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June 5, 2009

**VIA HAND DELIVERY**

James J. McNulty, Secretary  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street, 2<sup>nd</sup> Floor  
Harrisburg, PA 17120

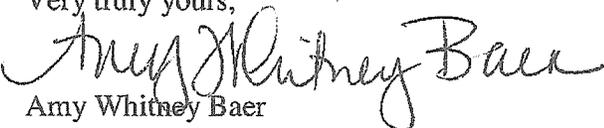
**Re: Comments of PECO Energy Company on the Commission's  
May 21, 2009 Draft Order, Docket No. M-2009-2108601**

Dear Secretary McNulty:

Pursuant to the May 21, 2009 Secretarial Letter issued in this docket, enclosed for filing are an original and fifteen copies of the Comments of PECO Energy Company on the Commission's May 21, 2009 Draft Order. The comments are also being sent to the Commission's Act 129 e-mail account.

Please do not hesitate to contact me should you have any questions.

Very truly yours,

  
Amy Whitney Baer

AWB/mb  
Enclosures

**Via Electronic Mail**

cc: ra-Act129@state.pa.us

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Implementation of Act 129 of 2008 - : Docket No. M-2009-2108601  
Total Resource Cost Test :

**COMMENTS OF PECO ENERGY COMPANY  
ON THE COMMISSION'S MAY 21, 2009 DRAFT ORDER**

Pursuant to the Secretarial Letter and Draft Order dated May 21, 2009 at the above-captioned docket (the "May 21 Draft Order"), PECO Energy Company ("PECO" or the "Company") hereby submits its comments to the total resource cost ("TRC") test proposed by the Pennsylvania Public Utility Commission (the "Commission"). As noted in the May 21 Draft Order, the TRC test is to be used in evaluating the cost-effectiveness of energy efficiency and conservation ("EE&C") plans to be implemented by electric distribution companies ("EDCs") in compliance with Act 129 of 2008 ("Act 129").

**I. INTRODUCTION**

Section 2806.1(b)(1)(i)(I) of Act 129 provides that EDCs must demonstrate that their EE&C plans are "cost effective using a total resource cost test approved by the commission." In its January 16, 2009 Implementation Order at Docket No. M-2008-2069887, the Commission concluded that the TRC test set forth in *The California Standard Practice Manual-Economic Analysis of Demand-Side Programs and Projects* (the "California Manual") supplied "an excellent beginning framework," noting, however, that further review of the California Manual was in order to determine whether any modifications were needed to meet Act 129's unique requirements (January 16, 2009 Order, pp. 14-15). This proceeding was initiated for that limited purpose.

PECO has carefully reviewed the May 21 Draft Order and commends the Staff for developing a sensible TRC test, tailored to Pennsylvania's requirements, that can be utilized to measure the cost effectiveness of the EDCs' EE&C plans. PECO generally concurs with the Commission's proposed modifications to the California Manual. Indeed, the only issue on which PECO offers extended comment relates to the "avoided costs of supplying electricity" (May 21 Draft Order, p.6). As explained below, while the May 21 Draft Order's overall approach for quantifying "avoided cost" is a sound framework, the Commission's proposed formulation, as described therein, would benefit from additional specification.

## **II. SPECIFIC COMMENTS**

### **A. Level at Which to Measure TRC**

PECO agrees that the TRC test should be applied to an EDC's plan taken as a whole (May 21 Draft Order, pp. 5-6). This is not to say that the relative costs and benefits of individual plan components will not be measured and assessed. However, it is broadly recognized that particular measures may not yield positive monetary benefits, yet they may be strategically important in terms of facilitating the achievement of the plan's overall savings goals. For example, certain renewable resource measures such as solar PV systems may not pass the TRC test. Nonetheless, these measures may contribute to the EDCs' overall savings goals, and they are an important part of educating customers about using renewable resources to offset their use of electricity. Consequently, as long as an EDC's EE&C plan, viewed in its entirety, produces net benefits, it should be deemed to pass the TRC test and thereby comply with Act 129.

