

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

**Answers by The E Cubed Company, LLC
on behalf of Joint Supporters**

**Regarding the Energy Efficiency and Conservation Program and EDC Plans
Additional Questions Related to the Commission's Energy Efficiency and
Conservation Program**

In Docket M-2008-2069887

**Submitted
by:**

Ruben S. Brown, M.A.L.D.
President

Arthur W. Pearson, C.E.M.
Director of Project Operations
1700 York Avenue, Suite B-2
New York, NY 10128
212.987.1095

Ruben.brown.ecubedllc@gmail.com
apearson@ecubedllc.com

Introduction

The E Cubed Company, LLC on behalf of the Joint Supporters respectfully submits its answers to select questions posed by the Commission on November 26th, 2008. Please note that we have utilized the same numbering/lettering for each question we have answered as contained in your communication of the 26th. As a result, since we have not answered every question raised, the lettering/numbering sequences that follow will not necessarily be consecutive.

3. Total Resource Test

b) The Act defines "Total Resource Cost Test" (TRC test) as "a standard test that is met if, over the effective life of each plan not to exceed 15 years, the net present value of avoided monetary cost of supplying electricity is greater than the net present value of the monetary cost of energy efficiency conservation measures." Under this definition, may the Commission limit consideration of monetary costs to the costs incurred by the EDC?

Regarding whether or not the Commission may limit consideration of monetary costs to the costs incurred by the EDC, we believe that it may. What matters here are the costs to the utility and by extension, the ratepayers, and not what costs an individual resident or business might face.

We contend this is so as the question at hand is what is the less expensive way for the utility in question to achieve the desired result. Is it less expensive for the utility and ultimately, ratepayers, to supply electrons or is it less expensive to provide a means for an individual consumer to use fewer electrons instead?

Whether an individual consumer/ratepayer elects to spend its own money to enable it to buy fewer electrons has no impact on the costs experienced by t

c) Can the TRC test include avoided environmental costs or other avoided societal costs?

As to the question of including societal or environmental avoided costs, in this day and age given the environmental issues Pennsylvania, our country and the world are facing, the only logical answer is “yes”. The environmental costs that our society are facing today due to the emissions from central station power plants and all the other sources of emissions are enormous. California, in its Standard Practice Manual, has acknowledged this and has as a result, developed a Societal Test that is “structurally similar” to the TRC test, but goes beyond that test in an attempt to “quantify the change in the total resource costs to society as a whole” rather to just a service territory, (see “California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects”, page 19). See also our submission of November 26th and in particular the EPA Emissions Calculator data demonstrates the benefits that Micro-CHP would provide the state. Furthermore, see attached with electronic transmittal the US DOE “Combined Heat and Power Effective Energy Solutions for a Sustainable Future” report that was just issued on December 1, 2008.

d) If the Commission limits costs considered under the TRC test to those incurred by the EDC, should the Commission exclude costs not incurred by the EDC from the test?

See discussion in “b” above.

e) If participant costs that are not paid by the EDC are included, should these costs be reduced by tax credits or credits under the AEPS Act received by the participants?

If participant costs that are not paid for by the EDC are included in the TRC test, then at the very least these costs should be reduced by any tax credits, credits under AEPS Act or any other credits received by participants. As stated above, however, we see no reason to include participant costs not paid for by the EDC in any TRC test.

k) The gas industry raised some interesting points on the net impact of displacing natural gas heating equipment (space and water) with electricity heating equipment. Should the TRC test include parameters to capture the consequences of net energy gains or losses in delivering alternative fuels to consumers?

Any TRC test should include parameters to capture the consequences of net energy gains or losses in producing and delivering alternative fuels to consumers. Certainly in the example given of switching from a natural gas to an electric water/space heating system that would be more than appropriate. One of the major points of this exercise (Act 129) is to encourage actions that reduce energy consumption. That being the case, the entire picture surrounding any measure should be examined to ensure that the measure does result in a reduction in the total energy consumed. By “the total energy consumed” we mean all the energy required to produce and deliver the energy to the end user, not just the energy consumed directly at the location in question.

So, for example, it is our belief that when considering the energy consumed by a ratepayer that comes from a central station, it is not just the meter reading at that ratepayers home or business that should be counted but also the energy lost in the generation of that delivered energy as well as the energy that is lost in its transmission. Furthermore, with respect to transmission and distribution loss factors, the loss factors that are used should be appropriate for the period involved and not simply an annual average loss factor.