POST & SCHELL, P.C.
ATTORNEYS AT LAW

17 North Second Street
12th Floor
Harrisburg, PA 17101-1601
717-731-1970 Main
717-731-1985 Fax
www.postschell.com

Andrew S. Tubbs

atubbs@postschell.com
717-612-6057 Direct
717-731-1985 Fax
File #: 2507/140069

June 3, 2011

Rosemary Chiavetta
Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor North
P.O. Box 3265
Harrisburg, PA 17105-3265

RE: Implementation of Act 129 of 2008 - Total Resource Cost (TRC) Test 2011 Revisions
<u>Docket No. M-2009-2108601</u>

Dear Secretary Chiavetta:

Enclosed please find the original and fifteen (15) copies of the Comments of PPL Electric Utilities Corporation for the above-referenced proceeding. Copies will be provided as listed below.

Respectfully Submitted,

Andrew S. Tubbs

AST/skr
Enclosures
cc: Gregory A. Shawley (*via email*)
Louise Fink Smith (*via email*)

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Implementation of Act 129 of 2008 –	:	**Docket No. M-2009-2108601**
Total Resource Cost (TRC) Test	:	
2011 Revisions	:	

COMMENTS OF
PPL ELECTRIC UTILITIES CORPORATION

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

On May 6, 2011, the Pennsylvania Public Utility Commission ("PUC" or the "Commission") entered a Tentative Order[1] in the above-captioned proceeding. In that Tentative Order, the Commission issued, for public comment, refinements to the Pennsylvania total resource cost test ("PA TRC Test") for use through May 31, 2013 in compliance with Act 129 of 2008[2] and, to a lesser extent, on the use of the TRC test beginning June 1, 2013. PPL Electric Utilities Corporation ("PPL Electric" or the "Company") hereby submits these comments on the proposed refinements to the PA TRC Test and the proposed use of the total resource cost ("TRC") test beginning June 1, 2013.[3] As discussed in detail below, PPL Electric generally agrees with the Commission's proposals in the Tentative Order; however, the Company requests clarification regarding certain topics addressed in the Tentative Order.

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1 *Implementation of Act 129 of 2008 – Total Resource Cost (TRC) Test 2011 Revisions*, Tentative Order at Docket No. M-2009-2108601 (Order Entered May 6, 2011).

2 Act 129 of 2008 ("Act 129"), P.L. 1592, 66 Pa.C.S. §§ 2806.1 and 2806.2.

3 On May 17, 2011, the Commission issued an Secretarial Letter at Docket No. M-2009-2108601 setting the deadline for comments and reply comments on the Tentative Order at June 3 and June 15, 2011, respectively.

I. BACKGROUND

Act 129 requires electric distribution companies ("EDC") with more than 100,000 customers to adopt an energy efficiency and conservation ("EE&C") plan to reduce electric consumption, reduce its total annual weather-normalized consumption and reduce its peak demand. Act 129 also addresses energy efficiency and demand reduction targets from June 1, 2013 forward. 66 Pa.C.S. §§ 2806.1(c)(3) and 2806.1(d)(2). Notably, the Commission approved PPL Electric's EE&C Plan, with modifications, on October 26, 2009, in *Petition of PPL Electric Utilities Corporation for Approval of its Energy Efficiency and Conservation Plan*, Docket No. M-2009-2093216 (Order Entered October 26, 2009).[4]

Act 129 requires an EDC to demonstrate that its EE&C plan is cost-effective using the TRC test. 66 Pa.C.S. § 2806.1(b)(1)(i)(I). The TRC test is "a standard test that is met if, over the effective life of each plan not to exceed 15 years, the net present value of the avoided monetary cost of supplying electricity is greater than the net present value of the monetary cost of energy efficiency conservation measures." 66 Pa.C.S. § 2806.1(m). In the Commission's Act 129 EE&C Implementation Order, the Commission directed that EDCs evaluate the cost effectiveness of energy efficiency or demand reduction programs using a TRC test based on the California model. *Energy Efficiency and Conservation Program, Implementation Order,* at Docket No. M-2008-2069887 (Entered January 16, 2009) at p. 15. Subsequently, after soliciting comments, the Commission entered a final order relative to TRC testing on June 23, 2009, at Docket No. M-2009-2108601 ("2009 PA TRC Test Order").