## B. Avoided Costs of Supplying Electricity

The May 21 Draft Order outlines a methodology for quantifying the supply costs that presumptively will be avoided as a result of the reduction in electricity consumption achieved by the EE&C plans (May 21 Draft Order, pp. 6-7). As noted previously, PECO does not take issue with Staff's fundamental approach. At the same time, it is critically important, where possible, that data sources and calculation methodologies be further defined and specified to minimize confusion and/or future debate. With that in mind, PECO recommends that the Commission's discussion of avoided costs be revised as follows:

**Avoided Energy Costs.** NYMEX PJM Western Hub futures prices, both on-peak and off-peak, will be employed for all years in which data is fully available.<sup>1</sup> (An around-the-clock ("ATC") energy price could be approximated by equally weighting the on- and off-peak futures prices, as proposed in the May 21 Draft Order, or could be based on the actual time-weighting associated with these periods.) Thereafter, NYMEX Henry Hub natural gas futures prices will be employed for all years in which data is fully available and will be converted into electric prices by applying a market-implied heat rate derived by taking the ratio of PJM Western Hub futures prices to Henry Hub futures prices for the latter year(s) in which data for both is available.<sup>2</sup> For the remainder of the fifteen-year period, for which neither energy nor natural gas futures prices are available, the EDC should use its best judgment, an extrapolation of the NYMEX futures prices, and/or the application of historic price escalators.

<sup>1</sup> PECO notes that, at present, NYMEX PJM Western Hub futures prices are quoted only through calendar year 2013 (*i.e.*, less than the full five-year period assumed by the May 21 Draft Order).

<sup>2</sup> This methodology is similar to that employed in PECO's Commission-approved Default Service Plan (Pa. PUC Docket No. P-2008-2062739) for purposes of calculating the collateral requirements of PECO's default service suppliers (*see* Appendix A).

The foregoing energy prices should be adjusted to reflect: (1) differences in energy prices between the PJM Western Hub and the EDC's Zone and (2) usage characteristics by rate class. The first adjustment should be made by applying the historical ratio, calculated over the previous twenty-four months, of the EDC's average hourly day-ahead locational marginal price ("LMP") to the PJM Western Hub's average hourly day-ahead LMP.<sup>3</sup> The second adjustment, *i.e.*, to reflect usage characteristics by rate class, should be made by calculating and applying a load-weighting factor based on historical real-time hourly price and load data.

Finally, an EDC may elect to include the effect of potential carbon abatement legislation by adding to its avoided energy costs the product of: (1) an estimate of the marginal carbon dioxide emission rate as published by the Environmental Protection Agency ("EPA") and (2) a then current forecast of carbon allowance prices as published by the EPA.

**Avoided Capacity Costs.** Consistent with the May 21 Draft Order, an EDC's avoided capacity costs should be determined by reference to applicable PJM Reliability Pricing Model ("RPM") capacity auction results for the EDC's zone. At present, such prices are available only through May 2013. Consequently, for subsequent years, the estimated avoided capacity costs should be calculated by applying an escalation factor to the appropriate RPM capacity price for June 2012 – May 2013.

**Avoided Alternative Energy Portfolio Standards Costs.** A reduction in electric consumption will also lessen an EDC's costs of complying with Pennsylvania's Alternative Energy Portfolio Standards ("AEPS") requirements. Avoided AEPS compliance costs should be determined by multiplying the projected reduction in required alternative energy credits

<sup>3</sup> This adjustment, derived from actual market data, captures several of the factors (*e.g.*, congestion, zonal locational basis differences) cited in the May 21 Draft Order at page 7.

("AECs") by the estimated unit costs of such credits for all types of AECs required (*i.e.*, Tier I (solar), Tier I (non-solar), and Tier II).

**Avoided Transmission and Distribution Costs.** Consistent with the May 21 Draft Order, an EDC's avoided transmission and distribution costs should be determined by applying prevailing tariffed rates, adjusted for projected inflation.

**Avoided Ancillary Services Costs.** An ancillary service rate, in \$/MWH, should be determined based on actual net ancillary service costs for associated wholesale energy for the EDC, calculated over the previous twenty-four months. For subsequent years, the estimated avoided ancillary service costs should be calculated by applying an escalation factor to this rate.

All costs developed at wholesale levels should be adjusted to retail rates by accounting for EDC transmission and distribution line losses.

