



November 1, 2019

**VIA E-File**

Rosemary Chiavetta, Secretary  
Pennsylvania Public Utility Commission  
400 North Street, Filing Room  
Harrisburg, PA 17120

**RE: 2021 Total Resource Cost (TRC) Test, Docket No. M-2019-3006868**

Dear Secretary Chiavetta,

Please find the **Joint Comments of the Green and Healthy Homes Initiative, Housing Alliance of Pennsylvania, Keystone Energy Efficiency Alliance, Natural Resources Defense Council, National Housing Trust, Pennsylvania Utility Law Project, and Regional Housing Legal Services** (collectively, the Pennsylvania Energy Efficiency for All Coalition (PA-EEFA)), which are submitted for filing in the above noted proceeding.

Please contact me with any questions.

Respectfully Submitted,

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**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

2021 Total Resource Cost (TRC) Test : Docket No. M-2019-3006868

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**JOINT COMMENTS OF**

**GREEN AND HEALTHY HOMES INITIATIVE**

**HOUSING ALLIANCE OF PENNSYLVANIA**

**KEYSTONE ENERGY EFFICIENCY ALLIANCE**

**NATURAL RESOURCES DEFENSE COUNCIL**

**NATIONAL HOUSING TRUST**

**PENNSYLVANIA UTILITY LAW PROJECT**

**AND**

**REGIONAL HOUSING LEGAL SERVICES**

**Collectively, PA ENERGY EFFICIENCY FOR ALL COALITION (PA-EEFA)**

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**November 1, 2019**

## I. INTRODUCTION

On September 19, 2019, the Pennsylvania Public Utility Commission (Commission) issued a Tentative Order containing “proposed guidance for implementing the Pennsylvania Total Resource Cost (TRC) Test for use in planning for and during a potential Phase IV of Act 129.”<sup>1</sup> The Commission states that “In order to allow for adequate planning for the potential Phase IV, [it] has chosen to put forth this Tentative Order regarding a 2021 TRC Test, which builds on the four previous Pennsylvania TRC Test Orders and industry documents.”<sup>2</sup> The Commission “seeks comments and reply comments on the proposed 2021 TRC Test intended for use in the potential Phase IV of Act 129.”<sup>3</sup> In response to the Commission’s request these comments are submitted by the above-named organizations, collectively Pennsylvania Energy Efficiency for All Coalition (PA-EEFA). PA-EEFA is a partnership of Pennsylvania and national organizations that share a common goal of ensuring that low-income individuals have access to energy efficiency services to reduce their energy consumption. PA-EEFA, as a collective, is principally concerned with expanding access to energy efficiency and weatherization in multi-family housing for economically vulnerable households. The organizations that comprise PA-EEFA recognize the significant overlap between those interests and the robust, effective implementation of Act 129 in current and any future phases that the Commission may elect to implement.

Improving the energy efficiency of low-income households not only provides direct economic benefits to these vulnerable households, it also has the potential to materially improve participants’ quality of life by addressing health and safety issues that may be present.

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<sup>1</sup> Tentative Order, cover.

<sup>2</sup> Tentative Order at 3.

<sup>3</sup> Tentative Order at 51.

Comprehensive energy efficiency upgrades reduce customer assistance program (CAP) costs, save energy for economically vulnerable households, increase comfort, and routinely identify and resolve health and safety concerns. Lower income populations are also commonly more vulnerable to both the short term pollutants that result from electric generation and to the potential consequences of climate change, both of which are lessened by improved energy efficiency programming. PA-EEFA thanks the Commission for the opportunity to provide these comments.

## **II. COMMENTS**

In its Tentative Order, the Commission sought comments in the following topic areas, with additional specific subcategories under each topic area:

- A. General Issues
- B. Avoided Costs of Supplying Electricity
- C. Other TRC Benefits
- D. TRC Costs
- E. Fuel Switching
- F. Net-to-Gross (NTG) Issues
- G. Demand Response

The Commission encouraged commenting parties to adhere to its numbering format. PA-EEFA lists below those subjects (and corresponding lettering or numbering) to which it will be responding, followed by its comments. Please note that the absence of specific subjects from the Commission's list and associated comments on other issues should not be construed as implied support or opposition for other matters addressed in the Tentative Order.