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4 The EE&C Plan was further revised by *Petition of PPL Electric Utilities Corporation for Approval of its Energy Efficiency and Conservation Plan*, Docket No. M-2009-2093216 (Order Entered February 17, 2010) and *PPL Electric Utilities Corporation for Approval of its Energy Efficiency and Conservation Plan*, Docket No. M-2009-2093216 (Order Entered May 6, 2011).

II. TENTATIVE ORDER

On May 6, 2011, the Commission issued the Tentative Order in which the Commission explained that the purpose of using the TRC test is to evaluate EE&C programs to track the relationship between the benefits to customers and the costs incurred to obtain those benefits. Tentative Order at p. 7. According to the Commission, the TRC test has historically been a regulatory test. *Id.* Act 129 provides that the TRC test is to be used to determine whether ratepayers, as a whole, received more benefits than the implementation costs of the EE&C plans. 66 Pa.C.S. §§ 2806.1(c)(3), 2806.1(d)(2) and 2806.1(m). In the 2009 PA TRC Test Order, the Commission recognized that many issues involved in the EE&C plans, program implementation, and operation of the TRC test would be ongoing in nature and that several issues would require additional consideration and discussion. 2009 PA TRC Test Order at p. 7; Tentative Order at p. 7. The Commission explained that the Tentative Order continues that further consideration and discussion relative to demand response, net-to-gross issues, fuel switching, TRC calculations, and TRC reporting. Tentative Order at p. 7.

III. COMMENTS OF PPL ELECTRIC UTILITIES CORPORATION

PPL Electric generally agrees with the proposals in the Tentative Order and provides the following comments on the Commission's recommendation. These comments request clarification of certain aspects of the Tentative Order and discuss the Company's limited areas of disagreement with regard to certain proposals.

As requested by the Commission, the topics addressed in these comments are numbered in the same manner as topics discussed in the Tentative Order. *See* Tentative Order at p. 33. To the extent that the Company does not address a particular topic, it is stated below.

A. Demand Response

1. Application of TRC Test Calculation to DR Programs

The EE&C Implementation Order directed EDCs to evaluate the cost effectiveness of each energy efficiency or demand reduction program using the TRC test. This provision was carried forward in the 2009 PA TRC Test Order. In the Tentative Order, the Commission proposed to continue to require EDCs to evaluate Demand Response ("DR") programs using the PA TRC test. Tentative Order at p. 7.

PPL Electric agrees with the Commission's proposal in Section III.A.1 of the Tentative Order regarding the evaluation of DR programs using the PA TRC test.

2. Treatment of DR Payments to CSPs and EDCs from PJM

As summarized in the Tentative Order by the Commission, Act 129 allows EDCs to provide funding to CSPs who aggregate DR customers for participation in Act 129 DR programs and in PJM economic programs. *See* Tentative Order at p. 8. As explained by the Commission, current practice has been to allow the EDCs to take credit for demand savings for any participant that has received Act 129 funding. *Id.* According to the Commission, given the possibility that many customers may be solicited by CSPs for participation in both programs, it is important to define how the TRC will be calculated. *Id.* In the Tentative Order the Commission asserted that the resolution of this issue must be considered in two different situations, *i.e.*, when PJM payments are made to a CSP and when PJM payments are made directly to EDCs. *Id.*

Therefore, in the Tentative Order, the Commission proposes the following:

- First, PJM payments to CSPs for DR market participation in all PJM programs would be excluded from TRC test calculations.
- Second, PJM payments to EDCs for DR market participation in economic programs would be allowed as benefits for the purpose of the TRC test to the extent that these payments represent benefits (costs avoided) that exceed those costs avoided which are calculated as set forth in the 2009 PA TRC Test Order.

