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The Southern Alliance for Clean Energy (SACE) appreciates the opportunity to submit these comments to the Environmental Protection Agency (EPA) on its proposed Clean Energy Incentive Program (CEIP) – a component of the Clean Power Plan (CPP). SACE is a regional non-profit organization that works across the Southeast to promote responsible energy choices that create global warming solutions and ensure clean, safe and healthy communities.

Our work with utilities and regulators to increase development of clean energy resources and decrease reliance on fossil-fueled power is primarily focused in states where we have offices and staff – Florida, Georgia, North Carolina, South Carolina and Tennessee. We work with allies in other Southeastern states to track utility planning engagement opportunities and highlight the true costs of fossil fuel power. Due to this broad geographical presence, SACE works to address a unique need for action on climate policy that utilizes a regional approach and allows us to compare trends, share solutions and identify common interests.

We applaud EPA for establishing an early-action carbon reduction opportunity for states that incentivizes early investment in clean energy resources, like renewable energy and energy efficiency. We are especially excited that EPA has provided an extra incentive to increase development of energy efficiency programs that benefit low-income

communities. Energy efficiency is the least-cost energy resource available for meeting states' energy and environmental needs, and there remain significant benefits to be reaped from further investment in this resource. Specifically, we recognize the multiple benefits of energy efficiency investments in low-income communities that have been demonstrated within our region to date, as well as the potential for continued investment to support a more vibrant, more economically and energy secure region.

As discussed below, we also believe that solar energy projects can bring benefits to low-income communities. The most important way that EPA can improve the CEIP is by adding a solar component to its incentives for investments in low-income communities.

The Southeastern United States is home to some of the most impoverished states in the nation and is therefore poised to benefit the most from the incentives contained in the CEIP. Each state in our region has a higher percentage of the population living in poverty than the national average.¹

State	Percentage of People in Poverty (3-year average 2011-2013)	Difference From National Average (14.8%)
Alabama	16.1	1.3
Florida	15.0	.2
Georgia	17.6	2.8
Kentucky	18.0	3.2
Mississippi	20.6	5.8
North Carolina	17.0	2.2
South Carolina	17.2	2.4
Tennessee	17.7	2.9

Below are our recommendations on how EPA can improve on the CEIP so that it is more effective in addressing energy equity issues in the Southeast as well as incentivizing growth in renewable energy in a region that has historically been slow to develop these energy resources.

¹United States Census Bureau, Percentage of People in Poverty by State Using 2- and 3-Year Averages: 2010-2011 and 2012-2013, available at <http://www.census.gov/hhes/www/poverty/data/incpovhlth/2014/tables.html>

I. Definitions, Timing and Eligibility

- A. *What definition(s) of “low-income community” should be required for eligible EE projects?*

In order to increase the range of eligible projects and therefore maximize savings potential, EPA should allow a broad definition of “low-income community” for eligible EE projects. The American Recovery and Reinvestment Act of 2009 expanded eligibility for the federal low-income Weatherization Assistance Program (WAP) from 150% of the federal poverty guideline to 200% of the federal poverty guideline. However, there are still many utility customers in the Southeast that do not meet this requirement, yet consistently struggle to pay their utility bills due to inefficient housing stock and outdated major appliances.

To help energy-burdened customers that do not currently qualify for federal assistance, some utility programs have sought to expand eligibility for WAP, such as Efficiency Vermont’s Major Appliance Rehabilitation Service, which allows customers that are below 80% of median household income.² However, requiring income testing of individual program applicants presents a major administrative burden, slows down the pace of completing retrofits, and significantly reduces participation rates.

Another approach has been used by Duke Energy Progress in the Carolinas. Its Neighborhood Energy Saver program defined a low-income community as one having greater than 50% of the neighborhood households below 150% of the federal poverty level.³ When the contractors are present in the community, installation crews provide education along with lighting, home heating & air conditioning, and hot water savings measures. The program’s cost-effectiveness can be very high when crews are continuously utilized by scheduling nearby neighborhoods sequentially, before moving to a different part of the state.

² American Council for an Energy Efficient Economy (ACEEE). “Leaders of the Pack: ACEEE’s Third National Review of Exemplary Energy Efficiency Programs.” June 2013.