## **A. General Issues**

### **3. Level at Which to Calculate and Report TRC Test Results**

PA-EEFA supports the Commission’s proposal to “continue applying the TRC Test at the plan level”<sup>4</sup> because, as the Commission states, “testing at the plan level gives new programs and technologies adequate opportunity to establish whether they are able to contribute to the EE and DR goals of Act 129.”<sup>5</sup> Further, PA-EEFA finds that as long as low-income programs are not uniquely determined to be categorically exempt from cost-effectiveness testing requirements, applying the TRC test at the Plan level will allow low-income customers to benefit from the implementation of energy efficiency (“EE”) programs that are specifically designed to overcome the barriers that these customers face.

### **4. Discount Rate**

PA-EEFA appreciates and agrees with the Commission’s determination regarding the “three key findings [that] support the decision to use a 3% real discount rate for the 2021 TRC Test.”<sup>6</sup>

### **5. Effective Useful Life**

Field experience clearly shows that energy efficiency measures have the potential to last far longer than the 15-year measure life limit imposed by Act 129 in the Commission’s interpretation of the statute. The maximum 15-year measure lifetime limits the ability of the programs to fully value the benefits provided by the installation of long-lived measures, and thus for cost-effectiveness testing. This arbitrary constraint on measure life is particularly challenging in income-

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<sup>4</sup> Tentative Order at 9.

<sup>5</sup> Tentative Order at 8-9.

<sup>6</sup> Tentative Order at 10.

eligible programs, especially when such programs may promote the installation of long-lived measures such as HVAC equipment, insulation, and air sealing, all of which commonly are given measure lives longer than fifteen years in other jurisdictions. It is true that the Commission proposes that any individual program, including those designated for low-income customers,<sup>7</sup> is not required to meet cost-effectiveness criteria. Nevertheless, PA-EEFA is concerned that understating the cost-effectiveness of low-income energy efficiency programs through Act 129 may discourage utility investment in long-lived efficiency measures capable of providing meaningful bill savings for low income households and to, in turn, reduce the costs of universal service programming passed on to other ratepayers.<sup>8</sup> PA-EEFA respectfully disagrees with the Commission’s suggestion that “end effects adjustments such as the ones proposed in the NSPM are not acceptable for use in Phase IV.”<sup>9</sup> The suggestion that full measure costs be used in cost-effectiveness testing when only a portion of the benefits are used is too narrow an interpretation of the statute. PA-EEFA urges the Commission to revise the TRC Order so that, for measures with estimated useful lifetimes greater than 15 years, the net present value of the first 15 years of the benefits and costs is reflected in TRC testing, rather than the full costs and only 15 years’ worth of benefits.

PA-EEFA supports continued application of “dual baselines where appropriate and

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<sup>7</sup> Tentative Order at 12.

<sup>8</sup> The Commission recently recognized the critical importance of addressing the unacceptably high energy burdens experienced by low income consumers, and has taken bold steps to address high energy burdens through effective programs and policies. See Joint Motion of Vice Chairman David W. Sweet and Commissioner Andrew G. Place, 2019 Amendments to Policy Statement on Customer Assistance Program, 52 Pa. Code §§ 69.261-69.267, Docket Nos. M-2019-3012599, M-2017-2597711, -2596907 (Sept. 19, 2019). The Commission’s Act 129 policies can and should align to ensure that the full benefits of low income energy efficiency programming are appropriately valued.

<sup>9</sup> Tentative Order at 11.

practical”<sup>10</sup> so that measure savings are calculated appropriately.<sup>11</sup>

## **B. Avoided Costs of Supplying Electricity**

### **1. Vintage of Avoided Cost Forecasts**

Consistent with its recommendation to “maintain the provision that the 2021 TRC Test apply for the entirety of Phase IV,”<sup>12</sup> the Commission also states that “For simplicity in compliance, EDCs will not be expected to update avoided costs mid-phase.”<sup>13</sup> Consistent with its recommendation regarding the TRC recommendation in section A.2., PA-EEFA urges the Commission to modify the Order such that it calls for the Statewide Evaluator (“SWE”) to annually consider whether there are indications that market conditions have varied sufficiently to warrant such an update or modification of the avoided costs, and to inform the Commission if it determines that an update is warranted.

### **4. Line Losses**

The Tentative Order proposes that line loss values consistent with Table 1-4 of the 2021 TRM be used in the avoided costs used for cost benefit analysis. PA-EEFA agrees that line loss values should be included and suggests if the values in Table 1-4 represent average line loss rates, those values should be modified to reflect marginal line loss rates. Efficiency programs’ impact on line losses are, by definition, equal to marginal loss rates. This is important because line losses grow (largely) exponentially with load,<sup>14</sup> meaning that marginal line loss rates are much higher than

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<sup>10</sup> Tentative Order at 12.

