October 22, 2018

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

Re: Alternative Ratemaking Methodologies
Docket No. M-2015-2518883

Dear Secretary Chiavetta:

Attached for electronic filing are the Comments of the Office of Consumer Advocate in the above-referenced proceeding.

Copies have been served per the attached Certificate of Service.

Respectfully Submitted,

/s/ Darryl A. Lawrence
Darryl A. Lawrence
Senior Assistant Consumer Advocate
PA Attorney I.D. # 93682
E-Mail: DLawrence@paoca.org

Enclosures:

cc: Kriss Brown, Law Bureau
Marissa Boyle, Bureau of Technical Utility Services
Andrew Herster, Bureau of Technical Utility Services
Certificate of Service
*256037
CERTIFICATE OF SERVICE


I hereby certify that I have this day served a true copy of the following document, the Office of Consumer Advocate’s Comments, upon parties of record in this proceeding in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant), in the manner and upon the persons listed below:

Dated this 22nd day of October 2018.

SERVICE BY E-MAIL & INTER-OFFICE MAIL

Carrie B. Wright, Esquire
Bureau of Investigation & Enforcement
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120

SERVICE BY E-MAIL & FIRST CLASS MAIL, POSTAGE PREPAID

Elizabeth R. Triscari, Esquire
Office of Small Business Advocate
300 North Second Street, Suite 202
Harrisburg, PA 17101

Terrance J. Fitzpatrick, Esquire
Donna M.J. Clark, Esquire
Energy Association of Pennsylvania
800 North Third Street, Suite 205
Harrisburg, PA 17101

Shelby A. Linton-Keddie
Duquesne Light Company
800 North 3rd Street, Suite 203
Harrisburg, PA 17102

(s/) Darryl A. Lawrence
Darryl A. Lawrence
Senior Assistant Consumer Advocate
PA Attorney I.D. # 93682
E-Mail: DLawrence@paoca.org

Christine Maloni Hoover
Senior Assistant Consumer Advocate
PA Attorney I.D. # 50026
E-Mail: CHoover@paoca.org

Michael D. Klein, Esquire
Cozen O’Connor
17 North Second Street, Suite 1410
Harrisburg, PA 17101
(National Association of Water Companies-PA Chapter)

Susan Simms Marsh, Esquire
Pennsylvania-American Water Company
800 West Hersheypark Drive
Hershey, PA 17033

Counsel for the Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Fax: (717) 783-7152
Dated: October 22, 2018
*256033.
BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION


COMMENTS
OF THE
OFFICE OF CONSUMER ADVOCATE

Darryl A. Lawrence
Senior Assistant Consumer Advocate
PA Attorney I.D. # 93682
E-Mail: DLawrence@paoca.org

Christine Maloni Hoover
Senior Assistant Consumer Advocate
PA Attorney I.D. # 50026
E-Mail: CHoover@paoca.org

J.D. Moore
Law Clerk
E-Mail: JMoore@paoca.org

Counsel for:
Tanya J. McCloskey
Acting Consumer Advocate

Counsel for:
the Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Fax: (717) 783-7152
Dated: October 22, 2018
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I. INTRODUCTION

On December 31, 2015, the Pennsylvania Public Utility Commission (Commission) issued a notice of En Banc Hearing on Alternative Ratemaking Methodologies at Docket No. M-2015-2518883 (En Banc Hearing Notice) to be held on March 3, 2016. The Commission also invited all interested parties to submit Comments no later than March 16, 2016. In the En Banc Hearing Notice, the Commission sought testimony and comments primarily in the context of energy efficiency, conservation, and demand response. A number of interested parties, including the Acting Consumer Advocate Tanya J. McCloskey, on behalf of the Office of Consumer Advocate (OCA), testified before the Commission at the March 3, 2016 En Banc Hearing. Additionally, the OCA and more than twenty other interested parties submitted initial Comments.

On March 2, 2017, the Commission issued a Tentative Order, which sought additional input regarding alternative ratemaking methodologies. Specifically, the Commission sought responses to numerous, comprehensive questions related to the reasonableness and efficiency of alternative ratemaking methodologies, as applied across various utility industries. In its March 2, 2017 Tentative Order, the Commission expanded the scope of comments to include alternative ratemaking as applied to water and wastewater utilities.

The OCA submitted Comments to the Commission’s Tentative Order on May 31, 2017. The OCA noted that Pennsylvania utilities currently use a broad array of alternative ratemaking methods, which have been targeted to achieve specific purposes and objectives set forth by the General Assembly, and which seek to balance utility benefits and consumer protections. The OCA submitted that with the current regulatory framework and array of alternative ratemaking
methods already being employed by Pennsylvania utilities, there has been no demonstration that further alternative ratemaking methods are currently needed.

On May 23, 2018, the Commission issued the current Proposed Policy Statement Order and sought comments from all interested stakeholders. The Proposed Policy Statement Order summarizes the stakeholders' and the Commission's current views of various alternative ratemaking mechanisms and alternative rate designs. The Order includes a Proposed Policy Statement designed to provide guidelines for utilities considering alternative ratemaking mechanisms and alternative rate designs. Alongside the Proposed Order, Chairman Gladys M. Brown issued a separate Statement. Statement of Chairman Gladys M. Brown, Fixed Service Utilities Distribution Rates Proposed Policy Statement, Docket No. M-2015-2518883 (May 3, 2018). Chairman Brown encouraged comments on alternative rate designs that can foster distributed energy adoption while also working to increase capacity utilization in the electric industry. In addition, the Motion of Vice Chairman Andrew G. Place emphasized the need for alternative ratemaking mechanisms and alternative rate designs that address five "first-order" principles, such as performance-based incentive rate designs; performance incentive mechanisms; various forms of decoupling; and, various forms of demand-based and Time-Of-Use pricing structures. With regard to the natural gas industry, Vice Chairman Place suggested that various weather normalizations and/or revenue decoupling mechanisms may balance utility and consumer needs.

