&C programs, not full revenue decoupling, which are two distinct, but often conflated, alternative ratemaking mechanisms.

A lost margin recovery mechanism would allow a utility to recover its lost revenues specifically caused by Act 129 EE&C program between rate cases through an automatic adjustment clause. Such a mechanism is exactly the type of mechanism prohibited by 2806.1(k), however, this is not the type of mechanism that KEEA is proposing. Instead, KEEA is advocating for full revenue decoupling, which differs from lost margin recovery mechanisms in several significant ways.

First, full revenue decoupling is not a mechanism that reimburses utilities for specific Act 129 EE&C costs through a 1307 automatic adjustment clause, it is a mechanism that “trues up” revenues to reflect deviations in sales, no matter the cause. Second, the mechanism is bidirectional, in that it provides both refunds and surcharges, while lost margin recovery mechanisms only recover costs. Third, a full revenue decoupling mechanism does not measure, or even contemplate, the impact that Act 129 EE&C programs have on utility revenues. Thus a full revenue decoupling mechanism is more akin to annual adjustment mechanism contemplated by the Commission in the ARRA working group, which would use 2806(i) and 1308(d) for its implementation, not 1307. Further, if such a mechanism were implemented under 1307, it is not the kind of mechanism prohibited by 2806(k) because it is not a cost recovery surcharge for utilities to recover specific Act 129 EE&C costs. Therefore, the Commission likely has the discretion to determine whether to implement full revenue decoupling.

¹⁴ Public Utility Commission, Energy Efficiency and Conservation Program Docket No. M-2008-2069887, at 36 (Jan. 15 2009).

3. **A Fully Forecasted Future Test Year does not Serve the Same Function as Full Revenue Decoupling**

The use of a fully forecasted future test year does not remove barriers or create a positive incentive for a utility to more aggressively pursue EE&C and other advanced energy resources. Under Pa C.S. 315(e), Pennsylvania is permitted to use a fully forecasted future test year to reflect prospective lost revenues in a base case. Ideally, this will allow base rates to be set in order to reflect future reductions in revenues caused by EE&C programs. Thus, the future test year may cause a utility's revenue requirement to more accurately track sales changes over time.

The future test year, however, does not address the primary reason for full revenue decoupling: the throughput incentive. As previously stated, the primary goal of revenue decoupling is to make utilities revenue neutral with regard to investments in advanced energy resources. A future test year does not address the throughput incentive, nor does it address the issue of under- or over-collection of utility revenues between rate cases. Therefore, the use of a future test year does not reduce the need for full revenue decoupling.

4. **The Benefits of Alternative Ratemaking Mechanism that Increase Investments in Energy Efficiency will outweigh the Costs**

To the extent that revenue decoupling and PIMs increase investments in cost-effective advanced energy resources, the benefits outweigh the costs. As explained above, revenue decoupling and PIMs have been successfully used in other states to increase cost-effective energy efficiency investments. Semi-annual SWE reports have demonstrated both costs and benefits of increased investments in energy efficiency and other advanced energy resources.

Spending on energy efficiency is an investment, not a cost. During the *en banc* hearing, it was stated that Pennsylvania ratepayers already bear the costs of \$240 million a year in Act 129 EE&C program spending. However, this assertion often overlooks the benefits of such spending, which result in \$1.60 saved for every \$1.00 spent, and accrues to all ratepayers in the form of reduced costs. In the aggregate, the benefits of Pennsylvania's Energy Efficiency investments have been staggering. Over the life of Act 129, the program has resulted upwards of \$4 billion of avoided costs; costs that would otherwise be borne by all ratepayers. This is because, on

average, the cost savings from electric ratepayer-funded efficiency programs is only one-half to one-third the average cost of electricity from new power plants.¹⁵ This is of particular importance given the accelerated investments in T&D resources and the changing generation mix of the Commonwealth.

Increased investments in energy efficiency all provide numerous economic benefits in the form of technological innovation, job creation, reduced T&D investments, reduced exposure to fuel price volatility, price suppression effects, and reductions in environmental compliance costs. Of particular note are the price suppression effects of energy efficiency programs. In regions with competitive wholesale markets, reductions in demand lowers the market-clearing prices for electric energy and capacity. Generally, for every 1% reduction in demand, there is a 1-3% reduction in the wholesale clearing price.¹⁶ Therefore, the price suppression effects of energy efficiency investments benefit every ratepayer connected to the grid, not just those who participate in programs. Further, states that have invested in energy efficiency as an alternative energy resources have avoided hundreds of millions of dollars in capital expenditures by deferring T&D upgrades.