- Third, PJM payments for capacity would be excluded from TRC calculations as either benefits or costs relative to the TRC test.

PPL Electric agrees with the Commission's third proposal that PJM payments for capacity would be excluded from TRC calculations as either benefits or costs relative to the TRC test. However, the Company disagrees with the Commission's first and second proposals regarding treatment of PJM payments to CSPs and EDCs for several reasons.

PJM's economic and capacity DR programs are independent programs from Act 129. To the extent that participation in PJM DR programs would have occurred in the absence of Act 129 DR programs (*i.e.* the PJM charges or payments are not directly related to incremental DR provided by Act 129), any charges, penalties, or payments from the PJM DR programs should be ignored for purposes of Act 129, regardless of whether the charges, penalties, or payments are to/from a CSP, a customer, or an EDC.

However, if the PJM DR revenue is directly related to Act 129 DR (*i.e.* Act 129 DR is incremental to PJM DR programs, for example, demand response from a new Act 129 direct load control program that previously did not exist or additional load curtailment above and beyond what the customer would have achieved for PJM DR programs) and the Act 129 DR program has revenue, charges, or penalties from PJM DR programs, then it may be appropriate to include that PJM revenue, charge, or penalty as a cost or benefit for Act 129 TRC regardless of whether it is to/from a CSP, a customer, or an EDC. However, it will be difficult for the EDC, or the EDC's independent evaluator that performs the TRC calculations, to know those PJM DR payments because:

- The customer could have different CSPs for the PJM DR program and the Act 129 DR program or the customer could be its own PJM CSP. There would be no contractual way for the EDC to force the customer or the customer's PJM DR CSP to disclose the PJM payments.

- PJM economic DR events could be declared as much as 60 days after the operating day (after the Act 129 event). PJM settlements are frequently adjusted after-the-fact.
- CSPs and customers are not likely to disclose PJM DR revenues for competitive reasons. That information is confidential.

Therefore, since it will be nearly impossible to quantify or verify PJM DR payments in this case, EDCs should be permitted to ignore those benefits for the TRC. If these benefits are ignored, the reported benefit-cost ratio will be lower than it would have otherwise been if PJM DR payments were included (*i.e.* EDCs would be understating the benefit-cost ratio).

The TRC recognizes costs and benefits regardless of whether they are incurred by the utility or the participant. Therefore, the TRC should not treat PJM DR payments differently based on whether the recipient of the payment is the EDC, the customer, or the EDC's CSP because that would distort the cost-effectiveness. For example, if a PJM payment to the EDC is included as a benefit but the same PJM payment is ignored if it is paid to the EDC's CSP, then the TRC will artificially look more favorable for EDC self-managed DR programs compared to using a CSP.

3. Treatment of DR Payments to CSPs and Participants from PJM

In the Tentative Order the Commission stated that treatment in the TRC test of PJM payments related to DR programs is a pivotal issue and that the question is whether these PJM payments should be included in the TRC test as costs or as benefits. Tentative Order at p. 8. To address this issue the Commission proposes that all direct payments by the EDCs to participants or payments by the EDCs to CSPs in DR programs be treated as follows:

- For Program Years 1 to 4, each EDC would treat such payments (made to CSPs or to DR program participants) in the TRC test in the same manner as each EDC treated such payments in its approved EE&C plan. These payments would be considered to be a proxy for participant transaction costs.

- After Program Year 4 ends on May 31, 2013, each EDC would include all such payments to CSPs or to DR program participants as transaction costs in the calculation of the TRC test. These payments would be considered to be a proxy for participant transaction costs.

PPL Electric agrees with the Commission's proposal in Section III.A.3 of the Tentative Order regarding direct payments by the EDCs to participants or payments by the EDCs to CSPs in DR programs.

