

COMMONWEALTH OF PENNSYLVANIA



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December 19, 2014

Rosemary Chiavetta, Secretary  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17101

RE: Act 129 Energy Efficiency and  
Conservation Program Phase III  
Docket No. M-2014-2424864

Dear Secretary Chiavetta:

Enclosed for filing please find the Office of Consumer Advocate's Comments in the above-referenced proceeding.

If you have any questions, please feel free to contact me at the number listed above.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Aron J. Beatty".

Aron J. Beatty  
Assistant Consumer Advocate  
PA Attorney I.D. # 86625

Enclosure

cc: Kriss Brown, Law Bureau  
Megan G. Good, CEP

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BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Re: Act 129 Energy Efficiency and Conservation Program Phase III : Docket No. M-2014-2424864  
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COMMENTS OF THE  
OFFICE OF CONSUMER ADVOCATE  
ON PHASE III OF ACT 129 ENERGY EFFICIENCY AND  
CONSERVATION PROGRAMS

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I. INTRODUCTION

The Office of Consumer Advocate (OCA) welcomes the opportunity to submit Comments on Phase III of the Act 129 Energy Efficiency and Conservation (EE&C) programs applicable to the Commonwealth's largest Electric Distribution Companies (EDCs). In its October 23, 2014 Secretarial Letter, the Commission requested comments on a number of topics to aid in designing and implementing any future phase of EE&C programs. The Commission also held a stakeholder meeting on December 2, 2014, which the OCA attended, to provide interested parties the opportunity to identify questions regarding the topics and issues presented in the Secretarial Letter and to allow parties an opportunity to raise additional issues.

The OCA has supported the development of energy efficiency and demand response programs by Pennsylvania utilities for more than two decades. The passage of Act 129 presented Pennsylvania with the opportunity to further expand the Commonwealth's work on energy efficiency and demand response for the benefit of all customers. The OCA participated actively in the development of the Phase I and Phase II EE&C Plans under Act 129 and has participated actively in the on-going EDC stakeholder groups that have continued to work on the

implementation of these programs. The OCA's work in these areas has reaffirmed the OCA's support for these programs and the OCA looks forward to continuing to work on the Phase III Plans.

The OCA will provide Comments below on the key areas identified in the Commission's Secretarial Letter.<sup>1</sup> The Secretarial Letter has raised many important issues regarding the transition to, and implementation of, Phase III EE&C Plans. Of critical concern to the OCA is that the on-going programs remain active as we work toward the implementation of Phase III and that the stakeholders and EDCs have sufficient time to design and implement appropriate Phase III programs and Plans.

## II. COMMENTS

### A. Length of Phase III EE&C Program

#### i. Length of Phase III

The Secretarial Letter states that the Commission seeks input from interested parties on the optimal length of any possible future EE&C Program and specifically discusses programs of three, four, five or six years in length. The OCA submits that the Phase III Plans should be sufficiently long to establish robust programs that consumers can depend on for a reasonable period of time. Importantly, Phase III should be long enough to allow for the

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<sup>1</sup> The OCA was assisted in the preparation of these Comments by Geoffrey C. Crandall and Jerry E. Mendl. Mr. Crandall & Mr. Mendl are principals at MSB Energy Associates, Inc. and have extensive experience in utility regulatory issues, including energy efficiency, conservation and load management resources program design and implementation, resource planning, restructuring, mergers, fuel, purchase power and gas cost recovery and planning analysis, and related issues. Mr. Crandall and Mr. Mendl have provided expert testimony before more than a twenty public utility regulatory bodies throughout the United States and before the United States Congress on several occasions.

implementation of comprehensive efficiency measures. For the reasons detailed below, the OCA suggests that a five or six year program length most reasonably balances these two interests.<sup>2</sup>

The OCA submits that a five or six year EE&C Plan length combined with a robust stakeholder process and a process for mid-course corrections provides the best framework for efficient program management. The longer term allows for the programs to operate over sufficient period of time so that their impacts and cost-effectiveness can be maximized.