³ Navigant Consulting, Inc. *2013 EM&V Report for the Neighborhood Energy Saver Program*, prepared for Duke Energy Progress. November 2014. (Filed in North Carolina Utilities Commission Docket No. E-2, Sub 952 on December 15, 2014.)

Considering the findings from the two programs above, EPA should allow states flexibility to approve projects that are reasonably expected to benefit low-income communities without requiring income-testing for all applicants. For example, EPA should allow states to approve projects that accept any person who has already qualified for any low-income program (e.g., food stamps, school lunches).

In supporting the contention that a proposed project is expected to benefit low-income communities, states should utilize EPA's EJSCREEN tool or an equivalent demographic analysis to identify the economic and demographic makeup of the community that will be receiving the benefits of the program or project. States should streamline the approval process for projects that are clearly targeted to census tracts, zip codes, neighborhoods or other geographic areas with a significant portion of low-income people. EPA could also consider prioritization of projects that incorporate EJSCREEN analysis in their applications when deciding how to re-allocate unused CEIP allowances.

B. What criteria should be used to define eligible wind and solar projects, as well as eligible EE projects implemented in low-income communities? (e.g., by sector (residential, commercial, etc.) or by geography (where a project takes place and who benefits from it))

Low-income communities accrue significant energy and non-energy benefits from a wide variety of energy efficiency projects, including projects that do not fall under typical residential energy efficiency programs. In order to maximize benefits to low-income communities, EPA should allow a wide variety of projects to be eligible, with an emphasis on flexibility. Energy efficiency programs that benefit low-income communities include but are not limited to:

- Weatherization Assistance Program (WAP)
- Neighborhood direct install
- On-bill financing
- Affordable multifamily housing
- Free energy kits
- Home audit programs

- LED streetlight retrofits
- New homes
- Upstream manufactured homes
- Community center retrofits
- Worship facility retrofits
- Codes and standards
- Education and outreach
- Behavioral efficiency
- School education events and energy kits

While evaluation, measurement and verification (EM&V) should be used to determine the allowances that are awarded to specific projects, the guidelines should not inadvertently exclude expenditures for educational or other activities that are not deemed to result in verified savings.

With respect to solar and wind projects, we do not believe there should be any additional geographic restrictions placed on projects for eligibility.

We also recommend that EPA consider altering the eligibility categories of the CEIP to include solar projects that specifically benefit individuals in low-income communities. Recently, the White House hosted a National Community Solar Summit. Community solar allows multiple households and businesses to pool their resources and invest in shared solar systems to save on their energy bills. We recommend that this model be explicitly encouraged as an implementation option in the CEIP.

Other solar programs could also deliver benefits to low income communities. One approach is on-bill financing: The NY-Sun Incentive Program, offered by NYSERDA, provides low-interest rates to residential, small business and not-for-profit organizations to install solar. Another approach is local government financing: The St. Lucie County, Florida Solar and Energy Loan Fund (SELF) is a nonprofit lending institution that provides low cost loans to residents and small businesses for energy-saving improvements such as efficiency and solar. Created with seed money from state and

federal grants, participants who have received these loans have reduced their energy bills by an average of 22%.

There are likely many other models that states and utilities could develop to serve this community, with the encouragement of the CEIP. Thus, EPA should not define the projects specifically, but rather use general criteria for defining benefits to low income communities that include both economic interests and geographic proximity. It may also be useful to cap the size of such projects at a community scale (e.g., 5-20 MW maximum) for purposes of clarifying that larger projects should be presented under the general renewable energy CEIP category, but that states may elect to designate smaller projects as benefitting low-income communities.

Because such projects could be eligible under CEIP as general renewable energy projects, EPA would not find it necessary to establish particularly stringent bright-line tests for the economic interests and geographic proximity of such projects to low income communities. We suggest the following general approach.

- In terms of defining what projects or activities would qualify as a low income solar project, EPA should adopt a definition of low income that is identical to the one chosen for energy efficiency.
- In terms of defining economic interest, the proposed project should be demonstrated to provide a financial benefit in terms of reduced electric bills, reduced exposure to energy cost fluctuations, or increased property values.
- In terms of defining geographic proximity, the project should be located in the affected community. We suggest approaches for identifying affected community in our discussion of energy efficiency projects. For solar projects, it may be useful to also allow such projects to be located on the distribution feeder that serves the affected community, even if it is not located in the affected community.

