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VIA ELECTRONIC FILING

EPA Docket Center
Environmental Protection Agency, Mail Code: 28221T
1200 Pennsylvania Ave, NW
Washington D.C. 20460

Re: Docket ID No. EPA-HQ-OAR-2016-0033, Comments to the U.S. Environmental Protection Agency on the Proposed Clean Energy Incentive Program Design Details

Dear Administrator McCarthy:

The Pennsylvania Chapter of Energy Efficiency For All (EEFA) is pleased to submit these comments on the U.S. Environmental Protection Agency's (EPA) Proposed Clean Energy Incentive Program; Design Details (CEIP). By bringing together diverse stakeholder groups, EEFA aims to increase investments in the multifamily affordable housing sector, lower energy bills, stabilize rent payments, reduce pollution, and provide a better quality of life for residents across the Commonwealth of Pennsylvania.

Respectfully Submitted,

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On behalf of EEFA in Pennsylvania:

Housing Alliance of Pennsylvania
Keystone Energy Efficiency Alliance
National Housing Trust
Natural Resources Defense Council
The Pennsylvania Utility Law Project, on behalf of its low-income clients

I. INTRODUCTION

Energy Efficiency for All (EEFA) in Pennsylvania supports the EPA's inclusion of the voluntary Clean Energy Incentive Program (CEIP) in the Clean Power Plan (CPP) as a tool to incentivize early investments in renewable energy (RE) and energy efficiency (EE) in low-income communities. The EPA has specifically identified EE as the lowest cost strategy to reduce CO₂ emissions in the United States.¹ But despite the benefits of EE, there are numerous barriers to the implementation of EE projects and programs in Pennsylvania's low-income communities.²

EPA rightfully states that there have been "historic economic, logistical, and information barriers" to implementing demand-side EE programs in low-income communities.³ The barriers to demand-side EE are even more evident for multifamily affordable housing developments. Existing multifamily rental buildings have received far fewer energy efficiency measures than any other type of housing, resulting in higher energy costs for tenants and increased operating costs for affordable housing owners.⁴ A recent report conducted by EEFA and the American Council for an Energy-Efficient Economy (ACEEE) reviewed energy burdens in 48 major U.S. metropolitan areas and found that low-income households devote up to three times more of their incomes to energy costs than higher-income households do.⁵ Indeed, across Pennsylvania, extremely low-income households (those below 50% of the Federal Poverty Level (FPL)) often pay in excess of 30 percent of their income for energy costs.⁶ Therefore, to reduce energy costs and improve quality of life in low-income communities, it is essential that the CEIP be designed in a manner that significantly increases EE investments in those communities.

In order to best empower states to drive much-needed new investments in low-income communities and multifamily buildings, EEFA recommends that EPA:

- Maintain the proposed 50/50 split of the 300 million short-ton matching pool for renewable energy projects and low-income community projects;

¹ EPA, DEMAND-SIDE ENERGY EFFICIENCY TECHNICAL SUPPORT DOCUMENT, 3 (Aug. 2014) [hereinafter EE TSD]. The EPA noted that, "evaluations of the economic potential for carbon dioxide reductions from the United States' power sector identify demand-side EE as the lowest cost strategy as well as the strategy having the greatest reduction potential." *Id.*

² EE TSD, *supra* note 1 at 3. Despite the benefits of EE, the EPA dedicated a section to exploring the market barriers to deployment and determined:

Despite the persistent and large potential for electricity savings through investment in EE technologies and practices, market failures, as well as non-market barriers and behavioral impediments, limit the realization of the many benefits of these investments. Several market failures that lead to inefficiencies in the investment in energy efficiency are widely recognized by analysts and practitioners, and are discussed extensively in the literature.

Id.

³ Clean Energy Incentive Program Design Details; Proposed Rule, 81 Fed. Reg. 42,940, 42,965 (Jun. 30, 2016) [hereinafter Proposed CEIP].

⁴ G.Pivo, *Unequal Access to Energy Efficiency in US Multifamily Rental Housing: Opportunities to Improve*, 551-73 (2014).

⁵ A. Drehobl & L. Ross, LIFTING THE HIGH ENERGY BURDEN IN AMERICA'S LARGEST CITIES: HOW ENERGY EFFICIENCY CAN IMPROVE LOW INCOME AND UNDERSERVED COMMUNITIES, ACEEE, (Apr. 2016), available at: <http://aceee.org/sites/default/files/publications/researchreports/u1602.pdf>.

