

COMMONWEALTH OF PENNSYLVANIA



OFFICE OF CONSUMER ADVOCATE

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IRWINA. POPOWSKY  
Consumer Advocate

December 23, 2010

Rosemary Chiavetta  
Secretary  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17105-3265

RE: Implementation of the Alternative Energy  
Portfolio Standards Act of 2004: Standards for  
the Participation of Demand Side  
Management Resources – Technical  
Reference Manual 2011 Update  
Docket No. M-00051865

Dear Secretary Chiavetta:

Enclosed for filing are the Comments of the Office of Consumer Advocate, in the  
above-referenced proceeding.

Should you have any questions, please contact me at the telephone number above.

Respectfully Submitted,

A handwritten signature in cursive script that reads "Tanya J. McCloskey".

Tanya J. McCloskey  
Senior Assistant Consumer Advocate  
PA Attorney I.D. # 50044

Enclosure

cc: Gregory A. Shawley, CEEP – via electronic mail: gshawley@state.pa.us  
Kriss Brown, LAW – via electronic mail: kribrown@state.pa.us.

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BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Implementation of the Alternative	:	
Energy Portfolio Standards Act of 2004:	:	
Standards for the Participation of Demand	:	Docket No. M-00051865
Side Management Resources – Technical	:	
Reference Manual 2011 Update	:	

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COMMENTS OF THE  
OFFICE OF CONSUMER ADVOCATE

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I. INTRODUCTION

On December 4, 2010, the Commission’s Tentative Order regarding the 2011 update to the Technical Reference Manual (TRM) was published in the *Pennsylvania Bulletin* for comment. Through this Tentative Order (2011 TRM Annual Update Tentative Order or Tentative Order), the Commission identifies additions, modifications and improvements to the TRM that are intended to reflect more recent research and the experience of the EDCs to date with the implementation of the energy efficiency and conservation plans (EE&C Plans). The proposed improvements also reflect the result of site inspections conducted by the statewide evaluator (SWE), comments of conservation service providers, comments of the EDCs’ independent evaluators, and EDC proposals. Tentative Order at 4. The Commission seeks comment on these additions, modifications and improvements.

The Commission also seeks comment on two specific issues. First, the Commission seeks comment on how to fairly address the tradeoff between the updating of the

TRM with more recent assessments of energy savings and the possibility that such adjustments may require greater market penetration or program modifications to meet the mandated goals. Tentative Order at 5. Second, the Tentative Order seeks comment on how the TRM should account for Federal legislation and regulations that prohibit the production and sale of less efficient lighting. Tentative Order at 11.

The OCA has had the opportunity to review the proposed additions, modifications and improvements to the TRM for 2011. The OCA would note that it was assisted in its review by staff members of the Vermont Energy Investment Corporation.<sup>1</sup> In general, the OCA finds the changes and updates to be within a reasonable range and consistent with current practice.

The OCA offers the following recommendation for consideration in the next annual update process and responds to the two issues presented by the Commission.

## II. COMMENTS

### A. Consideration Should Be Given In Future Updates To Further Segmentation Of Low Income Household Baseline Data.

In its Tentative Order, the Commission proposes to add new measures to the TRM to reflect EE&C measures being implemented by the EDCs that were not previously included in the TRM and to update baseline data for certain measures based on more recent experience. By way of example, the Tentative Order notes that it has added about 18 residential EE&C measure protocols to the TRM such as ceiling/attic and wall insulation, efficient electric water heaters, room air conditioner retirements, smart strip plugs, solar water heaters, and others. The deemed savings associated with these measures can now be used by the EDCs to determine progress toward the savings goal. The Commission has also updated the baseline data for compact

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<sup>1</sup> Vermont Energy Investment Corporation (VEIC) is a non-profit organization that operates Efficiency Vermont which delivers energy efficiency programs in Vermont. VEIC also provides implementation services across the nation and provides consulting services both nationally and internationally.

fluorescent lighting measures and refrigerator/freezer retirement measures. The update for the CFL measures reduces the baseline usage for the CFL from 3 hours of operation to 1.9 hours of operation, thus reducing the deemed savings available for each CFL installed. The deemed savings for the refrigerator/freezer retirement have also been reduced.