4. Treatment of American Reinvestment and Recovery Act of 2009 ("ARRA") Funds

In the Tentative Order, the Commission explained that, the 2009 PA TRC Test Order directed incentive payments from sources outside of the Act 129 programs to be considered benefits that decrease costs to customers participating in programs and, therefore are accounted for in the TRC calculations. Tentative Order at p. 13. The Commission further explained in the Tentative Order, that Met-Ed was the only EDC to factor stimulus money into its plan. Upon review of the Met-Ed plan, the Commission concluded that ARRA incentive payments should be considered benefits in TRC testing. *Joint Petition of Met-Ed, Penelec and Penn Power*, Docket Nos. M-2009-2092222, *et al.* (October 22, 2009) at 22 ("*Met-Ed*"). However, according to the Commission, over the course of the past year, EDCs have requested clarification from Bureau of Conservation, Economics and Energy Planning ("CEEP") and the Statewide Evaluator ("SWE") as to how ARRA funds received by EDCs and allocated to Act 129 programs should be accounted for in the TRC calculation. In response to these requests, the Commission explained that it believes that this matter was adequately addressed in the *Met-Ed* decision. Tentative Order at p. 13. In *Met-Ed*, the Commission held that ARRA incentive payments should be considered benefits in TRC testing and that furthermore, since Act 129 funding is fixed, any additional funds, such as ARRA funds, will be used to supplement, not replace, funds from the EDC. *Met-Ed* at p. 22. In the Tentative Order (and in *Met- Ed*) the Commission states that since

Act 129 funding is fixed, any additional funds will be used to supplement, not replace, funds from the EDCs. Tentative Order at p. 13.

PPL Electric fully agrees with the Commission's proposal in Section III.A.4 of the Tentative Order regarding ARRA funds. The Company, however, does have practical concerns regarding implementation. For example, PPL Electric can easily ask customers, as part of the rebate application or impact evaluation survey, if they received ARRA funding for an Act 129 energy efficiency or DR measure. However, the customer may not be willing to disclose the amount of ARRA funds they received and, even if the customer did, there is no practical way to verify if the customer received such ARRA funding or verify the amount of said ARRA funding. Moreover, to the extend that ARRA funds must be included in the TRC, tracking systems may need to be modified to accommodate the requirement. Therefore, due to practical implementation concerns regarding quantification and or verification of ARRA funding, EDCs should have the option of ignoring those benefits for the TRC. If these benefits are ignored, the reported benefit-cost ratio will be lower than it would have otherwise been if ARRA benefits were included (*i.e.* EDCs would be understating the benefit-cost ratio). If the Commission decides the TRC is required to include ARRA funds, then PPL Electric seeks clarification that the benefits associated with ARRA funding take the form of a reduction to the costs, consistent with the California model.

5. Measure Life For DR Programs

The 2009 PA TRC Test Order did not provide direction for determining the measure life for DR programs, such as direct load control. In the Tentative Order (at p. 14), the Commission proposes to define "measure life" for use in calculating the TRC benefit cost ("B/C") ratio for DR measures as follows:

- For DR programs delivered by program administrators, "measure life" would include equipment life or program life and measure persistence (but not savings persistence).
- "Equipment life" would mean the number of years that a measure is installed and operates until failure.
- "Measure persistence" would take into account business turnover, early retirement of installed equipment, and other reasons measures might be removed or discontinued.
- "Program life" would be defined as the number of years that a DR program is projected to operate in an EDC's approved EE&C plan or the EDC's alternative plan for DR programs.

Tentative Order at p. 25.

