

**BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Comments of the Joint Supports**

**On the Implementation of Act 129 of 2008 – Total Resource Cost Test**

**Strawman for Comments**

**In Docket No. M-2009-2108601**

**Submitted by**

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## SUMMARY OF COMMENTS

- (a) “Plan = Portfolio” - The EDC Plan should be treated as a Portfolio With the TRC Test Applied Both to the Portfolio Level and to The Programs Level within the Portfolio, But Not to the Measure Level.**
- (b) Avoided Costs of Supplying Electricity – The Commission Should Affirm That It Is Correct To Credit Residential Self-Generation Customers, At The Full Retail Rate For The Calculation Of Benefits In The TRC Test.**
- (b1) Adjustments – the Modifications Proposed To Electric Prices Allow Differentiation, but May Tend to Result in Uniformity Based Upon Annual Averages In Some Components Where Differentiation May Yield Higher TRC Benefits**
- (b2) Discount Factors Should Be Keyed To Available Sources Of Funds To Program Participants, Not To The EDC’s Weighted Average Cost Of Capital – An Alternative Is Historic Twelve-Month Average Of The Yields Of Ten-Year United States Treasury Notes As Approved for TRC Evaluation by the Massachusetts DPU.**
- (c) No Comment**
- (d) Incentive Payments From An EDC – It Is Appropriate To Treat These As A Wash.**
- (e) Incentive Payments From Outside Sources – It Is Appropriate To Treat These As Reductions To Costs.**

## **Introduction**

The E Cubed Company, LLC, on behalf of the Joint Supporters, a voluntary association of companies and organizations, is pleased to submit the following comments with regards to the Total Resource Cost Test Strawman (“TRC test”) recently released by the PAPUC. The Joint Supporters include providers of conservation services, demand response services, equipment providers and system developers (HVAC, fuel substitution, distributed generation, including combined heat and power/micro-combined heat and power) and system installers, as well as, end-users of such services and systems.

The Joint Supporters have participated in previous Commission efforts regarding energy efficiency, net metering, interconnection and alternative energy. In addition, we have been, and continue to be, active in utility commission proceedings throughout New England, as well as, in New Jersey and New York on such matters as interconnection, energy efficiency program development, demand response issues, alternative energy and energy conservation. Furthermore, we represent a number of our clients in Working Groups at the New York Independent System Operator involved with demand response and related issues. In addition, our company President, Mr. Ruben S. Brown, has sat on the New York State System Benefit Charge Advisory Group.

## **Overview**

In general, the Joint Supporters are concerned that facile, yet rigid deployment of TRC tests should not be allowed to stifle innovation and deter or slow deployment of breakthrough technologies, such as fuel substitution technologies, including combined heat and power (“CHP”) and micro-combined heat and power (“micro-CHP”).

Looking back at lighting advances, application of narrowly defined and inflexible TRC tests a decade ago would have impeded the mass production effects and benefits that have occurred while bringing down the cost of compact fluorescents and LED technology to today’s levels.

Looking forward, the opportunity to blend TRC benefits by leveraging the benefits of higher ratio or higher NPV measures, such as lighting advances for a few more years (before measure absorption levels are exceeded), within an overall portfolio of programs can be utilized to advance measures with currently lower TRC values that are transitioning to broader market

acceptance. Our remarks address items to facilitate and enhance the TRC treatment of fuel substitution technologies, including residential combined heat and power systems for 1-4 family houses.<sup>1</sup>

### **Comments**

The Joint Supporters offer the following comments with regards to several items contained in the Strawman.

**(a) “Plan = Portfolio” - The EDC Plan should be treated as a Portfolio With the TRC Test Applied Both to the Portfolio Level and to The Programs Level within the Portfolio, But Not to the Measure Level.**

The Joint Supporters agree that the TRC test should not be applied to eliminate or incorporate specific measures, independent of the context of an overall portfolio. However, a two-tier approach is more appropriate than a single-tier TRC test. The overall plan should comprise the portfolio. The Program should be treated as a component of the Portfolio. The portfolio should be created with flexibility (within the overall portfolio TRC) to move resources around AMONG programs and measures. The experience in other jurisdictions, e.g. New Jersey, demonstrates that when some programs and measures are slow to mount momentum, it can be entirely appropriate to allow resources to be redeployed within the broad TRC guideline for the entire portfolio. One segment that had been allocated \$128-130 million in 2008 was only able to

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<sup>1</sup> We generally support incorporating into this Docket No. M-2009-2108601, the comments filed by the UGI Companies on March 12, 2009 in Docket No. M-2008-2069887, pp 1-2.