The OCA supports the inclusion of additional EE&C measures in the TRM as well as updating baseline data as more information becomes available. Expansion of the included measures in the TRM will assist in identifying opportunities for savings that should be useful to all program managers. Updating and improving the TRM based on recent experience can better ensure the reliability of the deemed savings for each measure. With significant program design decisions and spending decisions often driven by the savings achieved from the various measures, it is critically important that all stakeholders have the most reliable and up to date information to guide these decisions. The improvements and modifications to the TRM should provide this necessary information.

The OCA would make one recommendation for consideration in the on-going updating process. As noted, the baseline data for certain residential sector measures have been adjusted in a manner that will reduce the deemed savings for these measures from the prior TRM. The OCA would also note that for some of the new measures added to the TRM, the deemed savings identified for the measure are lower than the savings assumed by some EDCs in the initial design of the EE&C programs. From the OCA's participation in the stakeholder process of several EDCs, the OCA is aware that these changes in deemed savings levels from the prior TRM, and from levels assumed in designing the programs, has occasioned a reconsideration of certain program measures in the low income programs. Based on the changes in the deemed savings levels, it is possible that some of these measures will not be pursued as

part of the low income programs due to the lower potential for deemed savings based on the TRM.

While the OCA agrees in general with the proposed modifications to the TRM for the general residential customer sector, the OCA submits that in future updating processes, further consideration should be given to whether a separate set of baseline data should be developed for the low income residential sector, particularly for certain appliance and lighting measures. The 2011 TRM appears to have given specific consideration to low income baseline data for one measure, the refrigerator/freezer recycling and replacement measure, but it is not clear whether such consideration has been incorporated for other measures deployed in low income programs. See, 2011 TRM, pg. 88. Consideration should be given in the on-going updating process to low income baseline data for other measures, as well as to segmentation of the low income baseline data for determining deemed savings for low income programs.

It is important to note that savings from certain measures may be significantly different when the measure is deployed in a low income household than when the measure is deployed in the average residential household. Low income customers are likely to have different baseline usage patterns than other residential customers resulting from a variety of factors such as disability, higher number of senior citizens or retired persons, nonstandard working hours, and slower turnover of products. For many appliances in particular, there is evidence that with relatively “big ticket” items such as refrigerators and room air conditioners, low income customers have a pattern of acquiring used or second-hand devices. As a result, the baseline data for the appliances in a low income household may be far different from an average household that may be replacing or retiring appliances that are not as old. In addition, for low income households, where residents may be at home throughout the entire day, the hours of use

for certain appliances and lighting could be much higher, leading to greater resulting savings from the EE&C measures.

The OCA submits that the use of baseline data to identify deemed savings that is not sufficiently segmented to address low income household needs may lead to improper incentive levels for certain measures or even the outright rejection of certain program measures for the low income programs as not sufficiently cost-effective. If, however, a measure is evaluated using baseline data appropriate to the low income customer segment, the measure may prove cost-effective.

The OCA submits that when working with the unique challenges of the low income programs, it is important to have baseline data specific to the low income population reflected in the TRM so that all reasonable measures can be included in the program design and used to assist low income customers. The OCA recommends that as further updates to the TRM are considered, particular attention be given to ensuring that baseline data for all measures applicable to low income customers are established based on experience with low income customers. This will ensure that an appropriate level of deemed savings is included in the TRM and will avoid the potential to unduly limit low income program measures if the savings that can be achieved are seen as too small.