<sup>11</sup> At least to the extent that they are not under-stated by arbitrarily limited baselines.

<sup>12</sup> Tentative Order at 8.

<sup>13</sup> Tentative Order at 14.

<sup>14</sup> Jim Lazar and Xavier Baldwin, Valuing the Contribution of Energy Efficiency to Avoided Marginal Line Losses and Reserve Requirements, published by the Regulator Assistance Project (Aug. 26, 2011), available at

average line loss rates. Thus, by using average loss rates the utilities are understating the economic value of efficiency savings.

## **9. Price Suppression Effects**

The Commission states that it “has concerns about inherent uncertainty associated with quantifying this presumed benefit stream of DRIPE as a TRC benefit”<sup>15</sup> and proposes that it is inappropriate to include price suppression effects in the avoided costs because “the findings of such an analysis – no matter how rigorous – would be speculative at best.”<sup>16</sup> By taking this position, it seems to imply that assuming price suppression effects equal to zero is less speculative than the values that a price suppression study would produce. However, if the goal of the study is not to achieve iron-clad precision, which PA-EEFA acknowledges is unattainable, but rather to achieve a reasonably plausible estimate, PA-EEFA believes that the study cost might be less – even considerably less – than the Commission assumes. Further, none of the documents that the Commission cites related to this point are more recent than 2013, suggesting that the current SWE was not directed to conduct any investigation or analysis of the current state of data regarding DRIPE. PA-EEFA suggests that this position is insufficiently supported and encourages the Commission to direct the SWE to review the possible costs of conducting a DRIPE study.

### **C. Other TRC Benefits**

#### **7. Societal Benefits**

The Commission proposes to maintain the exclusion of “societal benefits” in cost-

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[https://www.raponline.org/knowledge-center/valuing-the-contribution-of-energy-efficiency-to-avoided-marginal-line-losses-and-reserve-requirements/?sf\\_data=results&sf\\_s=lazar+line+loss](https://www.raponline.org/knowledge-center/valuing-the-contribution-of-energy-efficiency-to-avoided-marginal-line-losses-and-reserve-requirements/?sf_data=results&sf_s=lazar+line+loss).

<sup>15</sup> Tentative Order at 25.

<sup>16</sup> Tentative Order at 26.

effectiveness testing, including decreased universal service program costs and reduced uncollectible expenses.<sup>17</sup> While it may be correct to classify these societal benefits also as non-energy benefits, the statute does not address whether to include certain benefits in those terms. Rather, it refers to the “avoided monetary cost of supplying electricity.”<sup>18</sup> And, so long as utilities can recover universal service program and uncollectible expenses from their customers, they clearly contribute to the monetary cost of supplying electricity.

In its comments regarding the 2016 Tentative TRC Order, the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA) argued that these two specific benefits categories should be included as benefits in TRC cost-effectiveness testing:

“The Commission’s interpretation of the savings calculation in the TRC Test does not align with the language in the statute, which is inherently much broader in that it requires the Commission to consider the **full, net present value of the avoided monetary cost of supplying electricity**. Universal Service programming and uncollectible account recovery make up a significant portion of the overall rate charged to residential customers. These costs are embedded in the rates paid by residential ratepayers for the supply of electricity to their home. So, reducing the cost of uncollectible accounts and Universal Service Programming necessarily translates into ‘the avoided monetary cost of supplying service’ to residential ratepayers.”<sup>19</sup>

PA-EEFA agrees with the prior comments of CAUSE-PA and urges the Commission to modify the TRC Order to include reduced universal service and uncollectible expenses in the calculation, as these benefits are both quantifiable and clearly associated with the monetary cost of supplying service.

As the Commission recognized in its regulations governing the Low Income Usage

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<sup>17</sup> Tentative Order at 36.

<sup>18</sup> 66 Pa. C.S. § 2806.1(m).

<sup>19</sup> Energy Efficiency and Conservation Program – 2016 Total Resource Cost (TRC) Test, Comments of the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania, Docket No. M-2015-2468992, at 4 (filed April 27, 2015) (emphasis added).

Reduction Program (LIURP):

“The reduction in energy bills should decrease the incidence and risk of consumer payment delinquencies and the attendant utility costs associated with uncollectible accounts expense, collection costs and arrearage carrying costs.”<sup>20</sup>

As with LIURP, the reduction in universal service costs and uncollectible expenses as a result of Act 129 programming should be explicitly recognized and quantified in the TRC because it directly contributes to the “avoided monetary cost of supplying electricity.”<sup>21</sup> Explicit valuation of reduced universal service costs as part of the TRC will help drive EDCs to produce deeper savings for low income consumers through the Act 129 programs, thereby reducing the cost of universal service programming and other associated costs to all residential consumers.