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2 The Proposed Policy Statement, Order, and Accompanying Statement of Chairman Brown address energy-related issues with alternative ratemaking and alternative rate designs. For this reason, the primary focus of the OCA Comments will be on energy-related issues.
On June 28, 2018, Governor Tom Wolf signed into law Act 58 of 2018, codified at 66 Pa. C.S. § 1330. Act 58 provides the Commission with express statutory authority to approve applications by utilities for alternative ratemaking mechanisms. In response to Act 58, several interested stakeholders filed requests to extend the comment period deadline for the current Proposed Order. The Commission granted the requests for an extension on August 14, 2018, which extended the comment period deadline to October 22, 2018. To address the Commission’s responsibilities under Act 58 in the interim, the Commission entered a Tentative Implementation Order on August 23, 2018. See Implementation of Act 58 of 2018 Alternative Ratemaking for Utilities, Tentative Implementation Order, Docket No. M-2018-3003269 (Issued Aug. 23, 2018). Several interested stakeholders, including the OCA, provided comments to the Commission’s proposed implementation of Act 58 on October 9, 2018.

The OCA appreciates the opportunity to submit Comments on the Commission’s Proposed Policy Statement, alternative ratemaking mechanisms, and the alternative rate designs. Throughout the proceedings within this docket and within the OCA’s Comments to the Commission’s Tentative Implementation Order, the OCA has expressed concern over the detrimental effects that alternative ratemaking mechanisms and alternative rate designs can have on consumers.\(^3\) Alternative ratemaking mechanisms and rate designs, such as those identified by the Commission and Act 58, are novel to Pennsylvania consumers, and the use of these mechanisms may create substantial consumer confusion as a result. Alternative ratemaking mechanisms function as risk-shifting mechanisms that move financial risk away from utilities and onto consumers. Additionally, the alternative rate designs discussed in the Commission

Order and Proposed Policy Statement can negatively impact customers, particularly customers who are unable to respond to the rate design by shifting or controlling usage. While some form of alternative rate design may be reasonable as a voluntary choice by some customers able to bear the risks, any suggestion that such complex rate designs should be mandatory for residential customers is unreasonable and contrary to law.

In addition to demonstrating that the Commission has authority to approve a specific alternative ratemaking mechanism, the utility bears the burden of demonstrating that the rates resulting from alternative mechanisms are just and reasonable. Alternative ratemaking mechanisms are not exempt from this cornerstone of utility ratemaking. As the OCA emphasized in its Comments to the Commission's Tentative Implementation Order, alternative ratemaking mechanisms, if applied for, must, inter alia, identify and accomplish policy goals that cannot otherwise be achieved under the Pennsylvania Public Utility Code (Code) or traditional ratemaking; provide tangible benefits to consumers; allow consumers to manage their bills in a safe and reasonable manner; and ensure that rates and bills remain understandable and affordable.

In these Comments, the OCA discusses the individual alternative ratemaking mechanisms identified by the Commission in its Proposed Order. The OCA also discusses the alternative rate design proposals contained in the Commission's Order and the Proposed Policy Statement, as well as the questions raised by Chairman Brown in her Statement. The OCA looks forward to

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4 These Comments were prepared with the assistance of regulatory consultant Glenn A. Watkins. Mr. Watkins obtained his B.S. in economics and M.B.A. from the Virginia Commonwealth University in 1982 and 1988, respectively. Mr. Watkins is a Principal and Senior Economist with Technical Associates, Inc., an economics and financial consulting firm. Mr. Watkins conducts marginal and embedded cost of service, rate design, cost of capital, revenue requirement, and load forecasting studies involving numerous electric, gas, water/wastewater, and telephone utilities. He has provided expert testimony in numerous jurisdictions, including Alabama, Arizona, Delaware, Georgia, Illinois, Kansas,
working with the Commission and the other stakeholders with regard to the implementation of Act 58 of 2018, the Commission’s Proposed Policy Statement, and any proposed alternative ratemaking mechanisms.

II. ALTERNATIVE RATEMAKING MECHANISMS AND RATE DESIGNS

The OCA has previously discussed the history of alternative ratemaking in Pennsylvania, as well as the mechanics of certain alternative ratemaking mechanisms in other Comments. The Commission has also provided a summary of how specific alternative ratemaking mechanisms operate in its Proposed Policy Statement Order. Fixed Utility Distribution Rates Policy Statement, Proposed Policy Statement Order, Docket No. M-2015-2518883, at 5-25 (May 23, 2018) (Proposed Order). Below, the OCA addresses some key points related to the alternative ratemaking mechanisms and alternative rate designs identified by the Commission in its Proposed Policy Statement Order, provides information from other states’ alternative ratemaking mechanisms and alternative rate designs, and identifies some of the consumer protections that may be necessary. As the OCA noted in its Comments on the Tentative Implementation Order, consumer protections may need to be developed based on the specifics of the proposal and the utility. The OCA provided some general consumer protections in its Comments on the Tentative Implementation Order for consideration, and will highlight here some of those protections.

Kentucky, Maine, Maryland, Massachusetts, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Vermont, Virginia, South Carolina, Washington, and West Virginia.