Additionally, the Commission proposes that for calculating the TRC B/C ratio, the measure life shall be the lesser of equipment life or program life, as appropriate. *Id.* Also, for retrofit/early retirement programs, measure life should take into account both the expected remaining life of the measure being replaced and the expected changes in baselines over time. *Id.*

PPL Electric agrees with the Commission's proposal in Section III.A.5 of the Tentative Order; however, the Company requests clarification on the Commission's proposal, specifically the definition of "Program Life." As currently structured in Act 129, the peak load reduction compliance period is limited to one year, the summer of 2012 during Program Year 4.[5] Since there are no Act 129 DR reductions targets beyond the summer of 2012 and no approval of any programs (DR or energy efficiency) beyond the current version of the approved EE&C Plans (*i.e.*, May 2013), the Commission should clarify if the "program life" is 1-year by default or can

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[5] Implementation Order at p. 29 ("To be in compliance the EDCs must demonstrate that its EE&C plan produced demand savings during the 100 hours of highest demand for the period June 1, 2012, through September 30, 2012, equal to at least 4.5% of the average of the 100 highest peak hours during the period from June 1, 2007 to September 30, 2007."). "

the EDCs assume that DR programs will extend beyond the summer of 2012 and, therefore, have a program life greater than 1 year?

B. Net-To-Gross

1. Net-To-Gross Research and Applications

In the Tentative Order, the Commission proposes to direct the EDCs to develop and conduct Net-to-Gross ("NTG") studies and that the NTG studies be funded out of the EDCs' Act 129 2% program budgets. Tentative Order at p. 18. The Commission explained that, NTG research studies can be used for three different applications. Tentative Order at p. 16. The first potential application is to inform program decision makers when a mid-course adjustment in a program should be made. *Id.* A second potential application of NTG research is to inform program decision makers when an entire program (containing perhaps several measures) should be phased out because it is no longer needed to incent customers to adopt an array of high-efficiency measures, as customers are making such adoptions even in the absence of program incentives. Tentative Order at p. 17. A third potential use of NTG research would be to adjust the gross verified savings figures by netting out the savings attributable to free riders, spillover, and rebound effects for the purposes of determining net-verified savings that are to be used for compliance purposes. *Id.*

Under the Commission's proposal, the SWE would coordinate the development and approval of common methodologies for EDCs' NTG studies. Tentative Order at p. 18. The results of the studies, according to the Commission, will be reported to the SWE and utilized by the EDCs to determine when a measure or program should be removed from the EE&C portfolio because it is no longer appropriate to offer incentives if the NTG ratio is low. *Id.* Moreover, for the period of June 1, 2009, through May 31, 2013, the Commission does not propose, in the

Tentative Order, that the NTG research be used to adjust the gross verified energy savings that are used for compliance purposes to determine whether an EDC has met its mandated Act 129 reduction targets. *Id.*

The Company agrees with the Commission's NTG proposal in Section II.B.1 of the Tentative Order for the period of June 1, 2009 through May 31, 2013. PPL Electric seeks clarification of whether cost-effectiveness calculations should also use gross verified savings during this period, since gross verified savings used for compliance purposes are not adjusted by a NTG ratio.

For the next version of Act 129 EE&C (beyond May 31, 2013), PPL Electric recommends using gross verified savings for compliance targets and using net verified savings for program design and effectiveness purposes (for example, determining if program design changes are required if net savings are low compared to gross savings). If net verified savings are the basis for future compliance targets, then program cost caps must be increased or the compliance targets must be decreased to account for the net-to-gross factor (typically on the order of 25%).

The total gross verified savings are truly realized by customers and, therefore, should represent the Act 129 savings for compliance purposes. The NTG factor attributes (*i.e.*, allocates) the savings between the Act 129 program and factors outside the program. The portion attributed to the Act 129 program is the net verified savings (gross verified savings x NTG factor = net verified savings). Regardless of this allocation, the full gross verified savings were realized by customers. NTG is a "funding equity issue" related to the use of Act 129 program funding, *i.e.*, should Act 129 ratepayer funds be used for measures/programs that would have largely occurred (fully or substantially) in the absence of Act 129 programs. Therefore, net verified savings should be used to judge program effectiveness, not compliance.