⁶ Fisher, Sheehan & Colton, *The Home Energy Affordability Gap*, 2nd Series (Apr. 2016), available at: http://www.homeenergyaffordabilitygap.com/03a_affordabilityData.html

- Clarify that states cannot use, and that EPA will disapprove, definitions of low-income community that arbitrarily exclude low-income renters in commercially metered multifamily buildings;
- Increase the matching ratio for low-income energy efficiency projects to better incentivize projects in low-income communities;
- Adopt an earlier eligibility date for when eligible EE projects must commence operation; and,
- Incentivize projects that integrate community solar projects into energy efficiency upgrades.

II. COMMENTS

- a. Maintain the 50/50 split of the 300 million short ton matching pool between a reserve for low-income community projects and a reserve for renewable energy projects

EEFA supports EPA's proposal to evenly split the 300 million short ton matching pool between renewable energy projects and low-income community projects.⁷ We further support the EPA's proposal to prohibit states from reallocating emission rate credits (ERCs) or allowances between the two reserves. Specifically, the equal division of ERCs/allowances will prevent states from shifting them from the low-income reserve to the renewable reserve and ensure that enough ERCs/allowances are available for low-income projects to overcome the many barriers to their completion.

In the Proposed CEIP, the EPA requested comment on the appropriateness of an alternative method of reserve apportionment. That method would reserve only 40% of each state's *pro rata* share of ERCs/allowances for each category of projects, and allow states to allocate the remaining 20% at their discretion to either category.⁸ EEFA urges the EPA not to adopt this approach, as it will likely result in ERCs/allowances being diverted from low-income community projects to projects that have typically faced fewer barriers to implementation, such as market-rate and large scale renewable projects.

Allowing states to shift ERCs/allowances from the low-income reserve to the renewable reserve would frustrate the most important purpose of the CEIP, which is to ensure the benefits of the CPP reach low-income and vulnerable communities. If states were free to shift ERCs/allowances out of the low-income sector, it is likely that states would complete fewer low-income projects, as there would be a reduced incentive to overcome persistent barriers to investments in the low-income and multifamily sectors. Further, it is unlikely that a strict prohibition on ERC/allowance-shifting would negatively impact renewable projects. With the extension of the solar investment tax credit and production tax credit in the FY 2016 Omnibus and Tax Extenders legislation, significant additional investments in wind and solar projects are

⁷ Proposed CEIP, 81 Fed. Reg. 42,951.

⁸ *Id.*

expected between the state plan deadline for the CPP and the start of the first compliance period in 2022, even without additional matching ERCs/allowances.⁹

EPA may hear from some commenters that providing states with flexibility to shift reserves is appropriate in light of EPA's conclusion that low-income community projects are unlikely to absorb the full amount of ERCs/allowances EPA is making available through the matching pool.¹⁰ However, EPA has underestimated the potential for energy savings from demand-side EE programs in the low-income sector by basing its analysis solely on the performance of ratepayer-funded energy efficiency programs.¹¹ There are several examples of programs and incentives that are not ratepayer-funded that could be significant sources of energy savings in the low-income sector. Several examples are provided below:

- **Weatherization Assistance Program.** The Weatherization Assistance Program is a significant source of energy savings. Nearly 100,000 low-income households across the country receive energy saving measures through WAP each year. Recent evaluations have found that households receiving WAP assistance reduce electricity use by nearly 10%.¹²
- **Low Income Housing Tax Credit program (LIHTC).** Each year approximately 100,000 affordable apartments are constructed or substantially rehabilitated through the LIHTC program. The program is administered by state housing finance agencies (HFAs). Many HFAs require or encourage developers to implement EE upgrades as part of LIHTC-financed developments.¹³ In Pennsylvania, the Pennsylvania Housing Finance Agency (PHFA) requires all developers applying for LIHTC to conduct an Energy Rebate Analysis analyzing the various EE resources available to the development, and further awards points in its application ranking system to projects that meet Passive House standards.¹⁴ Similarly, the Virginia Housing Development Authority (VHDA) implements incentives in the LIHTC program that encourage developers and builders to use recognized third-party green standards in design and construction in order to reduce long term energy usage. The incentive requires the use of rigorous standards, third-party testing and inspection from EarthCraft Virginia and LEED. A study of the impact of these incentives by Virginia Tech's Center for Housing Research found that apartments built to VHDA's higher EE standards used 40% less energy than housing built to existing code requirements.¹⁵

⁹ T. Mai *et al.*, IMPACTS OF FEDERAL TAX CREDIT EXTENSIONS ON RENEWABLE DEPLOYMENT AND POWER SECTOR EMISSIONS, National Renewal Energy Laboratory (Feb. 2016), available at: <http://www.nrel.gov/docs/fy16osti/65571.pdf>. The report found that the extension of tax credits would result in increased wind and solar deployment, with peak deployment occurring in the early 2020s. *Id.*

¹⁰ Proposed CEIP, 81 Fed. Reg. 42,951.