The Commission’s Tentative Order suggests that avoided universal service program costs and reduced uncollectible expenses are not quantifiable, concluding that the only non-energy benefits it would include were “the quantifiable fossil fuel, water, and O&M impacts.”<sup>22</sup> However, the Commission already has a significant amount of data with which to quantify the avoided universal service costs and uncollectible expenses achievable through comprehensive low income energy efficiency programming. Bill reduction benefits achieved through LIURP are reported annually in the Bureau of Consumer Services’ Report on Universal Service Programs and Collections Performance.<sup>23</sup> This data could be used to closely approximate the savings in universal service costs, such as reductions in the Customer Assistance Program benefits, achievable through comprehensive low income energy efficiency programming. Utilities are also currently required to

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<sup>20</sup> 52 Pa. Code § 58.1.

<sup>21</sup> 66 Pa. C.S. § 2806.1(m).

<sup>22</sup> Tentative Order at 36-37.

<sup>23</sup> Pa. PUC, Bureau of Consumer Services, 2017 Report on Universal Service & Collections Performance, at 50 (Oct. 2018), [http://www.puc.state.pa.us/General/publications\\_reports/pdf/EDC\\_NGDC\\_UniServ\\_Rpt2017.pdf](http://www.puc.state.pa.us/General/publications_reports/pdf/EDC_NGDC_UniServ_Rpt2017.pdf).

conduct a third-party program evaluation every six years, which examine the reduction in universal service costs and uncollectible expenses as a result of LIURP participation.<sup>24</sup> This same type of quantification of benefits can and should be done in the Act 129 context to properly account for the full monetary benefit of delivering comprehensive energy efficiency programming to low income consumers.

#### **D. TRC Costs**

##### **1. Program Administration and Overhead**

PA-EEFA agrees with the Commission that, where “parties have scrutinized the ratio of incentive costs to direct costs”<sup>25</sup> the characterization of kits and direct install program costs as administrative rather than incentive costs can “create an unfair perception issue for direct install and kit programs simply because of the program delivery mechanism.”<sup>26</sup> PA-EEFA supports the Commission’s determination that such costs should be characterized as incentive costs.

#### **E. Fuel Switching**

##### **1. ENERGY STAR Requirement**

This section contemplates “minimum efficiency provision[s]”<sup>27</sup> for “fuel switching

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<sup>24</sup> See 52 Pa. Code § 58.15 (requiring utilities to monitor and evaluate “changes in customer bills, payment behavior and account balances” as part of its period program evaluations); see also APPRISE, PECO Energy 2014 LIURP Evaluation Final Report, at 44-53 (April 2016), [http://www.puc.state.pa.us/General/pdf/USP\\_Evaluation\\_LIURP-Peco.pdf](http://www.puc.state.pa.us/General/pdf/USP_Evaluation_LIURP-Peco.pdf) (“LIURP has had a positive impact on energy affordability and bill payment for program participants. Following participation, the percent of the total bill that customers paid increased by 15.4 percentage points. Customers were paying an average of 92.7 percent of their bills prior to LIURP treatment and an average of 108.0 percent of their bills following LIURP treatment.”)

<sup>25</sup> Tentative Order at 38.

<sup>26</sup> Tentative Order at 38.

<sup>27</sup> Tentative Order at 42.

measures that convert equipment from electricity to fossil fuel.”<sup>28</sup> Should the Commission determine that a Phase IV of Act 129 is warranted, which we urge the Commission to do, PA-EEFA suggests that the merits of allowing utilities to promote fuel-switching from electricity to fossil fuel in Phase IV should be reviewed in light of any relevant climate initiatives or directives from the Governor or Legislature. Further, in the development of the utilities’ program plans, all cost-effective alternatives to fuel-switching should be evaluated both for the economic benefits they can provide compared with fuel-switching and for their ability to provide meaningful impacts in the pursuit of climate goals.

### **III. CONCLUSION**

For the reasons stated more fully above, PA-EEFA urges the Commission to adopt its recommendations to adjust the Total Resource Cost test to more appropriately reflect all of the costs and benefits of energy efficiency programming. We thank the Commission for the opportunity to submit comments in this proceeding, and look forward to further participating in the Phase IV proceedings.

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<sup>28</sup> Tentative Order at 42.

**Respectfully Submitted,**

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