C. Fuel Switching

1. TRC Inputs For Fuel Switching

In the Tentative Order, the Commission proposes to adopt the fuel switching provisions as set out in the Fuel Switching Working Group ("FSWG") Staff Report. Moreover, the Commission proposes to use the 2002 CA SPM as a guide for defining the costs and benefits that should be included in the TRC test for fuel switching programs and other proposed fuel source substitution programs should also use the 2002 CA SPM as a guide in the cost/benefit analysis of each proposed program.

PPL Electric has no comments on the Commission's proposal to use the 2002 CA SPM as a guide for TRC testing of fuel switching programs. PPL Electric notes, however, that the Commission does not define the calculation of gas avoided costs in the Tentative Order. Therefore, unless instructed otherwise by the Commission, PPL Electric will use the gas avoided costs provided by the UGI Utilities, Inc. – Gas Division, UGI Penn Natural Gas, Inc. and UGI Central Penn Gas, Inc. in the Company's cost-effectiveness calculations. Alternatively, to avoid confidentiality issues, gas avoided costs could be developed using an approach comparable to the calculation of electric costs, *i.e.*, using NYMEX and Energy Information Administration (EIA) published prices for natural gas.

2. Fuel Switching Appliance Efficiency

The Company has no comments on the Commission's proposal in Section III.C.2 of the Tentative Order.

D. TRC Calculations

1. Database For Deemed Customer Costs or Incremental Measure Costs as Applicable

In the Tentative Order, the Commission proposes that the EDCs continue to use filed incremental cost data through May 31, 2013. Tentative Order at p. 22. According to the Commission, for measure variants not included in the EDCs' EE&C plans, the EDCs should use the California Public Utility Commission's ("CPUC") Database for Energy Efficient Resources ("DEER") as the primary source of cost data. Under the Commission's proposal, the EDCs can adjust the DEER cost values for regional and local conditions using appropriate cost multipliers and the cost multipliers should be clarified and included in the EDCs' annual reports. *Id.* Moreover, the EDCs would be allowed to use cost data from local retailers and suppliers if the CPUC DEER database does not provide appropriate values. *Id.* Additionally, EDCs would submit incremental cost data and assumptions to the SWE with their Act 129 annual reports.

PPL Electric agrees with the Commission's proposal in Section III.D.1 of the Tentative Order regarding the database for deemed customer costs or incremental measure costs.

2. Basis of TRC Benefits – Reported Savings or Verified Savings; and Basis of TRC Costs – Actual Costs or Committed Costs

In the Tentative Order, the Commission recommends that the calculation of TRC benefits should be based upon "verified" kWh and kW savings and that costs should be based on "actual" costs. Tentative Order at p. 23. The Commission made this proposal because, as stated in the Tentative Order, it wanted to resolve the issue of whether the basis of TRC benefits would be "reported" kWh and kW savings or "verified" kWh and kW savings, and whether the basis of TRC costs should be "actual" costs or "committed" costs. *Id.*

PPL Electric agrees with the Commission's recommendation in Section III.D.2 of the Tentative Order regarding the calculation of TRC benefits; however, the Company requests that the Commission revise two particular terms to ensure clarity and consistency with industry and PA SWE terminology. PPL Electric requests that the Commission change "verified savings" to "verified gross savings" (so it is clearly differentiated from "verified net savings"). PPL Electric also requests that the Commission change "reported savings" to "reported gross savings".

3. Definition of "Incentives" In TRC For Energy Efficiency Measures

The Commission proposes, in the Tentative Order, that "incentive" be defined as a *payment made to a program participant by an EDC to encourage the customer to participate in an* energy efficiency program and to help offset some or all of the participant's costs to purchase and install an energy efficiency measure. Tentative Order at p. 24.

PPL Electric generally agrees with the Commission's recommendation in Section III.D.3 of the Tentative Order regarding the definition of "incentive"; however, the Company requests clarification for cases where there is no incremental cost, *i.e.*, appliance recycling. In the case where the incentive paid to customers is a marketing cost or intended to offset participant costs that are difficult to quantify, PPL Electric proposes including the incentive in the TRC calculations as either a direct cost (marketing) or as a proxy for the participant cost, consistent with the treatment of incentives paid to DR participants.

