January 21, 2016

Gina McCarthy
Administrator
U.S. Environmental Protection Agency
EPA Docket Center, Mail Code: 28221T
1200 Pennsylvania Ave., NW
Washington, DC 20460
via www.regulations.gov

Comments of the National Association of State Energy Officials (NASEO) to the U.S. Environmental Protection Agency's (EPA) on the proposed Federal Plan and Model Rules for the Clean Power Plan (CPP), **Docket No. EPA-HQ-OAR-2015-0199**

Dear Administrator McCarthy,

The National Association of State Energy Officials (NASEO) appreciates the opportunity to provide the following comments for consideration by the EPA in relation to the proposed CPP Federal Plan and Model Rules.[1]

NASEO and our 56 governor-designated State and Territory Energy Office members have a history of working with their governors and legislatures to develop energy policies and programs that promote energy system reliability, spur economic development, diversify fuel mixes, provide economic benefits to consumers and businesses, and limit environmental impacts. NASEO has also facilitated collaboration among State Energy Offices, Public Utility Commissions, and environmental agencies (including air regulators) regarding the intersection of energy policies and programs and clean air efforts since the 1980s. The agreement reached on energy efficiency in May of 2014 by NASEO, the National Association of Regulatory Utility Commissioners (NARUC) and the National Association of Clean Air Agencies (NACAA) should be a useful guidepost to EPA.[2]

[1] It should be noted that these comments do not supersede the comments or opinions of any individual state on the proposal. States' positions on aspects of the proposal vary significantly.
[2] NASEO, NACAA and NARUC, 2014, "Principles for Including Energy Efficiency in 111(d) of the Clean Air Act" http://www.naseo.org/Data/Sites/1/principles_3n_2014.pdf

While NASEO has taken no position on the merits or legality of the CPP, we believe it is important for states that choose to create compliance plans for consideration by EPA to have flexibility and the opportunity to craft least-cost compliance options that can support other state energy imperatives, including assuring energy reliability and affordability and supporting state economic objectives. We believe that end-use energy efficiency will often provide lower-cost or least-cost compliance opportunities that support such objectives.

Our comments under this docket complement those submitted by NASEO on December 14, 2015 under Docket No. EPA-HQ-OAR-2015-0734 concerning feedback on design and implementation of the Clean Energy Incentive Program (CEIP).

Today we offer comments under the following nine major headings:

- **Reinforce That Energy Efficiency Is a Valid CPP Compliance Tool and Include It in the Federal Plan**
- **Signal the Acceptability of the Broadest Possible Suite of Energy Efficiency Measures**
- **Explicitly Signal that State Energy Offices, State Utility Commissions, and Other State Agencies May Certify or Vet Energy Efficiency Programs, Projects, and Measures and Their Evaluation**
- **Support Development and Implementation of Private Energy Efficiency Registries**
- **Clarify that Federally Funded or Supported Measures Are Creditable and Can "Count" for CPP Compliance**
- **Assure a Level Playing Field Between Energy Efficiency and Renewable Energy**
- **Allow States to Employ Least-Cost Approaches to Compliance and Build on State Programs**
- **Simplify Approvable Compliance Pathways Across States as Much as Possible and Provide and/or Approve Guidance and Model Plans to Facilitate State Implementation and Standardization**
- **Evaluation, Measurement, and Verification (EM&V) Requirements**
- **Supplemental Comments on the CEIP**

Reinforce That Energy Efficiency Is a Valid CPP Compliance Tool and Include It in the Federal Plan

We urge the EPA to reinforce that energy efficiency–end-use as well as in power generation and transmission and distribution (T&D)–is a valid and acceptable compliance approach under the CPP. We also urge EPA to include energy efficiency as well as combined heat and power (CHP) and waste heat to power (WHP) as eligible Federal Plan compliance options (under both rate and mass bases).