Adding this additional category would provide low income communities an opportunity to highlight the role of particular programs or projects that would benefit their communities and advance EPA's overall environmental justice objectives.

C. How should ‘commence construction’ of an eligible wind or solar project and ‘commence operations’ of an eligible low-income energy efficiency project be defined?

For eligible wind and solar renewable energy projects, EPA should replace the “commence construction” language with “commence operation” after the submittal of an initial state implementation plan. With this minor change, utility-scale renewable energy projects may be able to qualify for important federal incentives that reduce purchase costs. This minor change would address a potential market distortion that would encourage a delay in renewable energy operation until 2020. Changing the standard for qualifying projects to be based on operation could encourage wind energy and solar power development between now and when a state submits its implementation plan, potentially September 2018, as opposed to January 2020.

Wind and Solar Power Capacity Required to Generate Full CEIP Allowances, by State and Commencing Construction Year⁴

State	State Gen ERC's	“Commence Construction” Earliest Operation Years		“Commence Operation” Earliest Operation Years					
		2021 (1 yr)	2020 (2 yr)	2019 (3 yr)	2018 (4 yr)				
		Wind MW	Solar MW	Wind MW	Solar MW	Wind MW	Solar MW	Wind MW	Solar MW
Kentucky	6,191,077	1,767	2,827	883	1,413	589	942	442	707
Florida	4,037,810	1,152	1,844	576	922	384	615	288	461
Alabama	3,902,882	1,114	1,782	557	891	371	594	278	446
Georgia	3,444,529	983	1,573	492	786	328	524	246	393
North Carolina	3,343,237	954	1,527	477	763	318	509	239	382
Arkansas	2,734,037	780	1,248	390	624	260	416	195	312
Tennessee	2,722,605	777	1,243	388	622	259	414	194	311
South Carolina	2,066,002	590	943	295	472	197	314	147	236
Louisiana	1,871,785	534	855	267	427	178	285	134	214
Virginia	1,733,183	495	791	247	396	165	264	124	198
Mississippi	446,633	127	204	64	102	42	68	32	51
Totals	32,493,780	9,273	14,837	4,637	7,419	3,091	4,946	2,318	3,709

⁴ Methodology: CEIP state proposed set-aside allowances in tons, converted into Emission Rate Credits (ERCs) using 0.8 tons per Megawatt Hour conversion. Wind energy generation based on a 40% capacity factor. Solar energy generation based on a 25% capacity factor.

If the eligibility requirement is not changed to "commence operation" for renewable energy, SACE would recommend using existing language to define "commence construction". The Internal Revenue Service (IRS), as a means for renewable energy projects to qualify for federal tax incentives, has developed guidance for what determines when construction has begun ("commence construction") on a qualified renewable energy project. Specifically, the IRS has issued Notice 2013-29 and provides two methods for determining whether a project has begun construction. Projects may qualify as having begun construction if they have conducted "physical work of a significant nature"; alternatively, the Safe Harbor provision considers construction commencement if the development firm has expended "five percent or more of the total cost of the facility".⁵

In addition to these two methods, a project developer must undertake "continuous construction" or "continuous efforts" after meeting either the physical work or safe harbor provisions. The IRS has provided additional guidance regarding the Continuous Construction/Continuous Efforts Tests in Notice 2013-60, but such guidance is unnecessary for the CEIP qualifying projects.

Our recommendation is consistent with the CPP analysis, which actually assumes four years of renewable energy installations, instead of two. The CPP as published in the Federal Register states, "Assuming 19 GW per year of RE from 2017–2020 based on these historic maximums yields an installed base of 76 GW of RE potentially eligible for CEIP incentives in 2020 and/or 2021."⁶

For low-income EE projects, "commence operations" should be defined as no sooner than the day after an energy efficiency retrofit is completed at a site, which is the earliest point at which the project should accrue credits for eligible savings. The duration of the

⁵ Internal Revenue Service (2013). Beginning of Construction for Purposes of the Renewable Electricity Production Tax Credit and Energy Investment Tax Credit, Notice 2013-29. [<https://www.irs.gov/pub/irs-drop/n-13-29.pdf>]

⁶ Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Final Rule at 64830, available at <http://www.gpo.gov/fdsys/pkg/FR-2015-10-23/pdf/2015-22842.pdf>

savings should be defined consistently with EM&V guidelines, and allowances awarded consistent with verified savings for the duration of the lives of the measures.