4. Avoided Cost Calculations and Forecasts

The Commission proposes that EDCs use the historic average annual growth rate in producer price index (which is included in the Tentative Order) for the period 2003 through the most recently available annual data point as a proxy for the rate of escalation between the end of the 2013 program year and the beginning of the U.S. Energy Information Administration Annual Energy Outlook in year 11. Tentative Order at p. 26. The Commission notes that as PJM RPM, distribution, transmission, or ancillary service cost data becomes known, it should be utilized in place of the U.S. Bureau of Labor Statistics factor. Furthermore, the Commission states that the average annual compound rate of growth in index in the Tentative Order is 4.65%, for the period 2003 through 2010.

PPL Electric agrees with the Commission's proposal in Section III.D.4 of the Tentative Order regarding avoided cost calculations and forecasts.

5. Inclusion or Exclusion of Customer Avoided Operating and Maintenance Costs in the TRC Calculation

The Tentative Order includes a proposal by the Commission that customer avoided operating and maintenance costs be included as benefits in the TRC calculation. Tentative Order at p. 28. The Commission explains in the Tentative Order that the TRC test has the potential to capture total benefits and that reduced costs for equipment and labor are benefits that are quantifiable and measurable. *Id.* Moreover, the benefits of the TRC test include non-energy benefits and that savings in equipment and labor costs are non-energy benefits. *Id.*

PPL Electric agrees, in concept, with the Commission's proposal that customers' avoided operating and maintenance costs should be included as benefits in the TRC calculation; however, it will be nearly impossible to obtain realistic operating and maintenance cost data for most programs or projects. For large custom projects, the EDC or its program implementation CSP work very closely with the customer and can attempt to reasonably estimate O&M benefits for the specific project. However, for standard, prescriptive type measures and projects, it will be nearly impossible to quantify operating and maintenance benefits, especially on a project by project basis. Examples of such prescriptive type measures and projects include:

- avoided maintenance on a retired/recycled appliance;
- higher or lower maintenance on a ductless heat pump that replaces baseboard electric heaters;

- higher or lower maintenance on a heat pump water heater than a standard electric water heater;
- higher or lower maintenance on an air source heat pump that replaces a thermal storage device;
- higher or lower maintenance on a ground source heat pump than an air source heat pump; and
- residential or commercial lighting that requires less operating and maintenance costs because it is replaced less often than incandescent lighting.

Therefore, since it will be nearly impossible to quantify operating and maintenance benefits, EDCs should be permitted to ignore operating and maintenance benefits for the TRC. If these benefits are ignored, the reported benefit-cost ratio will be lower than it would have otherwise been if operating and maintenance benefits were included (*i.e.* EDCs would be understating the benefit-cost ratio).

6. Avoided Costs in the Benefit/Cost Ratios and in the Approved EE&C Plans and Avoided Costs Commencing June 1, 2013

The Commission proposes, in the Tentative Order, that through May 31, 2013, EDCs should use the most current forecast of avoided costs when filing a new program for Commission approval. Tentative Order at p. 29. The Commission further proposes that for program measures that have not been changed, the avoided costs figures included in TRC calculations in previously approved EE&C/DR program plans need not be updated for the period June 1, 2009, to May 31, 2013, by present or future avoided cost figure revisions or updates. However, any new programs proposed by EDCs between now and May 31, 2013, would use the appropriately updated and most current avoided cost forecasts available at that point in time. *Id.* Moreover, the Commission proposes that when calculating and reporting the overall portfolio TRC test B/C ratio in EDC Act 129 annual reports, the EDCs shall use the vintage of avoided cost forecasts applicable for each program at the time the program was approved. *Id.*

PPL Electric agrees with the Commission's proposal in Section III.D.6 of the Tentative Order regarding avoided cost forecasts.