EE&C Plans are a crucial element of the resource mix needed to ensure reliable service to customers throughout Pennsylvania. The Commission identified a number of factors that should be considered in determining a reasonable plan duration e.g., energy and demand forecast accuracy, an evolving energy efficiency marketplace, an evolving demand response marketplace, adoption of efficiency measures by consumers, changes in Federal legislation and regulations that set minimum efficiency standards, and administrative costs incurred by all parties in designing, filing, litigating and implementing the EE&C Programs. The OCA agrees that these are important considerations. In addition, it is also important to consider changes to local codes or ordinances. Importantly, as we enter this next phase, significant changes in the PJM market design could have an impact on the development of EE&C and demand response programs.

While extending the EE&C Plans to five or six years could present some program design and implementation concerns and be impacted by the factors identified by the Commission, the OCA submits that a thorough stakeholder process with a process for mid-term

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<sup>2</sup> In the Secretarial Letter, the Commission notes that Act 129 requires the Commission to evaluate the costs and benefits of the programs at least every five years. The Commission posits that a six year program would allow for this evaluation while also allowing an additional year to set new targets and develop a new plan. The OCA agrees that this would smooth the transition between program phases. Whether a five or six year program phase is adopted, the timing should allow for Commission evaluation and planning for the next phase without disrupting program delivery in the current phase.

corrections can address these concerns. It will be critically important for the stakeholder process to review changes to such things as appliance efficiency standards, market transformation, and the other factors identified herein to determine if program adjustments are needed. As such, the OCA recommends that each EDC be directed to continue with a robust stakeholder process that can consider these issues and the need for program adjustments. Given the extensive experiences gained in Phases I & II, the OCA submits that it would be appropriate to provide a longer program to allow parties to focus efforts on implementation of sound programs rather than continually looking to the future, uncertain goals of the next EE&C phase which occurs when the phase is too short.

ii. Inclusion of an Incremental Progress Requirement

In addition, the Commission seeks input on the merit of incremental progress requirements, such that each EDC's goals are at least partially achieved on an annual basis. If the Commission were to approve a longer Phase III period, the OCA submits that setting incremental targets is reasonable to assure continued progress. By establishing incremental progress requirements, the ultimate goal is more likely to be achieved in that progress is being made toward that goal each year. Achieving the goal earlier, rather than back loading it, generates benefits for the ratepayers.

Such an approach, though, should offer the EDCs flexibility in the manner in which they achieve the goals and recognize that there are uncertainties that may either accelerate or decelerate the rate of implementation. The incremental progress requirements may not be able to be a fixed percentage of the target amount. New and evolving programs and technologies are likely to require more ramp-up than existing mature programs and technologies. More comprehensive measures may take longer to develop and implement. This suggests that there

could be annual targets reflecting conditions specific to the program/technology where warranted, rather than simply applying a fixed annual percentage to the plan.

Accordingly, the OCA submits that incremental progress requirements are appropriate but may need to be properly tailored to the programs and technologies being deployed.

B. Inclusion of Peak Demand Reduction Requirements

The Commission seeks comment on six specific questions concerning the inclusion of a peak demand reduction requirement in Phase III plans. The OCA submits the following responses.

- a) **If the SWE determines that there is cost-effective peak demand reduction potential available within the Act 129 framework, the EDC's would be required to meet a May 31, 2017 peak demand reduction target. Should the EDC's be required to continue peak demand reduction programs past the May 31, 2017 target? If so, should there be annual reduction requirements or an average annual reduction requirement over the entire period?**

Yes, if the SWE determines that there is available cost-effective peak demand reduction potential, it would be appropriate to require the EDCs to continue peak demand reduction programs past the May 31, 2017 target. If the SWE concludes that the peak demand reduction programs should be modified to make them cost effective, or more cost-effective than the current peak demand reduction programs, the programs beyond May 31, 2017 should be modified accordingly. Cost-effective peak demand reduction programs should be implemented to avoid reliance on more costly generation resources, but must also be balanced with energy efficiency programs and resources.

