

May 12, 2015

VIA EFILE

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120

**Re: 2016 Total Resource Cost (TRC) Test;
Docket No. M-2015-2468992**

Dear Secretary Chiavetta:

Enclosed herewith for filing are the Reply Comments of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company to the Pennsylvania Public Utility Commission's March 11, 2015 Total Resource Cost Tentative Order.

Please contact me if you have any questions regarding this matter.

Very truly yours,


John L. Munsch

JLM:jss

Enclosure

cc: (Via Email in Word Format)
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**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

2016 Total Resource Cost (TRC) Test

:

Docket No. M-2015-2468992

**REPLY COMMENTS OF METROPOLITAN EDISON COMPANY,
PENNSYLVANIA ELECTRIC COMPANY, PENNSYLVANIA POWER
COMPANY AND WEST PENN POWER COMPANY TO THE
TOTAL RESOURCE COST TENTATIVE ORDER**

I. Background

Act 129 of 2008 requires electric distribution companies (“EDCs”) to demonstrate that their energy efficiency and conservations plans are cost-effective using the Total Resource Cost (“TRC”) Test.¹ 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.”²

On March 11, 2015, the Commission entered a Tentative Order (“Tentative TRC Order”) seeking comments and reply comments on the proposed TRC test for use during the Commission’s proposed Phase III Energy Efficiency and Conservation (“EE&C”) Plan for Commonwealth EDCs to begin June 1, 2016. Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company (collectively, the “Companies”) submitted Comments on April 27, 2015, and hereby submit replies to comments made by various parties.³

¹ 66 Pa. C.S. §2806.1(b)(1)(i)(I)

² 66 Pa. C.S. §2806.1(m)

³ Absence of a reply to any specific comment made by a party should not be interpreted as the Companies’ agreement.

II. Phase III 2016 TRC Test Topics For Which No Changes From Phase II Are Proposed

In Part IV of the Tentative TRC Order the Commission requested comments about areas of the TRC test for which changes from Phase II were not proposed. The Companies offer reply comments in the following areas.

A. Societal Test As Part Of The TRC Test - The Commission declined to factor societal costs, environmental costs, non-energy impacts or other non-electric elements into the 2016 TRC test. Several parties filed comments recommending that non-energy elements be included, namely the Home Performance Coalition and the Keystone Energy Efficiency Alliance (“HPC” and “KEEA”),⁴ the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (“CAUSE”),⁵ and Citizens for Pennsylvania’s Future (“PennFuture”).⁶

The Companies strongly recommend that the Commission not factor societal costs, environmental costs or non-energy impacts into the TRC test. Non-energy impacts have a high degree of variability, and including non-energy impacts as benefits risks overstating the benefits. For example, PennFuture and CAUSE contend that the alleged decreased cost of uncollectable accounts related to universal service programming should be included in the measurement of avoided costs. The Companies disagree because any reduced collectibles which may occur are attributable only to certain programs, such as universal service programs, and so should not be universalized by inclusion in the avoided cost calculations. Also, measuring reduced collectables is difficult to quantify reliably, and the sustainability of such impacts is questionable, at best.

The Companies recommend not adding assumptions to the TRC test that would exaggerate avoided costs in assessing program cost effectiveness. Because energy efficiency

⁴ HPC and KEEA, p. 5

⁵ CAUSE, p. 4

⁶ PennFuture, p. 4

programs effectively monetize a portion of projected benefits of programs, prudent assumptions are necessary so as to avoid making speculative investments on behalf of ratepayers that would result in long-term, over-market contracts and costs to customers.

B. Maximum 15-Year Measure Life – In the Tentative TRC Order, the Commission continued the Phase II criterion that energy efficiency measures are presumed to have a maximum 15-year life. HPC and KEEA argue that the use of actual measure lives is a “best practice approach,” and that Pennsylvania should therefore use studies from other states instead of a 15-year maximum.⁷ The Companies disagree with the HPC and KEEA proposal. Limiting measure life to fifteen years or less is prudent financial analysis, and the Companies recommend against extending the maximum measure life beyond 15 years. Average measure lives of programs based on prior plans are actually fewer than 15 years. Moreover, beyond the short term, the uncertainty of measure lives for certain measures increases substantially. For example, customer preferences may change, equipment may be abandoned due to unforeseen operating/maintenance expenses, equipment failure may occur, and technological advances may render equipment obsolete. Thus, the maximum 15-year measure life should be maintained in Phase III.

III. Frequency Of Review Of TRC Test

In Part VII of the Tentative TRC Order, the Commission requested comments about the frequency of the TRC review. The Companies offer the following reply comments.