While various parts of the CPP rule and its associated materials (rule preamble and technical support documents) favorably note energy efficiency as an often most cost-effective and beneficial emission mitigation approach, there remains uncertainty among some state officials and other stakeholders as to the standing and "creditability" of energy efficiency.

This is prompted in part by EPA's exclusion of end-use energy efficiency as a "building block" for Best System of Emission Reduction (BSER) determination, despite the building blocks being irrelevant to compliance approaches (i.e., states may use all, some, or none of the building blocks in any proportion to achieve compliance). Importantly, EPA's exclusion of energy efficiency as an eligible resource for emission reduction credits (ERCs) under the proposed Federal Plan rate-based implementation approach is of great concern.[3] Not only would energy efficiency be excluded as a compliance approach in states under the Federal Plan but some states looking to the Federal Plan as a model may then exclude energy efficiency from their state compliance plans. This may not be the intent but could very well be the effect of energy efficiency's omission from the Federal Plan, and could result in states forsaking least-cost, beneficial energy efficiency compliance opportunities based on the impression that EPA may have less confidence in energy efficiency. We also note similar concerns regarding the exclusion of several renewable energy categories (such as biomass energy) and CHP from the proposed Federal Plan.

While we acknowledge that end-use energy efficiency is included as an eligible resource in the proposed Model Trading Rules, we urge inclusion of end-use energy efficiency, T&D efficiency measures (such as conservation voltage reduction), CHP (including waste-heat-to-power), and additional renewable energy categories (e.g., biomass) as allowable and creditable approaches under the Federal Plan.

We also seek clear, unambiguous reinforcement of energy efficiency's validity and, indeed, its benefits as a compliance option. And, as noted below, we suggest that EPA develop or endorse model plan approaches to energy efficiency as a compliance option (whether to be used formally in plans or as "complementary" measures).

Signal the Acceptability of the Broadest Possible Suite of Energy Efficiency Measures

Building on the preceding comments, we seek broad eligibility of end-use energy efficiency, T&D efficiency measures, and CHP as well as a range of distributed renewable energy (including biomass) systems as creditable least-cost options under the CPP, including under the Model Trading Rules and under the Federal Plan.

Beyond the exclusion of end-use energy efficiency, CHP, and various renewable energy forms from the proposed Federal Plan, the proposed Trading Rule's enumeration of certain technologies, techniques, and programs to the exclusion of others may reduce consideration of and impede technological advance and innovation for the unmentioned approaches. We are concerned that air quality regulators and other stakeholders will interpret the enumerated approaches as "preferred" and unmentioned approaches (for example, low-income weatherization, above-code building programs, non-ratepayer industrial energy efficiency,

[3] 80 FR 64990-91

energy efficiency financing programs[4]) as either administratively (e.g., for plan approval purposes) or technically "risky."

While the rule cannot cite all pertinent existing nor predict future potential technologies, programs, and approaches, it can make more clear that approaches listed in the rule and its preamble are non-exclusive options. EPA through rule and preamble language supplemented by more in-depth separate technical support documents and memoranda can signal to states the eligibility of other options and approaches that further the rule's objectives of reducing existing covered EGU CO_2 emissions or emission rates.

Explicitly Signal that State Energy Offices, State Utility Commissions, and Other State Agencies May Certify or Vet Energy Efficiency Programs, Projects, and Measures and Their Evaluation

In many states energy efficiency and other state energy policies may fall under the purview of agencies other than those responsible for air quality regulation, such as the State Energy Office (SEO) or the Public Utility Commission (PUC).[5] Many air quality regulators (federal as well as state) are relatively unfamiliar with energy efficiency technologies, policies, and programs as well as related issues of evaluation, measurement, and verification (EM&V).

