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**Via Electronic Filing**

Rosemary Chiavetta, Secretary  
PA Public Utility Commission  
Commonwealth Keystone Bldg.  
400 North Street  
Harrisburg PA

**RE: Reply Comments of the Keystone Energy Efficiency Alliance on Alternative  
Ratemaking Methodologies Docket No. M-2015-2518883**

Dear Secretary Chiavetta:

Please find attached the Reply Comments of the Keystone Energy Efficiency Alliance (KEEA)  
for the above referenced proceeding.

Respectfully Submitted,

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Policy Counsel  
Keystone Energy Efficiency Alliance  
Pa Bar I.D. No. 321519

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Alternative Ratemaking  
Methodologies**

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**Docket No. M-2015-2518883**

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**REPLY COMMENTS OF THE  
KEYSTONE ENERGY  
EFFICIENCY ALLIANCE**

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Dated: July 31, 2017

## **I. INTRODUCTION**

The Keystone Energy Efficiency Alliance (KEEA) thanks the Public Utility Commission (PUC) for the opportunity to submit reply comments on the important topic of alternative ratemaking and rate design. These reply comments build upon KEEA's initial comments submitted May 31, 2017, as well as respond directly to comments made by various stakeholders. KEEA and its sister organization the KEEA Energy Education Fund (KEEF) are committed to advancing energy efficiency and other clean energy technologies in the Commonwealth of Pennsylvania. With more than fifty business, organizational, and non-profit members operating throughout the Commonwealth, KEEA is growing the market for energy efficiency and helping Pennsylvania secure a prosperous, sustainable future.

## **II. COMMENTS**

In its comments submitted to the PUC on May 31, 2017, KEEA advocated for a broad suite of alternative ratemaking and rate design policies that included revenue decoupling, performance incentives, time-of-use (TOU) rates, and updated standby rate procedures. KEEA proposed these policies based on the principles of promoting energy efficiency and conservation, rate simplicity, and utility revenue stability. If well-designed, these policies would prepare the Commonwealth to be a leader in innovative policy solutions, while lowering costs for customers and increasing revenue stability for electric distribution companies (EDCs) in a changing utility environment.

KEEA is encouraged by several stakeholders' broad support for many ratemaking and rate design methodologies, particularly revenue decoupling, performance incentives, and TOU rates. Additionally, KEEA supports the sentiment of many commenters that the PUC should refrain from prescribing a "one-size-fits-all" approach, and instead allow for a flexible approach

to ratemaking and rate design. Different utilities have different characteristics that may make certain policies inappropriate for their service territory. However, KEEA believes that there are some policies proposed in this docket that should not be pursued by any utility in the Commonwealth; namely Lost Revenue Adjustment Mechanisms (LRAMs), residential demand charges, increased fixed charges, and straight-fixed/variable (SFV) rate design. KEEA urges the PUC to reject these policies.

#### **A. Ratemaking**

KEEA is encouraged by the increased stakeholder support for innovative ratemaking policies such as revenue decoupling, performance incentive mechanisms, and multi-year rate plans. In addition to broad support for these policies by stakeholders, many utility commenters expressed their desire to pursue some, or even all, of these ratemaking methodologies. If implemented, these policies could have a transformative effect on Pennsylvania's utility industry by stabilizing utility revenues while paving the way for the greater proliferation of advanced energy measures that will empower customers to decrease their energy costs and usage. Moreover, these policies provide sufficient flexibility for each EDC to meet the specific needs of their service territory.

##### **i. Revenue Decoupling**

KEEA supports revenue decoupling as a method by which to remove any disincentive that may exist for utilities to pursue demand-side reduction to its full cost-effective potential. In an environment of declining or flat electricity sales, revenue decoupling serves the important purpose of stabilizing utility revenue, while simultaneously keeping rates volumetric for ratepayers. Several commenters offered support for revenue decoupling, including two EDCs; PPL and PECO. This marks a shift in overall policy positions over the last year. While there are

still some stakeholders who are skeptical of the efficacy of decoupling, the benefits of full revenue decoupling outweigh the potential risks, and can be mitigated by strong consumer protections that accompany revenue decoupling.

KEEA supports both PPL's and PECO's proposed revenue decoupling mechanisms. PPL stated that it reached its conclusion that full revenue decoupling would be appropriate based on the belief that in the face of new technological and economic developments, EDCs would continue to face challenges.<sup>1</sup> Importantly, PPL mentioned that it believes revenue decoupling may allow the utility to retain the usage component in its bills.<sup>2</sup> Additionally, PECO proposes a revenue per customer decoupling model for all customer classes, excluding very large customers.<sup>3</sup> Unlike a large customer opt-out provision to Pennsylvania's Act 129 program, KEEA does not believe that excluding very large customers would negatively impact overall decoupling efforts.