A. Revenue Decoupling

As the Commission explains in its Order, revenue decoupling mechanisms allow a utility to recover an authorized revenue amount between base rate cases regardless of a utility’s sales volume. **Proposed Order, Docket No. M-2015-2518883, at 5-6 (May 23, 2018).** Revenue decoupling is typically utilized by utilities that are experiencing declining sales as it breaks the link, in whole or in part, between revenues and sales. There are many different forms of revenue decoupling, but all operate to break the link between sales and revenues. Breaking this link, however, has consequences for both consumers and utilities. In addition, whether decoupling is full or partial can significantly impact the fairness of the proposal and the needed consumer protections. The OCA agrees with the Commission that for revenue decoupling to achieve rates that are just and reasonable, consumer safeguards are required. The OCA emphasizes that the consumer protections proposed by the Commission, such as revenue adjustment caps, reduced returns on equity, revenue adjustment dead-bands, seasonal adjustment limitations, and adjustment timelines must all be considered when evaluating proposals for revenue decoupling. 7 The OCA would also note that revenue decoupling must further an important public policy goal, be understandable, allow customers to manage their bills, and be accepted by consumers.

The General Assembly has indicated that “it is the policy of the Commonwealth that utility ratemaking should . . . be consistent with the efficient consumption of utility service.” 66 Pa. C.S. § 1330(a)(2) (general policy of Act 58 relating to alternative ratemaking). The Commission has also indicated that it intends to consider and align its actions with the policy goals of the General Assembly and the Commonwealth. **Implementation of Act 58 of 2018 Alternative Ratemaking for Utilities, Tentative Implementation Order, Docket No. M-2018-**

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7 **Proposed Order, Docket No. M-2015-2518883, at 11, 12 (May 23, 2018).**
3003269, at 2 (Aug. 23, 2018) (Tentative Implementation Order). The OCA has previously explained, and at least one utility stakeholder currently acknowledges, however, that revenue decoupling may not promote conservation and efficiency efforts by the consumer. While it is argued that decoupling will remove the disincentive of the utility to promote energy efficiency and conservation, Pennsylvania has already done this through Act 129. The Act 129 programs have achieved significant energy usage reductions, within the required budgets, and with good customer acceptance and participation. The Commission should be cautious not to disrupt this success.

Other states have not simply accepted the theoretical claims as to the benefits of revenue decoupling. In Arizona, for example, the Corporation Commission required a natural gas utility to provide in its annual decoupling report:

1) a listing of customer complaints resulting from or associated with revenue decoupling; 2) a showing that disincentives to energy efficiency have been removed by December 31, 2012; 3) compliance with the Commission's required annual energy savings; 4) an analysis of usage differences between new and existing customers; 5) a comparison of the differences between new and existing customer usage per customer ("UPC"); 6) an analysis of overall customer usage, UPC, and customer growth per class on a pre- and postdecoupling basis; 7) an analysis of customer migration to tariffs not subject to decoupling or converting to non-gas energy usage; and 8) an analysis of Company activities in supporting new customer growth including the encouragement of new and economic uses of natural gas.


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8 OCA Comments for En Banc Hearing on Alternative Ratemaking Methodologies, Docket No. M-2015-2518883, at 11-18 (Mar. 16, 2016); Aqua Pennsylvania Comments on Alternative Ratemaking Methodologies, Docket No. M-2015-2518883 (May 31, 2017) (“Customers may not see the need for conservation if they receive a surcharge on their bill when they have made efforts to conserve during each billing period.”).

9 A question also remains if revenue decoupling alone, without mandated, aggressive energy efficiency targets and programs will result in conservation and energy efficiency efforts by the utility.
The Commission also correctly notes that revenue decoupling may not be appropriate for certain fixed utilities and may not result in rates that are just and reasonable. The OCA agrees. As the OCA discussed in its initial comments, revenue decoupling has been considered primarily in instances where significant declines in sales are driving frequent rate case filings. Frequent case rate filings have not been an issue in Pennsylvania. The after-the-fact billing increases, which customers cannot control, can result in much dissatisfaction, particularly when customers have no notice or opportunity to comment as in a base rate case. Also, the lack of a clearly identifiable goal or purpose to be achieved that is necessary for utility operations can result in customer dissatisfaction. The OCA would note that in states where there are no statutorily mandated energy efficiency programs, such as Act 129, revenue decoupling is accompanied by mandated programs with specific, aggressive targets. For example, Minnesota Public Utilities Commission authorized a utility to implement full revenue decoupling on the condition that the utility demonstrate progress toward a statutorily imposed 1.5% annual energy savings goal. Minn. Energy Resources Corp., Docket No. G-007, G011/GR-10-977, 2017 Minn. PUC LEXIS 344, at *3-4 (Dec. 1, 2017); see also Minn. Stat. § 216B.241.

The OCA continues to have reservations about the usefulness of revenue decoupling in Pennsylvania. Revenue decoupling can significantly impact consumers, particularly low to moderate income consumers, and can reduce incentives for timely outage and storm repairs. Pennsylvania’s utilities have also been very engaged in delivering cost-effective energy efficiency programs on both a mandated and voluntary basis. These factors, along with the factors identified by the Commission and the necessary consumer protections, will need to be thoroughly examined for any revenue decoupling proposal.
B. Lost Revenue Adjustment Mechanism (LRAM)

LRAMs are based on the recovery of lost revenues from specific causes, such as energy efficiency. The Commission states that LRAMs “may be appropriate in certain circumstances.” Proposed Order, Docket No. M-2015-2518883, at 13 (May 23, 2018). The OCA, however, respectfully disagrees with the Commission and submits that LRAMs are never an appropriate ratemaking mechanism. The OCA has previously discussed the negative impact that LRAMs can have on consumers’ conservation efforts and energy efficiency incentives. LRAMs are also difficult to calculate and verify, and allow the utility to continue to benefit from actions that are inconsistent with the LRAM. In the OCA’s view, LRAMs should not be considered by the Commission.