### **SUMMARY OF RECOMMENDATIONS**

The UGI Distribution Companies believe the TRM should:

- Recognize that the direct end use of natural gas in lieu of electric for space, water or industrial heating purposes is an acceptable measure or practice for meeting the electric peak and load reduction goals of Act 129;
- Establish rules for the application of the total resource test in the TRM or elsewhere for evaluating fuel substitution measures, and in such rules recognize the likely savings from reduced wholesale electric and gas prices resulting from the increased efficiencies associated with the direct end use of natural gas.
- In projecting gas and electric prices for purposes of applying the total resource test, utilize easily understood methodologies, and in the case of electric retail price projections use post-rate cap rates to the extent known.

deploy \$28 million. Some was allowed to be reassigned to other programs in the portfolio and some was rolled over into the following year.

Act 129 requires

**(b) Avoided Costs of Supplying Electricity – The Commission Should Affirm That It Is Correct To Credit Residential Self-Generation Customers, At The Full Retail Rate For The Calculation Of Benefits In The TRC Test.**

In footnote 7 of the Strawman for Comments (p. 6) the Commission clarifies that EDCs will be required to credit self-generation customers at the full retail rate when estimating avoided energy and capacity costs for the calculation of the benefits in the TRC test.

<sup>1</sup> For the purposes of TRC testing, we shall require EDCs to credit self-generation customers at the full retail rate when estimating avoided energy and capacity costs for the calculation of the benefits in the TRC test. This is consistent with the regulations we adopted on July 2, 2008, pursuant to Section 1648.5 of the Alternative Energy Portfolio Standards Act, 73 P.S. § 1648.1, *et seq.*, (AEPS), relative to net metering. In particular, we modified Section 75.13(c) to read, in part: “The EDC shall credit a customer-generator at the full retail rate, which shall include generation, transmission, and distribution charges, for each kilowatt-hour produced. . . .” 52 Pa. Code § 75.13(c).

The Joint Supporters ask the Commission, consistent the referenced provisions, to affirm positively from the outset that this provision applies to TRC criteria for the evaluation of residential self-generation facilities, for example micro-combined heat and power facilities (micro-CHP).

**(b1) Adjustments – the Modifications Proposed To Electric Prices Allow Differentiation, but May Tend to Result in Uniformity Based Upon Annual Averages In Some Components Where Differentiation May Yield Higher TRC Benefits**

The Joint Supporters ask the Commission to direct the EDCs to consider the locational and temporal differences for such factors as losses, rather than simply allowing a regional average annual loss factor to be employed. Losses are greater in the periphery of the distribution system than at the core, especially at times of special conditions, (peak demand for example). The TRC for programs and measures should be accorded advantaged treatment in such

situations. The locational value of an energy efficiency measure, including self-generation, to be reflected in a TRC evaluation can be noticeably improved in such circumstances.

**(b2) Discount Factors Should Be Keyed To Available Sources Of Funds To Program Participants, Not To The EDC's Weighted Average Cost Of Capital – An Alternative Is Historic Twelve-Month Average Of The Yields Of Ten-Year United States Treasury Notes As Approved for TRC Evaluation by the Massachusetts DPU..**

The Joint Supporters ask the Commission to direct the EDCs to employ other discount factors than their own weighted Average Cost of Capital. As a group these amounts are significantly higher than capital available to the customers that they are seeking to assist. They are not spending their own money here. The Massachusetts Department of Public Utilities is employing the historic twelve-month average of the yields of ten-year United States Treasury notes to the discount rate used for the Total Resources Cost test.<sup>2</sup> That model is worthy of consideration here.

**(d) Incentive Payments From An EDC – It Is Appropriate To Treat These As A Wash.**

**(e) Incentive Payments From Outside Sources – It Is Appropriate To Treat These As Reductions To Costs.**

**Conclusion**

The Joint Supporters therefore respectfully recommend that the Commission adopt our comments.

Very Truly Yours,



Ruben S. Brown, M.A.L.D.  
President, The E Cubed Company, LLC  
On behalf of the Joint Supporters

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<sup>2</sup> The Commonwealth of Massachusetts, **DEPARTMENT OF PUBLIC UTILITIES**, D.P.U. 08-50-A March 16, 2009, Investigation by the Department of Public Utilities on its own Motion into Updating its Energy Efficiency Guidelines Consistent with An Act Relative to Green Communities, p. 2

For this purpose the Joint Supporters include:

Capstone Turbine Corporation

Climate Energy, LLC

Energy Concepts Engineering, PC

Energy Spectrum, Inc.

ECR International, Inc.

Quad-K Energy Conservation