The peak demand reduction requirements should be expressed on an annual basis but the OCA would hasten to add that actual reductions should not be required. That is, the

targets should be established based on connected load under the peak demand reduction program rather than on load actually interrupted. Optimal use of the peak demand reduction resource may not require the interruption of all load under the program at one time or at the same level every year. Just because the demand response capability is there does not necessarily mean it is always best to be fully utilized. Demand response has some value as an option when service reliability is threatened as an economic option. The targets should acquire the peak demand reduction resource, the optimal cost-effective use of that resource is a separate issue.

- b) If the SWE determines that there is cost-effective peak demand reduction potential available within the Act 129 framework, the EDCs' budgets would need to be split between consumption reduction and peak demand reduction initiatives. How should the budget be split between the two initiatives?**

Generally speaking, energy efficiency saves energy and money. DR shifts energy use and saves money. If the energy efficiency/demand reduction budget is limited, the bulk of the budget should go toward energy efficiency to get the benefits of saving energy - reduced cost, reduced environmental impact, more energy independence, etc. Ideally, the budgets for both energy efficiency and peak demand reduction would reflect the optimal utilization of both resources.

- c) If the SWE determines that there is cost-effective peak demand reduction potential available within the Act 129 framework but would require the majority (e.g., 75%; 80%; 90%, etc.) of the EDCs' budgets, should the EDCs still be required to achieve peak demand reduction targets?**

If peak demand reduction programs are cost effective, they should be implemented, but not to the extent that it takes the majority of the EDC's energy efficiency budget. Using the majority of the budget for peak demand reduction would result in underfunding the energy efficiency programs, which are also cost-effective. The OCA submits

that a set percentage “cut off” should not be utilized or determined in the abstract. Rather, the merits of the actual plans must be reviewed to determine a reasonable approach.

- d) **If the SWE determines that there is cost-effective peak demand reduction potential available within the Act 129 framework but only for a certain sector (e.g., through residential direct load control programs), can the Commission prescribe a peak demand reduction target? In other words, can the Commission prescribe a target if it can only be met through measures offered to certain rate classes instead of across all rate classes? If so, should the Commission do so?**
  
- e) **If the SWE determines that there is cost-effective peak demand reduction potential available within the Act 129 framework but only for a certain EDC service territory, can the Commission prescribe a peak demand reduction target? In other words, can the Commission prescribe a target for only one of the EDCs? If so, should the Commission do so?**

The Commission questions whether it can direct peak demand reduction for certain EDCs or certain customer sectors but not others if demand reduction targets are not found to be cost-effective for every EDC or every customer sector. At the outset, it is critically important that demand response programs be properly designed and evaluated when determining cost-effectiveness. With a proper design and evaluation, the OCA expects that some level of demand response program would be cost-effective for all customer sectors and all EDCs.

The OCA would also note that an EDC’s overall Plan must be cost-effective but not every program or measure within the Plan may necessarily be cost-effective on a stand-alone basis. The ultimate goal for each EDC should be to have a diverse plan that provides reliability and economic benefit to all of its customers in an overall cost-effective manner. The OCA continues to see demand response as an integral part of a diverse, comprehensive plan that provides opportunities to customers and benefits to the system. The EDCs should continue to

work to design appropriate demand response programs and maximize the cost-effectiveness of their designs given the circumstances in the individual service territories. These efforts may take on even more importance as the future of demand response in PJM's markets continues to evolve.

- f) **If the SWE determines that there is *no* cost-effective peak demand reduction potential within the Act 129 framework, should the Commission again, as in Phase II, allow the EDCs to utilize all of their budgets for consumption reduction programs? Should the EDCs again, as in Phase II, be allowed to include voluntary peak demand reduction programs within their EE&C plans, so long as those programs are cost-effective and the EDCs can still meet their consumption reduction requirements?**

If there is no cost-effective or marginally cost-effective Demand Response, which the OCA does not expect, EDCs should still be allowed to include voluntary programs. Some EDCs have invested millions of dollars of ratepayer money in equipment to run the demand response programs. Customers have accepted the programs and are providing an important system benefit. The EDC should be allowed to continue these programs, particularly as the economics and cost-effectiveness of the programs may change over time.