**Market Uncertainty Adjustment.** It is not clear from the May 21 Draft Order what is intended by the proposed "market uncertainty adjustment"; how such an adjustment might be quantified; or why its inclusion in a TRC calculation would be appropriate. If the Commission disagrees with any of the EDC's specific input assumptions, it can always request, as part of its review of an EE&C plan, that the EDC's cost/benefit analysis be rerun using different assumptions.

### **C. Maximum 15-Year Measure Life**

PECO agrees that Act 129 appears to limit application of the TRC test to consideration of costs and benefits over a plan period not to exceed fifteen years.

#### **D. Incentive Payments from an EDC**

PECO agrees that costs calculated in the TRC test should include EE&C plan costs, whether paid by the EDC or the participants, but that incentive payments from an EDC to a customer should not be included in the TRC as they are both an EDC cost and customer benefit that cancel each other out.

#### **E. Incentive Payments from Outside Sources**

PECO agrees that incentive payments from sources outside Act 129 programs are a benefit that decreases costs to customers participating in energy efficiency and conservation programs and should be accounted for in TRC calculations *to the extent that the EDC is aware of these incentives*. PECO adds this qualification as there may be new incentives that EDCs may not be aware of, and program costs should not be increased by requiring EDCs to know of the existence or creation of every possible incentive or tax rebate.

#### **F. Savings Claims From Act 1 Programs and Act 129 Programs**

PECO agrees with the Commission that if an end-use customer is a recipient of an incentive or rebate from an Act 129 program and an Act 1 (or other) program for the same equipment or service, the entire savings of that equipment or service should be claimed by the EDC for TRC testing purposes. However, consistent with this position, the Commission should also make it clear that in such circumstances the EDC should also be able to claim all of the Act 129 energy efficiency or demand reduction credit for the equipment or service.

As PECO has noted many times in stakeholder meetings and other presentations, Act 129's goals are extremely aggressive. As EDCs are the only entities that will face stiff penalties if the Act's mandatory targets are not met, they should receive 100% of the Act 129 savings credit attributable to equipment or services to which they provide incentives. Indeed, this is consistent with the language of the Act, which defines "Energy efficiency and conservation

measures” as technologies for which “[t]he cost of the acquisition or installation of the measure is directly incurred *in whole or in part* by the electric distribution company.”<sup>4</sup>

#### G. Net-to-Gross (NTG) Adjustments to Savings

In both the May 21 Draft Order and its June 1, 2009 Order at Docket No. M-00051865 updating its Technical Reference Manual (“TRM”), the Commission indicates that, for July 1, 2009 EE&C plan filing purposes, a Net-to-Gross (“NTG”) ratio of one should be assumed.<sup>5</sup> The May 21 Draft Order further directs EDCs to study “whether free-rider, take-back effect, and spillover effect are present for the more prevalent efficiency measures,” and goes on to note that the results of those studies will be used to determine if NTG adjustments (other than one) should be made in the future (pp. 10-11).

PECO commends Staff for proposing future updates to the NTG, but offers the following comments to clarify how the process will work. First, in determining when studies would be conducted, and, as a result, when adjustments for future NTG ratios would be made, it must be recognized that EE&C programs will be launched in a phased approach, over a multi-year period. Thus, a full year’s worth of data will likely not be available for most measures until Year 2 and possibly Year 3 of the plan. The studies would then need to be coordinated between the EDCs and the Statewide Evaluator (should the Commission choose to have the Evaluator perform this coordination service). As a consequence, the final NTG ratios would likely not be available until Years 3 or 4, or at approximately the time when the next EE&C plan (*i.e.*, post 5/31/13 plan) was being developed. Second, PECO requests the Commission to clarify that any such NTG adjustments will not be used to revisit the TRC test results or otherwise to second-

<sup>4</sup> See 66 Pa. C.S. § 2806.1(m)(1)(iii) (emphasis added).