Other states have demonstrated negative experiences with LRAMs. In 2010, for example, the Montana Public Service Commission discontinued its LRAM mechanism and stated:

[T]he LRAM does not eliminate the throughput incentive. Because LRAM only adjust rates to account for volumes of energy saved, it only mitigates the throughput incentive with respect to those volumes, and even then, only if the savings are measured accurately. The LRAM may actually create a perverse incentive to maximize both the estimates of savings attributable to utility efforts and actual sales volumes, because both reward the utility with revenues. Although the LRAM was intended to mitigate the throughput incentive, it does so only in a limited way, and only if certain assumptions are accurate.

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11 LRAMs for electric utilities are not permitted. See OCA Comments on the Proposed Implementation of Act 58, Docket No. M-2018-3003269 (Oct. 9, 2018) (discussing that Act 129 precludes EDCs from implementing alternative ratemaking mechanisms that recover “decreased revenues that are solely attributable to reduced energy consumption or changes in energy demand through a separate automatic adjustment mechanism”).
In the Matter of the Lost Revenue Adjustment Mechanism of Northwestern Energy, Public Service Commission of the State of Montana, Regulatory Division Docket No. D2014.6.53, Order No. 7375a, at 10-11 (Oct. 15, 2015). In 2006, the Illinois Appellate Court reversed a decision by the Illinois Commerce Commission that approved a proposal with a cost recovery rider and said:

Requiring ratepayers to bear the expense of services they avoid due to conservation or DSM programs is not only incredible, but runs afoul of basic ratemaking principles. . . . The lost revenue charge here does not reflect the cost of providing electric service, does not reflect a cost that benefits ratepayers, and further, adds to [the company’s] revenues without regard to whether [the company’s] demand or revenues increased because of factors unrelated to DSM programs.


Additionally, a 2010 order from the Arizona Commission did not speak favorably to LRAMS, noting that such mechanisms would “appear to be inconsistent with our constitutional obligation to set just and reasonable rates, based on considerations of the interests of both the Company and its customers.” _Arizona Water Co._, W-01445A-08-0440, 2010 Ariz. PUC LEXIS 313, *135 (Aug. 24, 2010). The Arizona Commission found that LRAMs could allow for utilities to increase their rates based on certain costs while other costs might be declining or even when overall revenues were increasing due to customer growth. _Id._ As such, the OCA urges the Commission to reject the use of LRAMs.

C. **Straight Fixed Variable (SFV) Pricing**

SFV pricing is an alternative rate design based on the theory that a utility’s distribution costs are fixed in the short run. Like LRAMs, the OCA submits that SFV mechanisms should be rejected. Further, the OCA submits that, if considered, SFV mechanisms should never accompany revenue decoupling. By establishing high fixed costs, SFV mechanisms distort the
historic relationship between usage and billing, and, as the Commission notes, may “reduce the price signals to customers in regard to the actual consumption of supply[.]” Proposed Order, Docket No. M-2015-2518883, at 16 (May 23, 2018). Additionally, SFV pricing is highly problematic to conservation and efficiency efforts because SFV can have the effect of promoting—and has in fact been used to promote—utility consumption instead of discouraging it. See OCA Comments for the En Banc Hearing on Alternative Ratemaking Methodologies, Docket No. M-2015-2518883, at 19-22 (Mar. 16, 2018) (discussing the impact that SFV mechanisms can have on conservation and efficiency efforts); see also Federal Energy Regulatory Commission, Docket Nos. RM91-11-001 and RM87-34-065, Order No. 636 (Apr. 9, 1992).  

The OCA also pointed out in its prior Comments that high fixed charges can negatively impact low use and low income customers. The Commission points to its universal service programs as a means to mitigate this impact. The OCA disagrees with the Commission’s assertion that customer assistance programs like the Low-Income Usage Reduction Program (LIURP), the Low-Income Heating Assistance Program (LIHEAP), and the utility customer assistance programs will mitigate the negative impacts that low-income consumers will experience from SFV mechanisms. Proposed Order, Docket No. M-2015-2518883, at 17 (May 23, 2018). These assistance programs simply do not have the funding required to reach all low-income consumers negatively impacted by alternative ratemaking mechanisms.

In 2016, for example, Philadelphia Gas Works (PGW) had 71,625 customers who were eligible for LIURP and in need of the program’s assistance; yet, PGW’s estimated LIURP budget

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12 FERC Order No. 636 had two primary goals. The first goal was to enhance gas competition at the wellhead by completely unbundling the merchant and transportation functions of pipelines. The second goal was to encourage the increased consumption of natural gas in the United States.
of $7.6 million per year was only sufficient to assist 2,108—or 2.9 percent—of eligible homes. OCA Comments on Petition of Philadelphia Gas Works for Approval of Demand Side Management for FY 2016-2020, Docket No. P-2014-2459362, at 8-9 (Aug. 15, 2016). Further, the participation rates in customer assistance programs across all electric utilities and natural gas utilities in Pennsylvania for the year of 2016 was only 47 percent and 34 percent respectively of confirmed low incomes customers. ALEXIS BECHTEL, 2016 Report on Universal Service Programs & Collections Performance of Pennsylvania EDCs & NGDCs, PENNSYLVANIA PUB. UTIL. COMM’N, at 49-50 (Oct. 2017). As the 2016 Report correctly notes, even these participation rates are overstated. The report finds that participation rates “would be much lower if the rate reflected estimated rather than confirmed low-income customers, as estimated numbers are much higher.” Id.