B. Adequate Time Should Be Provided To Make Necessary Plan Adjustments In Response To TRM Updates.

In its Tentative Order, the Commission seeks comments on “how to fairly address the tradeoff between the use of baseline data derived from more recent data that reflects a more accurate assessment of current energy savings and the possibility that such adjustments may require greater market penetration to meet mandated goals.” Tentative Order at 5. The OCA agrees with the Commission’s goal to ensure the reliability of the savings claims as many

decisions that affect the EDC ratepayers, as well as the EDCs, depend upon these savings calculations. For the savings calculations and related decisions to be accurate and informative, it is important to reflect more current information and technology.

The OCA submits, however, that changes to the TRM deemed savings are likely to necessitate changes in program design and implementation ranging from incentive levels to participation levels, to the appropriate portfolio of programs to achieve the mandated savings goals. It will be important as the programs are being implemented to provide sufficient time and flexibility for the programs to adjust to the updated TRM if the deemed savings for program measures are being changed. As the Commission has already recognized, the changes to the deemed savings levels for specific measures should be applied prospectively and should not impact already deployed and achieved savings.<sup>2</sup> 2011 TRM, pg. 5. Program managers, however, must also be given adequate time to adapt the programs to the changing baselines and claimed savings levels. In light of this, the OCA submits that updates to the TRM should be coordinated with the EDC program year so that the TRM is finalized sufficiently in advance of the next program year filing to allow the EDC to make the necessary changes to the Plan. The new TRM values should then be applied once the revised Plan is approved.<sup>3</sup>

Program design and implementation are continuous processes informed by many factors, including a better understanding of the markets and customers as well as a better understanding of the savings to be achieved from the program measures. The OCA recommends

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<sup>2</sup> Deemed savings for new items added to the TRM could take effect immediately so as to allow those measures to be deployed without undue expense for additional measurement and verification.

<sup>3</sup> At this time, the two initiatives of updating the TRM and obtaining Commission approval for program modifications may not be ideally timed. Most EDCs filed amendments to their Plans in September of 2010 before the release of the updated TRM for 2011. While some EDCs attempted to anticipate the TRM changes, until those changes are finally approved by the Commission, it may not be possible to fully assess the program changes. The OCA would urge the Commission to conduct further discussions about the timing of these initiatives with the stakeholders.

that the Commission apply changes to the deemed savings levels for existing program measures prospectively after providing sufficient time for any necessary program modifications to be approved and implemented.

C. Changes To Minimum Standards Should Be Accounted For In The Updating Process.

The Commission also seeks input on how the TRM should account for Federal legislation and regulations that prohibit the production and sale of less efficient lighting. Tentative Order at 11. The OCA submits that the TRM should be updated to reflect the impact that changing federal minimum standards will have on the baseline usage data for the lighting measures. Failing to reflect these changes could lead to investment in programs that are no longer cost-effective or supported.

When considering TRM updates based on revised minimum standards, it is important to understand the precise nature of the revision and to assess the prospective impact of the revision on the market. For example, if a new standard prohibits the manufacture of a less efficient product, but the less efficient product can still be sold, the impact of the continued sale of the product in the market needs to be accounted for in the baseline data. Such impacts could result from the potential stockpiling of the product for future sale or the sale of the product in the second hand market. In such instance, the program, and the deemed savings, may be viewed more as retirement or replacement measures, thus impacting the baseline data determination.

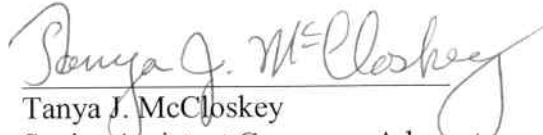
The OCA agrees that new minimum standards must be reflected in the updating process of the TRM, but the update should consider all impacts of the new standards.



### III. CONCLUSION

The OCA appreciates the opportunity to comment on the 2011 Updated Technical Reference Manual. The OCA looks forward to continuing to work on the implementation of effective energy efficiency and demand response programs in Pennsylvania.

Respectfully Submitted,

  
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