<sup>5</sup> *Implementation of the Alternative Energy Portfolio Standards Act of 2004: Standards for the Participation of Demand Side Management Resources – Technical Reference Manual Update* (June 1, 2009), at 17.

guess the cost-effectiveness of an EDC's as-filed EE&C plan. This is consistent with the Commission's holding with respect to the Technical Reference Manual in its January 16 EE&C Implementation Order that "[a]ny such updates [to the TRM] will be prospective in nature and applicable to measures undertaken after final approval of any TRM changes."<sup>6</sup>

#### H. The Appendix

At pages 4 and 12, the May 21 Draft Order states that the formulae to be used in implementing the Commission's Pennsylvania-specific TRC test are set forth in an attached Appendix. However, the Appendix in question contains a series of formulae and definitions, apparently extracted from the California Manual, that apply to the "Participant Test" and the "Ratepayer Impact Measure Test," neither of which was adopted by the Commission. PECO assumes that the Commission included these formulae and definitions as many of them are components of the TRC test. Nonetheless, PECO requests that the Commission make clear that it is only using these formulae and definition as they pertain to the TRC and not to apply the "Participant Test" and the "Ratepayer Impact Measure Test" to EDC plans.

#### I. Limited Use of TRC Results

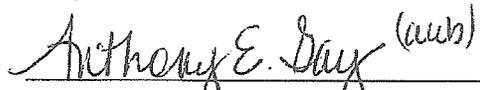
PECO concurs with the Commission that the TRC test "will be a critical measuring tool in determining the cost effectiveness of the EDCs' EE&C plans" (p. 2). PECO submits, however, that TRC test results should be utilized solely for their intended purpose (*i.e.*, ranking and prioritizing potential energy efficiency measures) and not cited in other proceedings as evidence of an EDC's prudence or cost of service.

<sup>6</sup> January 16, 2009 Order at 14.

### III. CONCLUSION

PECO appreciates the opportunity to comment on this important matter and believes that the Draft Order, as revised herein, will establish the necessary blueprint for the successful implementation of Act 129's energy efficiency and conservation provisions. However, given the July 1, 2009 deadline for the filing of EE&C plans, timing is critical and PECO therefore asks the Commission to incorporate the foregoing comments as expeditiously as reasonably possible.

Respectfully submitted,

 (uwb)

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Counsel for PECO Energy Company

Dated: June 5, 2009

## APPENDIX A

## APPENDIX A

### METHODOLOGY FOR CALCULATION OF MARK TO MARKET (MTM) EXPOSURE

*Excerpt:*

#### Process to Update the On-Peak Initial Mark Prices and Off-Peak Initial Mark Prices on a Daily Basis

On each Business Day subsequent to the Transaction Date, the Pricing Agent will contact four Reference Market-Makers to obtain price quotes for on-peak and off-peak energy for PJM Western Hub.

.....

As a reasonable alternative source of price data, the Buyer may use the following methodology:

- A calendar year on-peak/off-peak energy price, for the calendar year pertaining to the delivery period for which the On-Peak/Off-Peak Forward Price is being developed, is calculated using the following methodology:
  - First, a Market-Implied Heat Rate is calculated as the ratio of the calendar year On-Peak and/or Off-Peak forward energy price (calculated using On-Peak/Off-Peak Forward Prices) to the calendar year Henry Hub forward natural gas price (calculated using Henry Hub forward natural gas prices quoted by NYMEX) for the calendar year for which price data sufficient to calculate both prices are available and that is the farthest year in the future. As an alternative, the applicable Market-Implied Heat Rate may be determined by calculating the market-implied heat rates applicable to the last three years for which data are available that are the farthest in the future, and performing an extrapolation.
  - Next, this calculated Market-Implied Heat Rate is applied to the calendar year Henry Hub forward natural gas price (calculated using Henry Hub forward natural gas prices quoted by NYMEX) for the calendar year pertaining to the delivery period for which the On-Peak/Off-Peak Forward Price is being developed.
- The resulting calculated calendar year price for on-peak or off-peak energy is converted into respective monthly prices by applying the inter-month shape of actual On-Peak/Off-Peak Forward Prices for the calendar year that is the farthest year in the future for which prices are available.

Quotes from the sources will be examined to identify quotes that are out of line and potentially invalid or are in obvious error. Sources will be asked to either correct or verify data that is anomalous and/or inconsistent with that provided by other sources or is in obvious error. If the data cannot be verified in time for the daily mark, the anomalous data will be discarded.