Recent cases decided by the Illinois Commerce Commission also reveal a shift away from fixed rates because of concerns with the effect of those rates on low-usage customers and environmental efficiency efforts. The Illinois Commission has instead preferred “cost causation” policies, which reflect more equitable cost sharing within customer classes and better support energy conservation efforts. Ameren III. Co., 16-0387, 2017 Ill. PUC LEXIS 29, *136, *5 (Feb. 23, 2017). The OCA submits that SFV is so laden with problems that it should simply be rejected.

D. Multiyear Rate Plans (MRPs)

The Commission identifies MRPs as a possible alternative ratemaking mechanism, suggests that such mechanisms could include adjustments based on an inflation index, and indicates that MRPs could reduce the frequency of rate case filings. The OCA submits that MRPs require more detailed information than the Commission seems to assume and would not
produce significant benefits for most utilities. The Commission notes that multiyear rate plans can include automatic rate adjustments “based on an index such as inflation[.]” Proposed Policy Statement, Docket No. M-2015-2518883, at 17 (May 23, 2018). The OCA stresses, however, that inflation adjustments have historically been discouraged, and the Fully Projected Future Test Year (FPFTY) already ensures that inflation is accounted for. Moreover, not all costs that a utility bears change with inflation. The OCA therefore submits that if multiyear rate plans are considered, they cannot simply be automatic rate adjustments for inflation. The Commission also notes that a multiyear rate plan would decrease the frequency that utilities file for base rate cases. The OCA, however, submits that base rate cases are not frequently filed as of now, and any regulatory lag is already addressed by the FPFTY.

Multiyear rate plans in other states have been implemented for time periods ranging from three to five years. See, e.g., Minn. Stat. § 216B.16, Subdivision 19; Central Hudson Gas & Elec. Corp., Case 17-E-0459, 2018 N.Y. PUC LEXIS 321, *22 (June 14, 2018). Additionally, multiyear rate plans typically require extensive filings that report on a utility’s current financial health, future planned investments, and a utility’s performance as measured by a predetermined performance mechanism. Minn. Stat. § 216B.16, Subdivision 19; Central Hudson Gas & Elec. Corp., Case 17-E-0459, 2018 N.Y. PUC LEXIS 321, *22 (June 14, 2018). The OCA submits that the Commission consider other states’ experience with respect to MRPs and agrees with the Commission that MRP proposals should demonstrate that the “plan does not discourage

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efficiency measures, appropriately aligns costs in accordance with cost causation principles, and does not inappropriately impact low-income customers or appropriately mitigates such impacts, among other things.” Proposed Order, Docket No. M-2015-2518883, at 19 (May 23, 2018).

E. Demand Charges

Demand charges are a part of rate design that has primarily been used in the Commercial and Industrial classes. As noted in its May 31, 2017 Comments, the OCA does not support mandatory demand charges for residential customers. See generally OCA Comments on Alternative Ratemaking Methodologies, Docket No. M-2015-2518883 (May 31, 2017). Non-time-differentiated demand charges provide no direct price signal to reduce or shift load during peak periods and therefore, have no direct objective of increasing the residential distribution load factor. While it is true that many residential customers’ peak loads occur at about the same time, and therefore, could reduce this class’ peak load, the billed demands paid by customers would be measured at any point in time in which a customer’s maximum load occurs (off-peak or on-peak periods).

Customers simply have no way of knowing when the peak periods will occur as this is an after-the-fact determination.\(^{15}\) Moreover, the vast majority of residential customers do not distinguish between the concepts of power (kW) versus energy (kWh). Perhaps most importantly, there has not been any acceptance of demand charges for residential customers given its complexities and potential for unreasonable and burdensome results. Mandatory

\(^{15}\) Customers are unaware of when peak periods are occurring, and peak period determinations are made after the peak period has ceased, which can lead to unreasonable and burdensome results. Without knowing that a peak is occurring, the customer has no way to respond. If advanced, time differentiated peak periods are established, those periods may not align with the actual peak, thus muting the anticipated benefits.
residential demand charges have either been flatly rejected by regulatory commissions or ultimately withdrawn by the applicants in the cases the OCA has found.

Specific examples of where mandatory residential demand charge proposals have failed include:

1. The Arizona Corporate Commission rejected UNS Electric’s\textsuperscript{16} proposal for mandatory residential demand charges;

2. Glasgow Electric Plant Board’s (which is a municipal utility not regulated by the Kentucky Public Service Commission) implementation of mandatory residential demand charges were changed to allow all customers to opt-out of such demand charges due to considerable outcry and complaints from residential customers as well as from elected officials;\textsuperscript{17}

3. After considerable resistance from consumer groups and lack of acceptance by State legislators, provisions within a Commonwealth Edison-backed bill in Illinois that would have required mandatory residential demand charges were ultimately dropped shortly before the bill’s passage; and,

4. Oklahoma Gas & Electric’s (Docket No. PUD201500273) proposal to require mandatory residential demands charges was dropped as part of a settlement agreement due to considerable opposition from residential customers and consumer interest groups.