D. What commencement date is appropriate for a project to qualify as eligible for the CEIP?

We interpret EPA's intent with the CEIP to maximize the amount of carbon pollution reduction during the period 2021-2022 from projects that can be reasonably associated with a state's effort to comply with the CPP. Assuming that EPA will not grant allowances for pollution reduction that occurs prior to 2021 (regardless of when the project commences operation), then the significance of the commencement date is thus mainly associated with the determination of whether the project results from the state's efforts. A bright line test is needed because the relative importance of many factors that may influence a state or utility decision to move forward with such projects would be impractical to assess on a case-by-case basis.

We recommend that EPA take different approaches with respect to the commencement date for renewable vs low income projects. For renewable projects that do not primarily benefit a low income community, EPA should allow projects that commence after the state has submitted its final compliance plan. As discussed above, we recommend that this reflect commencement of operations, so that as the final plan is being developed, responsive projects may be developed and construction begun. This will provide an incentive for states to complete their plans expeditiously, but will also not place project developers in the position of needing to track the status of a regulatory filing as part of their construction project management.

With respect to low-income projects (including solar energy), we recommend that EPA should allow projects approved by states that commenced operations after September 2016, regardless of whether or not that date represents submission of an initial state compliance plan or a final state compliance plan. In our experience, low-income programs often start with a pilot and ramp up slowly. Encouraging states and utilities to initiate such programs at the earliest possible date, and to expand existing qualified

programs beginning in September 2016, would maximize the potential for this CEIP initiative to result in increased investments in low income communities. We recommend that particularly with respect to programs benefitting underserved communities, EPA should avoid any perverse incentive to delay ramping up a project's activities or the launch of new programs.

II. Allowance or Credit Distribution

A. How should the 300 million short ton matching pool be split between the two reserves: one for wind/solar, one for low-income energy efficiency?

In order to assure that states participating in the CEIP will take advantage of a wide range of eligible projects or programs, EPA should establish matching allowance or credit pools that are split into reserves dedicated to either renewable energy or low-income energy efficiency programs. Ensuring development of a diversified CEIP program will result in states establishing both renewable energy projects and low-income energy efficiency programs, reducing the risk associated with states taking an "all or nothing" approach that relies on only one of type of CEIP-eligible project. However, because states have different opportunities to enact low-income energy efficiency programs or renewable energy projects, the allowance pools should be provided as a floor with flexibility for the states to expand development of whichever type of projects are more available to an individual state.

For example, requiring the set-aside of one-third of allowances for renewable energy and another one-third for low-income energy efficiency, states would then be able to appropriate the remaining one-third to either renewable energy or low-income energy efficiency programs. It is important for these set aside portions to be significant enough to allow for development of full-scale renewable energy projects or robust low-income energy efficiency programs. If instead, only a single-digit set aside for renewable energy were required, this would likely result in development of a disproportionate number of solar energy projects since wind energy projects are usually constructed with a larger nameplate capacity that maximizes economies of scale. Similarly, creating too small a

set-aside for low-income energy efficiency could create the opportunity for those allowances to be awarded to a fiscally inefficient one-off energy efficiency project that does not provide the same level of benefits, in terms of energy savings, for low-income communities.

B. When should EPA allocate matching allowances or emission reduction credits (ERCs) to a state, and when should awards from these allocations be made to eligible project providers?

In order to ensure that the appropriate amount of allowances are available to each state and to protect against too many unused allowances that would need to be reallocated at a later date, EPA should allocate matching allowances to states based on the states' estimation of potential CEIP-eligible projects. States should be allowed the flexibility to create their own methodology or process to determine the potential of CEIP-eligible projects and communicate that potential to EPA before the beginning of the CEIP eligibility timeline. States can then accept applications from potential projects and accept or reject those as appropriate.

Allocation of allowances or credits to projects from states, for both state credits and matching EPA credits, should come after the state has appropriately verified the megawatt hours (MWhs) savings or generation. In order to accommodate verification timelines, we suggest a two-year delay from when projects submit their projected savings or MWhs to when those projects are awarded allocations from the states; however, states may choose to award allocations sooner than two years if satisfactory verification has been provided. For example, verified credits would typically be awarded in Q1 of 2022 to projects that were allocated credit in Q1 2020. If verification has not been completed in this time, verification must be completed before EPA may elect to re-allocate the unused CEIP credits.