As it presented in its *en banc* testimony, KEEA recommends that any decoupling mechanism be accompanied by certain consumer protections to minimize any potential negative impacts of revenue decoupling identified by several stakeholders. Specifically, KEEA has proposed that decoupling mechanisms be accompanied by a fully-litigated rate case every three to five years as well as placing an asymmetrical cap on revenue adjustments for each period, with a 3% cap on upward rate adjustments, and no cap on downward rate adjustments. KEEA's recommendation for periodic rate-cases is similar to PPL's proposal for a multi-year rate plan. Additionally, KEEA recommends that if revenue decoupling moves forward, EDCs and the

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<sup>1</sup> See Comments of PPL Electric Utilities Corp., 4-8.

<sup>2</sup> *Id.*

<sup>3</sup> Comments of PECO, 13-14.

Commission examine the proposed consumer protections offered by the Office of Consumer Advocate (OCA) in designing a revenue decoupling mechanism.

ii. Performance Incentives

KEEA supports Performance Incentive Mechanisms (PIMs) as one of the most useful tools the Commission has at its disposal to incentivize utilities to meet and exceed public policy goals, specifically increasing the deployment of energy efficiency measures. Therefore, KEEA is pleased to see its inclusion in several stakeholder comments. PIMs can be used for a multitude of desired policy goals, such as energy efficiency, advanced metering, peak load reduction, and reliability, among others. By rewarding utilities for performance, not investment, the Commonwealth could better meet its public policy goals and adapt to the changes underway in the regulated utility industry.

EDCs in support of performance incentives propose reliability and customer satisfaction as metrics. KEEA does not oppose these metrics, but urges the PUC to explore a broad array of potential performance incentives, including one for exceeding energy efficiency targets. As previously stated by KEEA, the Statewide Evaluator's (SWE's) Final Phase II Report observed that, across Phase I and II, Pennsylvania EDC's left up to 20% of budgeted funds on the table.<sup>4</sup> This data contrasts with the comments of some stakeholders that alternative ratemaking would not encourage additional efficiency gains, and that Act 129 is working to its fullest potential.<sup>5</sup>

Of the different types of PIMs, KEEA supports a multi-factor incentive based on performance, and urges the Commission to explore the incentives currently in place in states like Rhode Island and Massachusetts. Many potential performance incentives for Pennsylvania are

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<sup>4</sup> Act 129 Statewide Evaluator Phase II Final Report, at 109 (Feb 28 2017), *available at*: [http://www.puc.pa.gov/Electric/pdf/Act129/Act129-SWE\\_PhaseII\\_FinalAR.pdf](http://www.puc.pa.gov/Electric/pdf/Act129/Act129-SWE_PhaseII_FinalAR.pdf).

<sup>5</sup> Comments of OCA, at 15; Comments of OSBA, 3-4.

discussed in an in-depth report published by the Advanced Energy Economy Institute (AEEI) titled Performance-Based Regulation for Pennsylvania.<sup>6</sup>

With regard to the PUC's ability to implement alternative ratemaking methodologies under existing law, KEEA strongly disagrees with the position of some stakeholders that previous litigation or Commission decisions around lost revenue adjustment mechanisms preclude *all* alternative ratemaking methodologies.<sup>7</sup> As detailed by KEEA in its May 31 comments, as well as the memorandum of Professor James M. Van Nostrand submitted by NRDC, the PUC has many differently statutory grants of authority by which to implement alternative ratemaking methodologies.<sup>8</sup> Importantly, these statutory sources of authority differ depending on the type of policy being pursued. For example, the implementation of TOU rates is mandated by Act 129, and was recently litigated in *Dauphin County Industrial Development Authority v. Pa PUC (DCIDA)*, 123 A.3d, 1136 (2015). Thus, KEEA believes there is sufficient legal authority for the PUC to act on many of these proposals without additional legislation.

## **B. Rate Design**

Many forms of rate design were discussed in the initial comments to this docket, including straight-fixed/variable rate design, increased fixed charges, demand charges, and time-of-use rates. KEEA maintains that rate design is an important tool to send customers accurate price signals while allowing for utility cost recovery. However, KEEA urges the PUC to consider other policy objectives that can be achieved through rate design such as increased energy and economic efficiency, as well as equity and fairness for customers. KEEA believes

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<sup>6</sup> AEEI, PERFORMANCE-BASED REGULATION FOR PENNSYLVANIA: AN OPPORTUNITY FOR PENNSYLVANIA TO DRIVE INNOVATION IN THE UTILITY SECTOR (Mar. 27 2017), available at: <http://info.aee.net/hubfs/PDF/PBR-in-PA.pdf?t=1496186156245>

<sup>7</sup> Comments of OCA, at 3.