In each of the above cases, consumers and other advocacy groups showed that residential customers are generally without sufficient information to identify peak demand and have limited


\textsuperscript{17} See MELINDA J. OVERSTREET, GE PB Ponders Best Approach to Price Increase, GLASGOW DAILY TIMES (Aug. 29, 2018).
ability to respond to such demand charges. Indeed, in the Arizona Corporation Commission’s Final Opinion and Order in the UNS Electric case cited above, the Commission found as follows:

The public distrust or antipathy to the proposal has convinced the Company and the Commission that any transition to three-part rates will require massive public education effort before we can say with any degree of certainty that mandatory residential demand rates in UNSE’s service territory are in the public interest.


As noted, demand charges are particularly difficult for residential customers to respond to, particularly if a peak period is not pre-defined (e.g. demand charges based on system coincident peak). The vast majority of residential electricity power requirements are either unavoidable or impractical to curtail during peak load times, particularly without notice. The following are the largest residential electricity power users:

1. electric heat pumps (heat pump mode) 6 to 12 kW;
2. electric strip heating 10 to 17 kW;
3. water heater 2 to 5 kW;
4. oven 4 to 8 kW;
5. range 4 to 5 kW;
6. clothes dryer 5 kW;
7. dishwasher 1.2 kW;
8. refrigerator 0.3 kW;
9. washing machine 0.5 kW;
10. coffee maker 0.9 kW;
11. microwave 1.4 kW;
12. hair dryer 0.6 to 1 kW;
13. toaster 1 kW; and,
14. vacuum cleaner 0.75 to 1.35 kW.

Although it would be rare for any household to use all of the above appliances at the same time, a change in lifestyle and/or standard of living would be necessary to significantly alter the electric load. For example, consumers have little ability to control their space heating load for a short duration (not to be confused with energy reduction due to lowering thermostats) or control when electric hot water heaters, refrigerators, and freezers activate for short periods of time without sophisticated "smart" home computerized equipment. If these appliances activated during what became the system coincident peak, the customer could be hit with significant demand charges. Perhaps more importantly is the fact that residential customers have little realistic ability to know what their electric load is at any given point in time without complex and expensive equipment that is only in the earliest stages of development and is not readily available to the typical household.

The OCA would also note that there exists considerable load diversity across residential customers. For example, rural customers tend to peak about an hour earlier in the morning and about an hour later in the evening during the winter and about an hour later in the summer than suburban/urban customers. Furthermore, young households with no children tend to peak somewhat later than families with children.

The Commission should also consider the level of potential impact on distribution system costs if it considers demand charges at all. It is important to remember, in Pennsylvania, demand charges would apply only to distribution costs, and only those distribution costs not recovered through a surcharge or rider. The impact could be relatively small given the design of the distribution system and the embedded costs that exist. By way of example, meters, service
drops, and transformers are sized to meet the maximum potential load for a particular residence. Therefore, any potential load shifting will not impact the sizing or costs associated with these facilities. While primary and secondary overhead and underground conductor sizing may potentially be impacted if a circuit’s maximum load is significantly reduced, virtually all utilities somewhat oversize conductors for reliability, safety, and planning purposes. With regard to distribution poles, the size, height, and number of these poles will largely be unchanged due to vertical clearance requirements and pole attachments from telecommunications and other carriers. If a distribution circuit were able to achieve significant peak load reductions due to demand charge pricing, it is possible that the future size and cost of substations would be reduced somewhat. In practice though, this is likely a small future potential cost avoidance would represent a very small portion of an EDC’s cost structure.\footnote{The OCA would also note that demand charges point out a disconnect between the cost of service study used to allocate class revenue responsibility and the rate design. In many utility cost of service studies, distribution costs, in large part, are classified as customer related and assigned on number of customers rather than demand.} If, however, the Commission finds benefit in shifting peak, the Commission should use a peak time rebate program or the demand side management programs currently developed through Act 129. These types of programs provide better outcomes for customers while achieving verifiable benefits.

F. Standby and Backup Charges

The OCA agrees that, “in addition to the Commission’s authority to approve” a standby\footnote{Standby charges are used by energy utilities, and, as the Commission notes, “typically involve a demand charge and an energy charge that together recover the cost of the energy used by the customer as well as the cost of the capacity to meet the customer’s peak demand needs.” \textit{Proposed Order}, Docket No. M-2015-2518883, at 22 (May 23, 2018). Water utilities, however, are prohibited from imposing a standby charge “on owners of residential structures equipped with automatic fire protection systems.” 66 Pa. C.S. § 1326(a). A standby charge with respect to water utilities is statutorily defined as “an amount,} or backup charge, a utility must demonstrate that the standby or backup charge “does not

G. Performance Incentive Mechanisms (PIMs)

PIMs can be used with other alternative ratemaking mechanisms to ensure utility performance. Performance metrics can cover many aspects of a utility’s operations. The OCA agrees with the Commission that a utility must demonstrate that the PIM “does not discourage efficiency measures, appropriately aligns costs in accordance with cost causation principles, and does not inappropriately impact low-income customers[.]” Proposed Order, Docket No. M-2015-2518883, at 25 (May 23, 2018). Simply having performance measures, however, is insufficient. The OCA submits that any PIM proposal must include performance incentives that go above and beyond the level of service that a utility is already obligated to deliver to its customers, beyond the level of service that the utility has already achieved and must include automatic penalties for noncompliance.

PIMs should also contain detail and should incorporate certain, identifiable duties to consumers. The California PUC, for example, indicated that PIMs should include:

(1) clear performance goals;
(2) a clear understanding of how performance will be measured in relation to those goals;
(3) a timely and transparent process for independent measurement and verification of performance results; and
(4) incentive earnings opportunities sufficient to motivate IOU performance, while providing cost-effective value to ratepayers.

in addition to the regular rate, assessed against the owner of a residential structure for the reason that the residential structure is equipped with an automatic fire protection system.” 66 Pa. C.S. 1326(b).