¹¹ EE TSD, *supra* note 1.

¹² DOE, Weatherization Assistance Program National Evaluations: Summary of Results (2015), available at:

http://energy.gov/sites/prod/files/2015/08/f25/WAP_NationalEvaluation_WxWorks_v14_blue_8%205%2015.pdf

¹³ <http://www.enterprisecommunity.com/solutions-and-innovation/enterprise-green-communities/resources/policy-support-h-m>

¹⁴ See Pennsylvania Housing Finance Agency's 2016 Qualified Allocated Plan, available at:

http://www.phfa.org/forms/multifamily_program_notices/qap/2016_allocation_plan.pdf.

¹⁵ Housing Virginia, *Twelve facts from new energy study show cost savings to low income housing tax credit residents in Virginia*, available at: <http://www.housingvirginia.org/home.aspx>.

- **Public Housing Modernization.** The U.S. Department of Housing and Urban Development strongly encourages Public Housing Authorities (PHA) to incorporate whole building, systems-based efficiency improvements as properties are upgraded and modernized.¹⁶ There are approximately 1.2 million affordable apartments in public housing properties throughout the country. These properties are estimated to have a \$26 billion backlog of deferred maintenance.¹⁷ As these properties are upgraded, they present a significant opportunity to incorporate energy savings technologies.

As these examples demonstrate, there is the potential for energy savings beyond what can be achieved through ratepayer-funded EE programs. Further, as discussed later in these comments, an increase in the low-income matching ratio to further incentivize EE projects in low-income communities would address concerns regarding an excess of ERCs/allowances. As such, EPA should maintain the 50/50 split of the 300 million short ton matching pool between a reserve for renewable energy projects and a reserve for low-income community projects and should not allow ERCs/allowances from the low-income community reserve to be transferred to the renewable energy reserve.

- b. Clarify that states cannot use definitions of low-income community that arbitrarily exclude low-income renters in commercially metered multifamily buildings

EEFA generally supports the EPA’s proposal to allow states to use existing federal, state, and local definitions of “low-income community.” By leveraging existing program definitions, states can build on their own successful existing programs, and avoid expending resources on creating a new definition at the start of the relatively short (two-year) CEIP. EEFA further supports the EPA’s proposal to allow a state to include more than one definition of low-income community within its state plan to allow eligibility for a range of different types of programs. However, EEFA recommends that the EPA clearly identify a procedure by which to screen state-level definitions of low-income to ensure that low-income households will be eligible for energy efficiency projects regardless of meter-type – whether utility service is delivered through a commercial (or master) meter or an individual residential meter.

EEFA supports EPA’s four designated “presumptively approvable” definitions of low-income community in the proposed CEIP. Two are geographic, and include U.S. Department of Housing and Urban Development (HUD) Qualified Census Tracts (QCTs) and New Market Tax Credit (NMTC) zones.¹⁸ The next two are household-level, and include the Weatherization Assistance Program (WAP) and the Federal Poverty Guidelines (FPL).¹⁹ EEFA supports the EPA’s inclusion of these four definitions, on the grounds that a mix of complementary geographic and household-level definitions is the best method by which to ensure every household in need receives assistance. The geographic definitions will allow states to identify entire communities and regions that could benefit from targeted energy efficiency projects. At the same time, the household-level definitions will allow states to meet the needs of those

¹⁶ HUD Notice PIH-2009-43 (HA), http://portal.hud.gov/hudportal/documents/huddoc?id=DOC_11835.doc

¹⁷ HUD, *Five Things you Should Know About RAD Public Housing Conversions*, available at: <http://portal.hud.gov/hudportal/HUD?src=/RAD>

¹⁸ Proposed CEIP, 81 Fed. Reg. 42,961.

¹⁹ *Id.*

individuals who do not meet the geographic definition of low-income, but nonetheless need assistance.