<sup>8</sup> See Comments of NRDC, at 2.

that this is best accomplished through TOU rates. Therefore, KEEA is concerned by multiple proposals by some stakeholders to pursue SFV rate design.

i. Straight-Fixed/Variable Rate Design

KEEA opposes any shift towards increased fixed charges or straight-fixed/variable (SFV) rate design. Over the past two years of activity on this docket, the large majority of stakeholders have opposed any move toward SFV. Indeed, it was increasing fixed charges that led many commenters, including KEEA, to get involved in alternative ratemaking in the first place.<sup>9</sup> Specifically, KEEA opposes SFV because it: (1) Weakens the price signal to customers, reducing the incentive to become more efficient; (2) improperly allocates costs within rate classes, adversely impacting low-usage customers, and; (3) harms low-income ratepayers. Simply stated, it is an unsophisticated solution to meet the challenges of an increasingly sophisticated grid.

SFV would weaken the price signal to customers to become more efficient. To the extent that SFV reduces customers' volumetric charge, it hampers their ability to control their bills and increases payback periods for efficiency measures. The FirstEnergy utilities propose this exact structure.<sup>10</sup> Some stakeholders stated that increased fixed charges would have little impact on customer efficiency measures. The FirstEnergy utilities stated that SFV would create only "slightly less incentive to participate in EE&C programs. . . ." <sup>11</sup> Further, Duquesne Light stated SFV would "not diminish the value or opportunity for efficiency gains."<sup>12</sup> This position is not supported by recent studies of fixed charges. For example, a recent ACEEE report examined

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<sup>9</sup> KEEA first proposed revenue decoupling in 2015 as an alternative for two EDC's requests for increased fixed-charges as part of their base-rate case.

<sup>10</sup> Comments of Met Ed *et. al.*, at 9.

<sup>11</sup> *Id.*, at 10.

<sup>12</sup> Comments of Duquesne Light Company, at 13.

several different rate designs with varying degrees of fixed charges ranging from \$10, \$25, and \$50. The report found that moving from a \$5 to \$25 monthly customer charge produced payback periods that were 31% longer, and more than doubled when moving from \$5 to \$50.<sup>13</sup> This strongly contrasts with the positions of the FirstEnergy utilities and Duquesne Light. Therefore, even if SFV did insulate utilities from declining revenue due to energy efficiency efforts, it would provide a serious disincentive for all types of customers to become more efficient. High-usage customers would see bill decreases under SFV, decreasing the incentive to use less energy, while low-usage customers would have a large portion of their bills consist of unavoidable fixed charges. This occurs because SFV does not follow a reasonable concept of cost-causation.

In addition to increasing payback periods for efficiency measures, SFV would improperly allocate cost to users who a less than average amount of electricity. As stated by FirstEnergy, under SFV, “Those who use the least amount [of electricity] will see the largest effect on their bills, and will also be picking up a higher percentage of costs allocated to the class.”<sup>14</sup> Contrary to the position of FirstEnergy, such intraclass cost-shifting is not consistent with cost causation principles. Across geographic areas and building types, the fixed costs to serve a customer differ significantly. As noted by ACEEE, “this method of cost recovery through fixed customer charges will substantially over collect costs from some users, and under collect costs from others.”<sup>15</sup> Indeed, using the same high fixed-charge for a low-usage apartment and a high-usage single family home does not adhere to the principles of cost-causation. The improper

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<sup>13</sup> Brendon Baatz, *Rate Design Matters: The Intersection of Residential Rate Design and Energy Efficiency*, AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY, at 25 (Mar. 2017), available at: <http://aceee.org/research-report/u1703>.

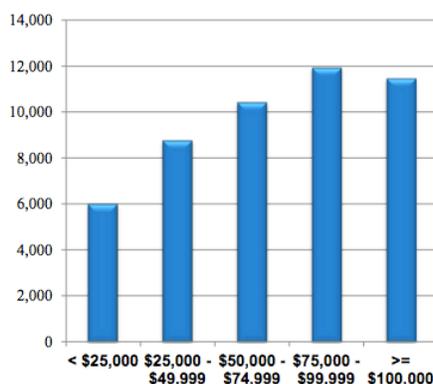
<sup>14</sup> Comments of Met Ed *et. al.*, at 6.

<sup>15</sup> Comments of ACEEE, at 4.

apportionment of costs is particularly troubling regarding Commonwealth’s low-income customers.