Additionally, if the Commission does not include demand response programs, the Commission should ensure that some of the energy efficiency programs emphasize components that reduce peak demand as well as save energy.

- C. Inclusion of a Reduction Target Carve-out for the Government, Educational and Non-Profit Sector

The Commission seeks comment on three specific questions concerning the potential inclusion of a reduction target carve-out for the Government/Educational/Non-Profit sector. The OCA submits the following responses on these issues.

- a) **If the SWE determines that there is cost-effective consumption and/or peak demand reduction potential in the G/E/NP sector within the Act 129 framework, should the Commission include a carve-out for reductions in that sector?**

Yes. The OCA submits that this customer segment is unique and hard-to-reach. Customers in this sector typically have greater barriers and impediments to acquiring energy efficiency and peak reduction opportunities than do customers in other segments. If the SWE determines there is cost-effective consumption and or peak demand reduction potential in the G/E/NP sector within the Act 129 framework, then the OCA submits that the Commission should designate a carve-out for overall plan-related reductions for that sector.

- b.) **If so, should it be:**
- i) **The same 10% carve-out as prescribed in Phases I and II?**
  - ii) **A percentage of the overall savings, as in Phases I and II?**
  - iii) **A sector carve-out based on that sector's potential in each EDC's service territory? This option may result in different savings carve-outs for each EDC.**
  - iv) **Some other methodology?**

The carve-out value should be no less than the 10% prescribed in Phases I and II. It may be beneficial, however, to further review the carve-out based on the sector's potential in each EDC service territory before finalizing the carve-out. It is also possible that this sector may be differently situated in different parts of the Commonwealth.

- c.) **If there is a G/E/NP carve-out, should the Commission again, as in Phase II, encourage the EDCs to give special emphasis and consideration to multifamily housing and to reach out to PHFA for assistance and coordination in these efforts? If so, should the Commission require multifamily properties to be owned by a non-profit or government entity to qualify under the G/E/NP sector, or should we simply require, as in Phase II, that the properties be financed under a Federal or State affordable housing program and have long-term use restrictions in place?**

Assuming there is a G/E/NP carve-out, the Commission should require that the EDC's give special emphasis and consideration to multi-family housing and to reach out to PHFA for assistance and coordination in these efforts.

The OCA would also note that multi-family housing other than that owned by a non-profit or government entity should be considered. If the properties are financed under a Federal or State affordable housing program and have long-term use restrictions in-place which would result in long-term public benefits these properties should be eligible for treatment.

A question was also raised at the stakeholder meeting about the inclusion of multi-family dwellings when the building is master-metered and served under a commercial account. In the OCA's view, these building should be considered for treatment as part of the commercial programs, most likely under the custom programs for commercial customers. While the measures would be similar to those installed under the residential programs, the benefits of the treatments accrue to the landlord/owner of the property and to the commercial class as a whole. For example, any reduction in energy use or demand through the commercial meter would benefit the commercial class by reducing the commercial class' overall demand and energy requirements. Similarly, the reduction in a landlord/owner's bill benefits the landlord/owner and does not necessarily flow through to tenants who may be under lease arrangements. It is also important to recognize that the occupants of the dwelling units are not utility customers and do not pay utility bills. As such, the costs and benefits of the multi-family housing program for units behind a commercial master meter should remain within the commercial class.

D. Inclusion of a Reduction Target Carve-out for the Low-Income Sector

- a) **If the SWE determines that there is cost-effective consumption and/or peak demand reduction potential in the low-income sector within the Act 129 framework, should the Commission include a carve-out for reductions in that sector?**

Yes. According to the U.S. Census Bureau approximately 1.7 million of Pennsylvania's 12.8 million population are living in poverty. This equates to over 13% of the population. This customer segment encounters major impediments and barriers that prevent many from implementing energy efficiency and peak reduction opportunities. These customers have very little discretionary funds and most are struggling to obtain housing, food, medical care, heating and electricity, shelter and the basics of life for themselves and their families. The OCA submits that the Commission should designate a carve-out for overall plan-related reductions for the low-income sector.