Despite the benefits offered by existing federal definitions of low-income community, EEFA is concerned that states will adopt definitions that restrict eligibility to projects that serve only individual residential meters. This would arbitrarily exclude low-income renters residing in master-metered buildings from participating in the program. In many states, residential low-income energy efficiency programs are open only to homeowners or renters who receive utility service through a residential meter.²⁰ Energy efficiency upgrades to residential units or building common areas where utility service is provided through a commercial meter are often ineligible for low-income energy efficiency programs. While not the case in Pennsylvania, some states' utility-administered low-income energy efficiency programs exclude renters altogether.²¹ While there are examples of utility-administered low-income programs that are tailored to multifamily buildings and include master-metered properties, they are few and far between. In many cases, master-metered multifamily buildings are served under "C&I" programs targeted to commercial or industrial customers, and often do not include the types of incentives necessary to make EE possible for affordable housing owners. Similarly, owners and managers of multifamily buildings with a combination of meter types often face additional hurdles in cobbling together programs to achieve deep energy savings.

Therefore, if states adopt existing eligibility requirements that do not allow residents in master-metered buildings or renters generally to qualify, the benefits of the CEIP will not reach these households. The CEIP presents a unique opportunity to incentivize projects that address entire buildings, regardless of meter configuration. It is incumbent on EPA to ensure that it does not approve definitions that arbitrarily exclude owners and residents of affordable multifamily housing by conditioning project eligibility on meter type.

- c. Increase the matching ratio for low-income projects to ensure a state can leverage all ERCs or allowances available to it

The EPA should design the CEIP in a manner that ensures states can take full advantage of the 150 million short ton low-income matching pool. As currently proposed, the low-income portion of the CEIP is projected to allocate only one-quarter of the available matching pool.²² Therefore, the majority of available low-income matching ERCs/allowances will not be used to support innovative low-income projects; instead, they will be retired by the EPA.²³ Such an outcome runs counter to goal of the CEIP, which is to help ensure that the benefits of the final CPP rule are shared broadly across society and that potential adverse impacts on low-income ratepayers are avoided. A strong CEIP that benefits low-income communities is essential to achieving this goal and overcoming the historic barriers to EE. Thus, EEFA recommends that the

²⁰ For example: Energy Upgrade California (<http://www.energyupgradeca.org/en/find-programs-and-assistance/find-a-program/programs/income-qualified-programs>); Energize Connecticut (<http://www.energizect.com/your-home/solutions-list/save-energy-and-money-all-year-long>); New Jersey Comfort Partners Program (<http://www.njcleanenergy.com/residential/programs/comfort-partners/comfort-partners>)

²¹ For example: Gainesville Regional Utilities (<http://gru.com/TabID/3656/Default.aspx>).

²² Proposed CEIP, 81 Fed. Reg. 42,952.

²³ *Id.*

EPA increase the matching ratio for low-income energy efficiency projects beyond the current 2:1 ratio.

As currently designed, the low-income portion of the CEIP prevents states from fully utilizing EPA's low-income matching pool. In its Technical Support Document (TSD) entitled "Renewable Energy and Low Income Energy Efficiency," the EPA estimated that the combined EE and solar potential in low-income communities in 2020 and 2021 would generate/save 47 million MWh of electricity, equal to 47 million matching ERCs or 38 million allowances.²⁴ Based on this calculation, less than a quarter of the available matching ERCs/allowances would be awarded to eligible projects.²⁵ Moreover, given the EPA's proposal to retire unused allowances, states would miss out on 112 million additional matching allowances, totaling 140 million MWh of EE and RE generation in low-income communities.²⁶

The discrepancy between the size of the EPA's matching pool and potential for projects to take advantage of them becomes more apparent when looking at the state level. In Pennsylvania, the size of EPA's low-income matching pool is 7,559,018 allowances, equivalent to approximately 9.5 million MWh of energy savings/generation in the low-income sector in 2020 and 2021.²⁷ However, over the last six years, Pennsylvania's utility-administered EE programs have resulted in approximately 8 million MWh of cumulative annual savings *across every customer class*. Thus, the allowances available for low-income projects under the CEIP are orders of magnitude greater than the sum of Pennsylvania's utility-administered low-income EE programs to date. Therefore, without greater incentives, it is unlikely that Pennsylvania could capture its 7.5 million allowances.