SFV rate design would negatively impact low-income customers, who on average, tend to be low-usage customers. In Pennsylvania, the average low-income customer uses less electricity than the average customer. The most recent the U.S. Energy Information Administration’s Residential Energy Consumption Survey demonstrates that PA households with incomes below \$25,000 used 1/3 the electricity of households with incomes between \$75,000-\$99,999.<sup>16</sup>

**Median 2009 Residential Electricity Usage (KWH), by Income**



Therefore, not only would SFV result in intraclass cost shifting from high-usage to low-usage customers, it would result in cost shifting from high-income to low-income customers. Despite this data, Duquesne Light and FirstEnergy stated that such concerns are “speculative at best”<sup>17</sup> and that SFV would “have very little, if any, impact on low-income customers.”<sup>18</sup> Neither of these conclusions are based on comprehensive data of low-income consumers in Pennsylvania. Duquesne Light reaches its conclusion based on a Texas study that speculates it is difficult to determine whether SFV would impact low-income customers because the authors did

<sup>16</sup> National Consumer Law Center, UTILITY RATE DESIGN: HOW MANDATORY MONTHLY CUSTOMER FEES CAUSE DISPROPORTIONATE HARM, at 1 (2015) *available at*, [http://www.nclc.org/images/pdf/energy\\_utility\\_telecom/rate\\_design/PA-FINAL2.pdf](http://www.nclc.org/images/pdf/energy_utility_telecom/rate_design/PA-FINAL2.pdf)

<sup>17</sup> Comments of Duquesne Light Company, at 12.

<sup>18</sup> Comments of Met Ed *et. al.*, at 10

not know whether they were high or low usage customers. In Pennsylvania, however, low-income customers are low-usage customers. Further, FirstEnergy bases its conclusion on its Customer Assistance Program (CAP) enrollment, whose participants use more electricity than average. However, CAP usage rates are not representative of all low-income ratepayers due to relatively low CAP penetration compared to census data estimates of low-income households. Therefore, it is likely that SFV would have significant negative impacts on low-income ratepayers across Pennsylvania. Based on the foregoing, KEEA urges the Commission to reject any SFV or increased fixed-charge proposal.

#### ii. Time-of-Use Rates

As an alternative to SFV, demand charges, or increased fixed charges, KEEA proposed that the PUC consider expanding the use of time-varying rates, specifically TOU rates. Compared to SFV rates and demand charges, a well-designed TOU rate structure has the potential to better apportion costs among customers, while meeting the policy objectives of peak reduction, increased energy efficiency, and providing ratepayers the opportunity to avoid increased energy costs by modifying their behavior. Moreover, EDC's already have an obligation to offer TOU rates to their customers.

TOU rates allow better customer interaction with the grid by charging a higher price for electricity during on-peak hours when costs are highest for utilities, and lower charges when cost is the lowest. TOU rates better reflect the true cost of supplying electricity to customers than existing flat rate structures. Importantly, compared to SFV and other charges, higher prices under TOU rates are actionable; meaning customers can either shift their usage, or become more efficient to decrease their electricity bills.

Because increased charges under TOU rates are actionable, TOU rates allow customers to become more efficient, which will reduce peak load. It has been observed across numerous jurisdictions that, depending on the peak to off-peak ratio, TOU rates can produce peak load reductions between 5%-10%.<sup>19</sup> Such a peak load reduction would lower energy costs for all consumers, improve system reliability, and avoid costly distribution system upgrades.

Finally, TOU rates have a clear path to implementation. In its comments, Duquesne Light noted that one potential advantage of SFV is that such rates could be implemented immediately.<sup>20</sup> TOU can also be implemented immediately for those customers who have smart meters. The PUC has already taken substantial steps towards empowering EDC's to implement TOU rates. Both the Public Utility Code and recent jurisprudence at the Commonwealth Court require that EDC's offer voluntary TOU rates for all customers that have smart meter technology.<sup>21</sup>

### III. Conclusion

KEEA again thanks the PUC for continuing this important conversation around alternative ratemaking and rate design methodologies in the Commonwealth. Over the past two years, stakeholder expertise has advanced considerably on these issues, and developed a robust record of different alternative ratemaking methodologies. With this information in hand, KEEA respectfully requests the Commission to continue to act on alternative ratemaking and rate design methodologies, and empower both utilities and consumers to adapt to the changing utility environment.

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<sup>19</sup> Herman K. Trabish, *Rate design roundup: demand charges vs. time-based rates*, UTILITY DIVE (Jun. 2 2016), <http://www.utilitydive.com/news/rate-design-demand-charges-time-based-rates/419997/>.

<sup>20</sup> Comments of Duquesne Light Company, at 11.

<sup>21</sup> 66 Pa. C.S. § 2807(f)(5); *see also*, *Dauphin County Industrial Development Authority v. Pa PUC (DCIDA)*, 123 A.3d, 1136 (2015).