5. There are a Number of Best Practices from Other Jurisdictions that Can be Successfully Applied to Pennsylvania

Revenue decoupling and PIMs are no longer a novel or untested rate mechanism. Instead, it is tool adopted by a large number of states to aggressively pursue EE&C programs. In fact, upon review of those states with successful EE&C programs, it is clear that those states with the most robust cost-effective EE&C programs have already adopted such measures. There exists significant data on alternative ratemaking mechanisms and outcomes from other states that Pennsylvania can look to for guidance as it moves forward.

Massachusetts adopted full revenue decoupling in 2008, with implementation in 2012. There, target revenues are determined on a utility-wide basis, and can be adjusted for inflation or

¹⁵ See, C. Neme and J Grevatt, THE NEXT QUANTUM LEAP IN EFFICIENCY: 30 PERCENT ELECTRIC SAVINGS IN TEN YEARS, REGULATORY ASSISTANCE PROJECT, at 3 (Feb. 2016).

¹⁶ *Id.* at 3 n.4.

capital spending requirements if necessary.¹⁷ Further, each year the authorized revenue requirement is adjusted to account for capital expenditures in the previous year, however, that number is limited to avoid overinvestment between rate cases. Moreover, rates are adjusted annually, subject to a three percent cap, with any excess carried forward. KEEA supports a model similar to the one adopted in Massachusetts, but would like to reiterate that decoupling is sufficiently flexible to support the specific needs of Pennsylvania.

While it is well settled that Massachusetts is a leader in Energy Efficiency, it is also important to determine what, if any impact, such an aggressive decoupling mechanism has had on consumer prices, low-income users, and other areas of concerns raised by stakeholders. KEEA understands that each state has its own characteristics that will affect bill impacts of customers differently. Therefore, KEEA would recommend that the Commission explore carrying out a bill impact study to determine the effect that revenue decoupling would have on customer bills.

6. Straight Fixed Variable Rate Design and Lost Margin Recovery do not Provide the Same Advantages as Full Revenue Decoupling and Performance Incentive Mechanisms

As discussed in KEEA's written and oral testimony, straight fixed variable rate design and lost margin recovery mechanisms are less effective than revenue decoupling and PIMs, and may even be worse than the status quo. However, KEEA believes that it is important to highlight that, as advanced energy resources become more widespread, and energy sales continue to decline, there will be the need to address utility revenue erosion in one form or another. KEEA believes that there is ample evidence, presented in our testimony and comments in this proceeding, and by others, that demonstrates revenue decoupling PIMs are the best method by which to address revenue erosion and provide better incentives for utilities.

¹⁷ See J. Midgen-Ostrander *et. al.*, DECOUPLING CASE STUDIES: REVENUE REGULATION IMPLEMENTATION IN SIX STATES, REGULATORY ASSISTANCE PROJECT, at 18 (2014).

7. Revenue Decoupling and Performance Incentive Mechanisms, if Properly Designed, can Mitigate any Potential Intra-Class Cost Shifting and Provide Additional Benefits to Low-Income Customers

A concern previously raised by KEEA, as well as many other stakeholders has been the risk of intra-class cost shifts that may occur between those customers who can afford to participate in energy efficiency programs and those who cannot. Simply, there is the worry that if energy consumption decreases between rate-cases and rates are adjusted up, low and moderate income customers be disproportionately affected. While KEEA does not necessarily agree that unreasonable intra-class cost shifts are inevitable under revenue decoupling, particular given the system-wide benefits of energy efficiency investments, KEEA supports robust PIMs targeted at historically underserved households to mitigate any risk that may exist.

Revenue decoupling removes disincentives to utility investment in advanced energy resources, it does not, however, provide an incentive for utilities to increase their investment. PIMs can meet this need by setting innovative performance targets for low-income programs beyond what is already required under existing programs. Such a PIM can take many forms: it can reward utilities for increasing the enrollment of low-and moderate-income customers who qualify for assistance programs but do not participate, and it can provide financial incentives for increasing low-income and multi-family affordable efficiency through new programs. While there are many permutations that PIMs can take, KEEA believes that by engaging low-income and consumer advocates to identify areas of need, PIMs can provide a flexible and lost-cost way to ensure the benefits of advanced energy resources accrue to low-income customers.

III. CONCLUSION

In conclusion, KEEA believes that the current regulatory structure is ill-suited to responded to the changes in the energy utility industry, which is evidenced by the increasing frequency of rate cases and requests for more fixed-charges. To respond to this challenge, KEEA believes that revenue decoupling and PIM's represent the best pathway forward for the Commonwealth. If all stakeholders are included, and the mechanism is carefully designed, revenue decoupling can better align utility incentives with investments in advanced energy resources while meeting the needs to all customers, including low- and moderate-income

customers. KEEA would like to thank the Commission for initiating this *en banc* proceeding, and is looking forward to further engage the Commission and all stakeholders to create a rate-design that is better suited for the 21st century.