Given that this longer verification timeline would necessarily put crediting into the formal CPP compliance timeline (beginning in 2022), reallocation of any unused CEIP allowances would have to occur within the CPP compliance timeline (explained below as CEIP Phase 2).

- C. *How should matching allowances or ERCs that are allocated to a state but not awarded to eligible projects be redistributed among other states with unmet demand for matching allowances or ERCs, and when should this redistribution take place?*

Due to the short timeline currently proposed for the CEIP, two years, it seems unlikely that EPA could undertake re-allocation within the 2020-2021 timeframe. Given this time constraint, and the realities of the administrative burden to quantify and reallocate unused allowances, we propose that EPA establish a “CEIP Phase 2.” This would allow EPA and the states plenty of time to properly quantify and reallocate remaining CEIP allowances.

We propose that after allowing two years to verify eligible savings under the first phase of the CEIP (2020-2021), states would surrender any remaining matching allowances to EPA. EPA would then determine how many allowances are still available under the CEIP, including those allowances originally set aside for states that do not participate in the CEIP. We would then recommend that EPA competitively award those remaining matching allowances to the best low-income projects, for implementation that commences operation in 2024-2025. EPA could define “best” using a variety of criteria, such as cost-effectiveness, demonstrated rate of project impact growth, or replication of innovation in other locations. The availability of such a potential incentive would encourage states to not only achieve meaningful carbon reductions benefitting low income communities, but also strive to model best approaches and sustain them beyond the initial CEIP period.

- D. *What are the appropriate mechanisms a state (in the case of a state plan) or EPA (in the case of a federal plan) should use to review project submittals and issue early action allowances or ERCs?*

In establishing the mechanisms and timelines used to review project submittals and issue early action allowances or ERCs, EPA and the states should take into account the typical timeline major utilities operate under in their existing energy efficiency activities. For

example, in North Carolina, investor-owned utilities must complete at least eight steps to initiate a new program.

Steps	Timeline
1. Utility plans new program with its internal staff, prospective vendors, and possible input from advocates and other stakeholders	3-9 months, depending on program complexity
2. Utility submits the proposed program to the North Carolina Utilities Commission (NCUC)	1 month (internal regulatory review)
3. NCUC review and approval	Usually 1-2 months
4. Utility contracts for program services and begins implementation	Usually 2-5 months
5. New program included in cost recovery filings, beginning with the first filing after program launch	Up to 1 year
6. NCUC approves cost recovery based on deemed savings	Usually 1-2 months
7. Program EM&V report submitted to NCUC	Within 2 years of the end of the first year of program operations, so up to 3 years
8. NCUC true-up of cost-recovery amounts based on adjustments between deemed savings and verified savings	First annual cost recovery proceeding after the EM&V report, so up to 4 years

As illustrated by steps 1-4, the process from initiating a new energy efficiency program concept to program launch can be as little as six months or as great as 18 months, depending on project complexity and potentially unrelated external factors (such as rate cases pending at the NCUC). Steps 5-8 indicate that the resolution of EM&V issues under current NCUC practices can take up to 4 years from program launch.

This example supports our recommendation that EPA encourage launch of low income CEIP programs as rapidly as possible. We also observe that unless programs are launched by 2019, it is unlikely that the EM&V issues will be resolved by a utility regulator by 2022 unless steps are taken to expedite such work – and even so, because it cannot be substantially expedited until a sufficient pool of completed program activities are available, it is not practicable to conduct EM&V.

III. Conclusion

We appreciate the opportunity to offer these comments on how EPA can improve the opportunities and effectiveness of the CEIP program, as part of the CPP. Incentivizing early action will ensure that states do not wait until 2022 to begin to develop renewable energy projects and low-income energy efficiency programs as carbon emission reduction measures. In order for EPA’s CPP to be truly effective in spurring development of clean energy resources and increasing job opportunities in the clean energy industry sector, the CEIP must take a broader approach, as suggested in these comments, as to what projects are eligible for CEIP allowances. Lastly, creation of a CEIP Phase 2 will allow EPA time to determine how best to reallocate allowances for maximum efficacy.

Respectfully submitted,

A handwritten signature in black ink that reads "Angela Garrone". The signature is written in a cursive, flowing style. Below the signature is a horizontal line.

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