- b) **If so, should it be:**
- i) **The proportionate number of measures requirement as prescribed in Phase I?**
  - ii) **The same 4.5% savings carve-out as prescribed in Phase II?**
  - iii) **A different percentage of the overall savings?**
  - iv) **A sector carve-out based on that sector's potential in each EDC's service territory? This option may result in different sector savings carve-outs for each EDC.**
  - v) **Some other methodology?**

The carve-out value should be no less than the 4.5% savings goal used in Phase II.

- c) **If there is a low-income carve-out, should the Commission again, as in Phase II, allow the EDCs to include savings from multifamily housing, up to the percentage of customers living in the multifamily housing with incomes at or below 150% of the FPIG, toward the goal?**

The OCA submits that the Commission should allow the EDCs to include savings from multifamily housing where the tenants pay the electric bill, up to the percentage of customers living in the multifamily housing with incomes at or below 150% of the FPIG, as

counting towards the goal.

E. Inclusion of Whole-House Measures

In its Secretarial Letter, the Commission sought comment on whether it should require EDCs to develop EE&C plans that contain at least one comprehensive measure for residential and small commercial rate classes in Phase III. The Commission also asked that, if so, should it be amended to require more than one measure. As an initial point of clarification, the OCA would describe whole-house as a program, not a measure. As a whole house program, treatment of the home should consider a variety of measures such as insulation, weatherstripping, lighting, refrigerator replacement, water heater wrapping or replacement, etc. This approach is similar to the federally funded Weatherization Assistance Program (WAP) applicability tests and delivery approach, which requires that all the items on their checklist be completed before leaving the premises. Once on site and the investment is made to get an implementation contractor physically present, the maximum amount of cost-effective measures should be installed. The OCA recommends that the Commission include a directive for Phase III that a comprehensive whole house program be included in the residential portfolio.

F. EDC Phase III Budgets

i. Accumulated Savings in Excess of Reduction Requirements

The Commission asked two questions regarding the accumulated savings issue:

- a) **Should the Commission allow for the continued spending of Phase II budgets after targets are met?**
- b) **Should we allow the EDCs to apply any excess consumption reductions from Phase II towards their Phase III consumption reduction requirements?**

The OCA is of the view that the ultimate objective of the EE&C Programs is to capture as much of the cost-effective energy efficiency and demand resources that are available under the budget. The EE&C programs deliver resources that are by definition economically superior to other alternatives when compared to system avoided costs. As long as benefits continue to be shown, the OCA supports the continued spending of the budgets after targets are met.

In addition, it is difficult to precisely predict which energy efficiency technologies will be of interest to customers and which programs will be better received than others. Allowing utilities and implementation contractor's flexibility (within reasonable guidelines) is essential to enhance the effective management of energy efficiency and demand response programs. The Commission should allow the banking of savings resulting from an EDC exceeding its program targets in one period to be applied to a future period. This is a reasonable and important policy, which places high priority on maintaining implementation momentum.

ii. Finalizing Phase II Spending

- a) **Should the Commission prescribe a deadline for the submission of rebate applications following the in-service date of the measure? For example, rebate applications would need to be submitted within 180 days from the in-service date of the measure to qualify for a rebate.**
- i) **Or, should an EDC be required to develop application deadlines specific to its programs?**

The OCA submits that it is reasonable for EDCs to develop application deadlines for its programs. For example, a custom retrofit program may require upfront applications, justification, and approvals for measures. On the other hand, it may be reasonable for certain LED lighting retrofit project criteria to require that applications be received within a specified

period of purchase or installation of lighting measures. Reasonable deadlines will assist in program administration.