As noted, PIMs can include metrics across all of a utility’s operations. Much of the previous discussion regarding PIMs, however, has been around energy efficiency. As the OCA noted in its previous Comments, PIMs have not been necessary in Pennsylvania in the energy efficiency context. PIMs can have a much broader application, if properly designed, particularly to ensure performance under alternative ratemaking mechanisms. While the specific design of a PIM will be important to consider, along with other consumer protections, the OCA submits that customer service and customer satisfaction will be necessary metrics in any proposal.

III. PROPOSED POLICY STATEMENT

A. Section 69.3301

The OCA agrees with the Commission’s purpose behind this Proposed Policy Statement and emphasizes that, in addition to the objectives that the Commission identifies in Section 69.3301, any alternative ratemaking mechanisms considered by the Commission must result in rates that are just and reasonable for utility consumers.
B. Section 69.3302

The OCA has previously expressed its concerns with respect to the effect of alternative ratemaking on utility consumers. Safeguards like the considerations enumerated by the Commission in Section 69.3302 are therefore required to ensure that consumers are protected.

In addition to the considerations under Section 69.3302, the OCA submits that utilities must provide sufficient information to satisfy the filing requirements the OCA proposed in its Comments to the Commission’s recent Tentative Implementation Order of Act 58 if including an alternative ratemaking proposal in a base rate case filing. These requirements include:

1) Identification of the regulatory policy goals to be achieved by the alternative rates;
2) Identification of the desired regulatory outcomes and how the alternative rate mechanism achieves these outcomes more efficiently or effectively than traditional base rate treatment;
3) Identification of the specific metrics and reporting that will be used to measure the utility’s performance;
4) Identification of the tangible benefits to consumers, the costs to consumers, and other impacts on consumers;
5) Identification of the consumer protections proposed for the mechanism;
6) Presentation of the consumer education plan and the cost of the plan; [and]
7) Information responsive to the topics and issues contained in [the current Proposed and/or Final Policy Statement].

OCA Comments on the Proposed Implementation of Act 58, Docket No. M-2018-3003269, at 16 (Oct. 9, 2018). By including these requirements alongside the Commission’s proposed considerations within Section 69.3302, the Commission will ensure that adequate information is available to consider any proposal.

C. Section 69.3303

The OCA is concerned with the illustrations provided by the Commission within Section 69.3303. At this juncture, the OCA recommends that the Commission remove the illustrations of rate design options for the energy industry. The illustrations are accompanied with disclaimers.
that make the section and illustrations unhelpful. In addition, Section 69.3303(d), suggesting different rates for different geographic locations, may be problematic. Targeted usage reductions to eliminate the need for future infrastructure in a geographic area may be better served through the energy efficiency and demand response program than through different rate designs for customers in the same class.

As such, the OCA submits that Section 69.3303 should be eliminated. Utilities are free to make rate design proposals in base rate proceedings that are consistent with the law, adhere to established rate design principles, and will achieve specific, identified public policy goals. Illustrating some designs without consideration of others does not advance the policy statement.

In addition, at page 29 of the Order, the Commission enunciates some first order principles related to Section 69.3303. While these principles provide some useful considerations, they are not the exclusive principles that must guide the design of rates. Other factors that must guide rate design include gradualism, equity and fairness, understandability, existing price differentials across rates and classes, conservation, and providing the utility the opportunity to recover its revenue requirement. It must also be remembered that rates are being designed based on average, embedded cost of service studies to recover these embedded costs. While the OCA agrees that the rates should be designed to encourage the efficient use of resources and provide least cost service over time, rate design cannot be singularly focused or result in complex rates that customers cannot understand or to which customers cannot respond.
IV. COMMENTS CONCERNING STATEMENT OF CHAIRMAN BROWN

Chairman Brown’s Statement concerns a concept known as capacity utilization, and the OCA’s Comments below concerning the Chairman’s Statement only address electric distribution utilities. Capacity utilization, also known as load factor, is the relationship of average demand (energy usage divided by hours) to peak demand. The Motion of Vice Chairman Place and proposed Section 69.3303(c) also look to address this point. Chairman Brown seeks comments relating to rate design alternatives that may enhance capacity utilization (load factor). In this regard, an electric distribution company’s (EDCs) load factor can only change as a result of three changes in the utilization in demand for electricity: (1) increase energy consumption (holding peak load constant); (2) reduce peak load (demand); or, (3) shift load from peak period to other than peak period. Given energy conservation efforts mandated by the General Assembly as well as efficiency gains in residential appliances/apparatuses, it is unlikely and not in the public interest that policies or rate structures advocating the increased consumption of energy will be promoted. This leaves possibilities (2) and (3) to be considered.

The OCA recommends that the Commission consider the potential benefits and detriments of rate design attempts to either reduce peak distribution load or shift peak usage from on-peak to off-peak periods. While there could be some long-term cost savings associated with increasing the residential load factor, it is important to recognize the potential savings as compared to the impact on consumers. It is also important to recognize that the rate designs at issue only apply to the distribution costs as this is what remains regulated by the Commission. The overall cost savings relating to distribution costs are not likely to be significant for the residential class. In evaluating the potential savings associated with an increased residential load

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factor for distribution costs, one must consider how distribution plant investments are planned and incurred by EDCs.