The Commission proposes that the 2016 TRC test apply for the entirety of Phase III from 2016 to 2021. HPC and KEEA state that they support general TRC framework that would last for the full length of Phase III, but that the Commission should implement a standing committee to

⁷ HPC and KEEA, p. 5.

provide advice and guidance.⁸ The Companies agree with the Commission’s proposal that the 2016 TRC test apply for the entirety of Phase III, and the Companies disagree with HPC’s and KEEA’s recommendation to establish a standing technical committee. The Commission already has established a process for parties to provide comments and feedback. HPC and KEEA cite the U.S. Environmental Protection Agency’s upcoming Final Rule on the Clean Air Act⁹ as support for the requirement of a standing committee. However, the EPA’s proposed rule does not address cost-effectiveness requirements for energy efficiency, and this matter is left to the states’ prerogative. The Companies believe that creating an additional committee would create administrative burden and uncertainty about TRC requirements.

IV. New Matters – New Topics

A Pennsylvania State University professor (“PSU submission”) provided comments on several aspects on the cost effectiveness of Combined Heat and Power (“CHP”) systems, contending that: 1) a 15-year effective lifecycle significantly undervalues the useful benefit of CHPs; 2) the Commonwealth’s cost of borrowing should be used as the TRC discount rate; and 3) other states’ incentive structures should be considered in Pennsylvania.¹⁰

The Companies recommend against extending the assumption of any benefits beyond a 15-year measure life, as discussed above. It is particularly speculative to include benefits beyond 15 years for CHP projects where higher operating and maintenance costs and/or new environmental

⁸ HPC and KEEA, p. 5

⁹ Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 FR 34829 (issued June 18, 2014).

¹⁰ The PSU submission was filed on behalf of James Freihart, Ph.D., Architectural Engineering.

regulations may cause owners to decommission the unit early.¹¹ Also, long-term energy and capacity forecasts are uncertain, and their uncertainties increase significantly into the future.

With respect to the cost of capital, the PSU submission incorrectly asserts that, because capital costs for CHP are customers' burden and not born by utilities, the Commonwealth's cost of borrowing, not the utilities', should be used for the discount rate. This reasoning is flawed. First, the PSU submission argues that the cost of capital is on the customer and not the utility, then leaps to the conclusion that the Commonwealth's cost of borrowing should be used for the discount rate. From the TRC perspective, both the benefits and the costs that result from CHP projects are no different from other EDC energy efficiency programs and thus there is no basis for using a different discount rate. Second, the appropriate discount rate is based on factors in addition to the cost of borrowing. The discount rate used in the present value calculation must take into consideration not only the cost of capital, but also the risk of the benefit and cost streams in the long term. The uncertainty of long term benefits should weigh more heavily in the selection of the discount rate, because the capital expenditures are near term and less impacted by discount rates, whereas long-term benefits are impacted exponentially.¹² Additionally, the monetization of up to

¹¹ The July 7, 2011 Itron Report entitled "*CPUC Self Generation Incentive Program Tenth-Year Impact Evaluation*" states that CHP systems have shown a declining capacity factor over time and increasing amounts of extended outage as the systems age. The study indicates the main contributing factors in the reduction of the systems' capacity factor are linked to issues with equipment maintenance and warranty, and increased cost of generating electricity. Most CHP systems in the program have problems achieving the program efficiency level threshold of 42.5%. The study indicates that the main contributing factor in lower efficiency at the host site is the lack of a sufficiently high thermal demand that is coincident with the electrical demand. CHP systems in the program are increasing net Green House Gas Emissions (GHG) relative to grid generated electricity rather than resulting in net GHG emission reductions. The report states: "All of the CHP technologies, with the exception of gas turbines, have suffered rapid declines with age in annual utilization or capacity factor. Extended outages are occurring as early as in the first year of operation. Some systems have been decommissioned after as little as three years. Half of the internal combustion capacity is unavailable by age five and half of the micro-turbine capacity by age six."

¹² For example, the benefits and costs in year one are discounted by a factor of $1 / (1+d)$ ¹ while the benefits in year fifteen are discounted by a factor of $1 / (1+d)$ ¹⁵ (Where d = discount rate.) Note that in year fifteen, benefits compose the majority if not all of the present value calculation for TRC.

15 years of benefits is inherently uncertain, and any discount rate used should consider such uncertainty.

The PSU submission finally recommends that the Commission look to other states for consideration of incentive structures. The Companies believe that the forum of the TRC is inappropriate for discussion of incentive structures of EDC programs, and that such discussion should be part of the regulatory proceeding reviewing Phase III EE&C Plans.

V. Conclusion

Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company appreciate the opportunity to provide Reply Comments on the Commission's Tentative Order regarding the 2016 Total Resource Cost Test. The Companies look forward to working with the Commission and the other parties on this matter.

Respectfully submitted,

Dated: May 12, 2015

By:



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