- b) **Should the Commission prescribe a deadline for the submission of rebate applications for measures installed at the end of a Phase? For example, rebate applications would need to be submitted within 90 days of the end of a Phase in order for the EDC to finalize its spending from that Phase.**
  - i) **If so, should it be the same deadline as utilized for measures installed in the beginning or middle of a Phase?**
  - ii) **Or, should the EDCs be required to develop their own program-specific deadlines within their plans?**

While the OCA submits that EDC's should be afforded the flexibility to develop their own program-specific deadlines within their plans, a cut off date at the end of the phase would be useful in finalizing cost recovery and avoiding overlap in the phase costs. The OCA recommends, however, that deadlines remain consistent throughout the phase and not change at the end of the phase. Changes in the deadlines could cause consumer and trade ally confusion.

- c) **What is an appropriate length of time for the EDCs to "true-up" their costs/budgets for Phase II? Should the Commission consider allowing the EDCs to roll all residuals of Phase II into their Phase III surcharges, for true-up purposes only, instead of keeping a Phase II surcharge in place while the Phase III rate is effective?**

The true up period may depend on the deadlines established for rebate applications and program implementation. EDCs should target 180 days from the end of the program phase to perform the final true up. The recovery or refund period for the final true up may depend on the amount remaining to be recovered or refunded.

The OCA takes no specific position on the treatment of the residuals. Such treatment should consider audit requirements as well as customer confusion from multiple surcharges.

G. Updating the Technical Reference Manual

a) **Should the Commission maintain an annual TRM updating process for Phase III?**

Yes. The TRM is a valuable resource that must be maintained and kept up-to-date. It is OCA's understanding that the creation of the Pennsylvania Technical Resources Manual as well as TRM's in others jurisdictions required an intense up-front effort. Designing the format, prioritizing measures, deciding on appropriate calculation methodology, deciding how the TRM is to be used and many other foundational tasks have been completed and won't need to be replicated in Pennsylvania. As more research, modeling, EMV reports and analyses (especially local analyses) are completed those results and findings need to be carefully considered and included (where appropriate) in the Pennsylvania TRM. Since errors and mistakes may be discovered, measure and installation costs change, more relevant research is being conducted in Pennsylvania and throughout the US, it is reasonable to require an annual review and update process for the TRM.

b) **If not, how often should the TRM be updated?**

Updating the TRM should be an ongoing process. Formal changes to the TRM should be made annually.

c) **Is the updating schedule dependent on the length of Phase III? For example, if the Commission implements a three-year phase vs. a six-year phase, would that affect how often we should update the TRM?**

OCA believes that the duration of the program Phase has little to do with the need and frequency to update the TRM. Revision of the TRM is related more market conditions, technology changes, new research and other factors rather than to the duration of an EE&C program phase.

H. Updating the Total Resource Cost Test

- a) **Should the Commission establish a periodic review and updating process for the TRC Test methodology in Phase III?**
- b) **How often should the TRC Test methodology be reviewed?**
- c) **Should a periodic review and updating of the TRC Test methodology process schedule be dependent on the length of Phase III? For example, if the Commission implements a three-year phase vs. a five-year phase, would that affect how often we should review the TRC Test methodology and consider updates?**

No. Once the TRC is defined and the equations set, there should be no need to review the methodology.

- d) **In our Phase I and Phase II Implementation Orders, we declined, among other things, the requests from certain stakeholders to require inclusion of societal benefits in the TRC equation and analysis. We have seen no reasons emerge during the span of the two phases to change such a determination and do not intend to revisit those issues again in this process of addressing Phase III issues based on any theories or arguments that have heretofore already been made. If, however, there are new data, theories, or arguments available, they may be presented in comments along with other relevant comments.**

The OCA does not support a change in the TRC equation and analysis.

### III. CONCLUSION

The OCA appreciates the opportunity to provide its Comments on these important issues. The OCA submits that it is critically important that on-going energy efficiency and demand response programs remain active as the Commission, EDCs and stakeholders work toward the implementation of Phase III, and that the stakeholders and EDCs have sufficient time to design and implement appropriate Phase III programs and Plans.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Aron J. Beatty', written over a horizontal line.

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