Starting at the customer’s meter, meters and service lines are sized and installed to meet each customer’s maximum potential demand. As such, an individual customer’s potential maximum load dictates the investment required for these plant investments. Even if there is a significant reduction in the peak load for the entire residential class, the costs required for services and meters will remain largely unchanged since they must be sized to meet the potential maximum load. Moving upstream to transformers, these investments are sized to meet maximum potential load requirements. When installing individual transformers, a utility will select a transformer size to incorporate a margin of error such that they are invariably somewhat oversized. While a reduction in an individual residential customer’s peak load may theoretically allow for a smaller and less expensive transformer to serve that customer, the potential load reduction attributable to rate design changes will not materially impact utilities’ decisions on the sizing and costs of transformers serving residential customers.

Upstream from transformers are distribution conductors, conduit, and poles. With regard to conductors and conduit, utilities also install this plant with considerable contingency margins such that the load carrying capability of conductors tends to be significantly greater than the actual loads placed on the conductors from residential customers. In addition, as a result of looping (interconnecting) distribution circuits to minimize power outages when one circuit fails by connecting to another circuit, conductors are sized to accommodate these contingencies.

Additionally, EDC’s distribution facilities are moving more and more towards primary voltage systems and away from secondary voltage systems. The conductors associated with higher voltages tend to have significantly higher load carrying capability than conductors
devoted to secondary voltage circuits. Finally, there are significant economies of scale relating to the size versus cost of conductors. That is, while a larger conductor (with a higher load carrying capability) will cost somewhat more than a smaller conductor, the incremental cost is small in comparison to the additional capacity gained with a larger conductor. Poles are installed to support overhead conductors and are sized largely in consideration of minimum clearance requirements for passage under roads and right-of-ways as well as to accommodate pole attachments for telecommunications and cable utilities. With respect to substations, a reduction in residential peak load may in the long-run produce some cost savings as it relates to the replacement and/or installation of substations. However, any cost savings would be very small in terms of the overall long-term cost of an EDC’s distribution system. In summary, any long-term distribution cost savings associated with reduced demand from residential customers directly relating to alternative rate designs will not likely be significant.

The Commission should also consider the benefits and potential harms to residential ratepayers under alternative rate designs. Distribution pricing structures designed to discourage peak usage by either reducing peak demand or shifting load will require lifestyle changes or the installation of control equipment by the majority of residential customers. Most residential consumers place high demands on the distribution system in the morning hours and again in the evening hours, which are elevated during periods of severe weather. Certain activities could potentially be postponed or deferred to other periods of the day, but other activities, such as getting ready for the work day, cooking, and caring for children’s needs at night are not easily shifted. It is particularly noteworthy that for the residential class of Pennsylvania utilities, the peak in the winter occurs twice a day—between approximately 7:00am and 8:30am and again between 6:00pm and 8:00pm. In summer, the residential peak typically occurs from 4:00pm to
6:30pm. While changes in lifestyle cannot be quantified in dollar terms, they should be considered as an impact of such alternative rate designs, as should the cost of any necessary control equipment. The cost of a failure to shift load, either by accident or necessity, must also be considered. For these reasons, the OCA favors the use of energy efficiency and demand response programs as well as voluntary alternative rate designs. The complex, time differentiated rates should remain a voluntary choice for consumers willing and able to make the necessary lifestyle changes and bear the risks as contemplated by 66 Pa. C.S. § 2807(f)(5).

In summary, few long-term cost savings relating to EDC’s investment in distribution infrastructure appear to be achievable with alternative residential distribution rates that are specifically designed to discourage usage and demand during peak periods. The traditional residential rate design based on a reasonably low fixed monthly customer charge with a volumetric energy charge has served consumers well, reasonably reflects distribution system cost causation, promotes efficiency, and allows EDC’s the ability to recover its costs of providing service including a fair rate of return on its investments. More complex, time differentiated rates should remain a voluntary choice for consumers willing and able to make the necessary lifestyle changes, as contemplated by 66 Pa. C.S. § 2807(f)(5).

V. CONCLUSION

The OCA appreciates this opportunity to provide the Commission with these Comments. Within these Comments specifically, and this docket generally, the OCA has expressed its concerns with respect to the negative impacts that alternative ratemaking mechanisms can have on consumers and utility efficiency efforts, particularly, if not properly designed and not accompanied by adequate consumer protections. Alternative ratemaking mechanisms, if approved, must provide consumers with rates that are just and reasonable and bills that are
affordable. The Commission should likewise avoid allowing any specific alternative mechanism that operates in contradiction to the efficiency and conservation policy goals provided by the General Assembly. These mechanisms must provide tangible benefits to consumers; allow consumers to manage their bills in a safe and reasonable manner; be understandable; and ensure that conservation and efficiency efforts are not undermined.

Respectfully Submitted,

/s/ Darryl A. Lawrence  
Darryl A. Lawrence  
Senior Assistant Consumer Advocate  
PA Attorney I.D. # 93682  
E-Mail: DLawrence@paoca.org

Christine Maloni Hoover  
Senior Assistant Consumer Advocate  
PA Attorney I.D. # 50026  
E-Mail: CHoover@paoca.org

J.D. Moore  
Law Clerk  
E-Mail: JMoore@paoca.org

Counsel for:  
Tanya J. McCloskey  
Acting Consumer Advocate

Counsel for:  
the Office of Consumer Advocate  
555 Walnut Street  
5th Floor, Forum Place  
Harrisburg, PA 17101-1923  
Phone: (717) 783-5048  
Fax: (717) 783-7152  
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