E. TRC Reporting

1. Baseline Study Research

The Commission, in the Tentative Order, proposes that the EDCs conduct baseline studies in consultation with the SWE and that the SWE is to coordinate, review and approve such studies. Tentative Order at p. 30. Under the Commission's proposal, the results of the studies shall be reported to the SWE by December 1, 2011, so that the SWE can make appropriate recommendations to the Commission on the potential for additional energy savings beyond May 31, 2013. *Id.* According to the Commission, baseline market research is necessary and should be conducted and reported by the EDCs so that the integrity of the TRM and its stipulated values are consistent with the energy efficiency marketplace. *Id.* at p. 31. The Commission explains that the SWE needs accurate baseline research from the EDCs to, in part, prepare recommendations to the Commission about the potential for energy efficiency gains after May 31, 2013.

PPL Electric requests clarification on the scope of the baseline study proposed by the Commission in the Tentative Order (pp. 29-31). Moreover, the Company objects to the proposed completion date for the baseline study, December 1, 2011, because the proposed completion date may not be realistic, especially since the SWE has not defined the required scope of the baseline studies as of June 2, 2011. The Company cannot determine if a December 2011 completion date is possible until the Commission clarifies whether the baseline study is required for all customer sectors (*e.g.*, residential, low-income, small C&I, large C&I, and government/schools/non-profit) and all measures/end-uses (*e.g.*, lighting, heating, cooling, refrigeration, plug loads, appliances, *etc.*). The Commission should also clarify the desired level of accuracy (confidence and precision) of the baseline study and whether results can be determined from currently available data (such as publicly available data from Pennsylvania or other relevant states) or must be obtained from the EDC-specific surveys or site visits. Site visits, in particular, are costly and time-consuming. The Company likely needs six months to complete a detailed baseline study once the Commission defines the scope of the baseline study. PPL Electric also requests clarification regarding delineation of the parties responsible for developing and maintaining data collection instruments and databases, as well as data analysis. PPL Electric recommends that a single data collection instrument be used by all EDC to maintain consistency, that the SWE collect the raw data from the EDCs, maintain the database, and analyze the data provided by all EDCs. In this way, the analysis and reporting will include all samples for a meaningful statewide assessment of residential and commercial baselines.

2. Frequency of Cost-Effectiveness Evaluations and Reporting Results and Timing of TRC Reports (*e.g.*, When to Freeze Data and Inputs)

In the Tentative Order, the Commission proposes that the results of the TRC test should be reported annually and be included as a part of the EDCs' Act 129 annual reports. Tentative Order at p. 31. Additionally, the TRC B/C ratio for each EDC program, and the portfolio, should be included in the aforementioned annual report. The Commission further specified in the Tentative Order that the B/C ratios should be based upon the latest available program costs and savings. *Id.*

PPL Electric agrees with the Commission's proposal, in Section III.E.2 of the Tentative Order, regarding the frequency of cost-effectiveness evaluations, reporting results and timing of TRC Reports.

IV. CONCLUSION

For all of the foregoing reasons, PPL Electric Utilities Corporation respectfully requests that the Pennsylvania Public Utility Commission consider these comments in formulating the refinements to the PA TRC Test and provide the clarifications requested herein.

Respectfully submitted,

David B. MacGregor (ID #28804)
Post & Schell, P.C.
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2808
Phone: 215-587-1197
Fax: 215-320-4879
E-mail: dmacgregor@postschell.com

Andrew S. Tubbs (ID #80310)
Post & Schell, P.C.
17 North Second Street, 12th Floor
Harrisburg, PA 17101-1601
Phone: 717-612-6057
Fax: 717-731-1985
E-mail: atubbs@postschell.com

Paul E. Russell (ID #21643)
Associate General Counsel
PPL Services Corporation
Office of General Counsel
Two North Ninth Street
Allentown, PA 18106
Phone: 610-774-4254
Fax: 610-774-6726
E-mail: perussell@pplweb.com

Of Counsel:
Post & Schell, P.C.

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Attorneys for PPL Electric Utilities Corporation