To ensure states capture all available ERCs/allowances for low-income EE projects, the EPA should increase the matching ratio. The purpose of the 2:1 matching for low-income projects is to provide additional incentives for efficiency measures in communities that face significant barriers in accessing EE. However, the 2:1 matching will not provide enough of an incentive to drive development of robust EE programs. ACEEE estimates that "even with a \$35-per-ton allowance price, the value of the CEIP incentive awarded to a single family home would be less than 2% of the total project cost."²⁸

Given this low-incentive level, it is likely that the low-income portion of the CEIP would reward low-income EE programs that are already planned under a state's existing utility-administered programs, rather than drive new and additional investment into this sector. Such an outcome would frustrate the goals of the CEIP to drive further investment in low-income communities, and lead to the retirement of a large portion of the unused ERCs/allowances CEIP matching pool. Fortunately, there are more than enough allowances for EPA increase the matching ratio for EE beyond the proposed 2:1 matching ratio.

²⁴ Proposed CEIP, 81 Fed. Reg. 42,952.

²⁵ *Id.*

²⁶ This number was calculated by subtracting EPA's projected allowance usage from the total allowance amount made available to the states in the low-income matching pool.

²⁷ Proposed CEIP, 81 Fed. Reg. 42,954.

²⁸ S. Hayes & R. Young, *Energy Efficiency: The Slip Switch to a New Track Toward Compliance with Federal Air Regulations*, 11 (Jan. 2012), available at: <http://aceee.org/sites/default/files/publications/researchreports/e122.pdf>.

Increasing the matching ratio beyond the 2:1 ratio contained in the proposed rule would better incentivize low-income EE investments and ensure that the CPP is effective. Many commenters have identified the potential negative impacts of the CPP, including environmental justice issues, affordability concerns, and inequitable distribution of benefits and costs, among others. The CEIP is an important tool to address these concerns and ensure the benefits of the CPP accrue to all ratepayers and to the communities that have felt the direct environmental impact of both carbon emissions and climate change.

d. Adopt an earlier eligibility date for when eligible energy efficiency projects must commence operation

We applaud EPA for recognizing that adequate ramp-up time must be allowed to thoughtfully design and target energy efficiency programs, and to achieve desired levels of volume.²⁹ However, in order to allow projects to generate robust energy savings in 2020/2021, we urge EPA to consider an earlier eligibility date for when EE projects must commence operation. EPA can do this by tying the eligibility start date to the publication of the final CEIP rule. For example, EPA could set the date when eligible projects commence operations to 6-months after the final rule is published. Assuming the final rule is published before March 2018, this would provide more than a 15-month period for savings to be generated. As EPA acknowledges, there have been “historic economic, logistical, and information barriers to implementing demand-side EE programs in low-income communities.”³⁰ It is unreasonable to expect states to develop and implement projects that overcome these barriers and generate meaningful energy savings in 2020 and/or 2021 in as little as 15-months.

e. Incentivize projects that integrate community solar projects into energy efficiency upgrades

EEFA supports the EPA’s attempt to bring the benefits of solar technologies to low income communities through the inclusion of solar technologies in the low-income community reserve. As with demand-side EE, low income communities often face barriers to accessing the economic and environmental benefits of solar technologies. While we believe that the low-income community reserve of the CEIP should focus on incentivizing EE projects, we agree with EPA that solar technologies implemented in low-income communities should be eligible to receive a 2:1 incentive under the low-income community reserve.³¹ We would particularly support incentives for projects that integrate solar technologies into energy efficiency upgrades. Community solar in particular is an important technology for ensuring that renters can access the economic benefits of solar power.

In the Proposed CEIP, EPA solicited comments on how states may be able to determine the benefits delivered to low-income ratepayers through solar projects. EEFA supports EPA’s proposal to count the direct bill benefits of solar projects. However, EEFA believes that unlike the Final CPP and the RE portion of the CEIP, the low-income project portion should credit the

²⁹ 81 Fed. Reg. 42964

³⁰ 80 Fed. Reg. 64831

³¹ 81 Fed. Reg. 42966

on-site consumption of solar projects so as to bring maximum benefit to low-income communities.

III. CONCLUSION

Many low-income communities have been and continue to be directly affected by carbon emissions and their co-pollutants, other environmental harms, and climate change. At the same time, the Clean Power Plan as a whole could, depending on how it is implemented, put upward pressure on energy bills that those same communities are already struggling to afford. The low-income community reserve of the CEIP is critical to mitigating these economic impacts. EEFA strongly encourages the EPA to design the CEIP to ensure low-income communities will be able to access the full extent of the ERCs and allowances available to them, by maintaining the mandatory 50/50 split of ERCs or allowances, ensuring access to projects regardless of meter type, increasing the matching ratio for low income energy efficiency projects, and adopting an earlier eligibility start date for projects.