As such, we recommend that the Model Rule and related guidance or memoranda explicitly state that SEOs, PUCs, and other agencies with purview over pertinent policies and programs may serve as certifying or vetting agents for energy efficiency, renewable energy, and other energy matters for which they have oversight, responsibility, or jurisdiction. SEOs or other pertinent agencies can support air quality agencies' development of compliance plans (e.g., assessing and projecting energy savings from policies and programs) and can oversee implementation and evaluation of relevant policies, programs, projects, and measures. Examples of the latter include SEO oversight and vetting of Energy Savings Performance Contracts, low-income weatherization programs, and energy efficiency finance programs, and PUC jurisdiction over utility energy efficiency resource standards (EERS) and renewable portfolio standards (RPSs). SEO and PUC oversight of EM&V processes for programs under their purview as well oversight of privately operated energy efficiency registries are important functions for CPP compliance that in many cases could not be handled by the air quality agency.

We are concerned that if EPA does not explicitly state that SEOs, PUCs, and other pertinent bodies can serve such a certifying or vetting function then state air quality agencies and EPA itself (including Regional Office staff) will assume that they must provide such a function for areas in which they usually lack expertise and experience. The result would be inefficient implementation of the CPP, higher costs for taxpayers and utility ratepayers, and likely less

[4] We note a growing number of financial programs supporting energy efficiency implementation such as Property Assessed Clean Energy (PACE) finance, the Warehouse for Energy Efficiency Loans (WHEEL), utility "on-bill" financing, and various loan fund types.

[5] Here PUC is also meant to refer to bodies with other names that serve the same or similar function such as Public Service Commissions and State Corporation Commissions.

effective emissions reductions due to underutilization of cost-effective energy efficiency options.

Support Development and Implementation of Private Energy Efficiency Registries

EPA should recognize that states or private entities may choose to develop or participate in a voluntary registry to establish a transparent data repository of energy efficiency projects or activities. EPA should support or contribute to the development of such a registry.

In the Model Rule, EPA has indicated the need for registries to assure resources are only counted once and to facilitate inter- and intra-state trading of ERCs or allowances in states that choose to allow such trading. A registry would provide clear attribution and ownership of energy savings. It would assure credibility of savings and emissions reduction claims (including avoiding the risk of double-counting savings); provide transparency on EM&V methods used; be valuable for simplifying and encouraging the use of energy efficiency as a CPP compliance approach; and support state tracking of energy efficiency related savings and emissions reduction to help improve programs and policies for CPP compliance and beyond (e.g., criteria air pollutant management, electricity reliability and resource planning, and comprehensive state energy planning).

EPA has proposed that it might support or contribute to the development of an energy efficiency project registry. Although a broad, national energy efficiency registry does not exist today, many of the fundamental elements for such a registry are already in place as a result of states' experience with renewable portfolio standards and renewable energy certificates (RECs) tracking. A number of states are collaborating on the development of governance rules for use in creating a national energy efficiency registry that could be used for a wide variety of state and private purposes including tracking energy savings and emissions reductions resulting from energy efficiency project such as voluntary industrial energy efficiency investments and energy savings performance contracts.

Further, under a Federal Plan, EPA should rely on a third-party-administrative infrastructure, such as may be provided by a registry, to provide "front end" administrative functions to facilitate ERC issuance (under a Federal rate-based plan), including to energy efficiency and other resources not included in the Federal Rule rate-based proposal. To that end, EPA should provide criteria for what may constitute an acceptable "front end" registry.

Clarify that Federally Funded or Supported Measures Are Creditable and Can "Count" for CPP Compliance

We seek explicit confirmation that federally supported (whether by funding, tax credit, or other means) energy efficiency programs, projects, and measures can count for issuance of emission rate credits (ERCs) generally under the CPP (in rate-based states) and that those meeting Clean Energy Incentive Program (CEIP) low-income and other pertinent criteria be deemed eligible for ERCs or allowances (as appropriate) under the CEIP.

There has been some confusion as to the eligibility of federally supported programs (such as the low-income Weatherization Assistance Program that blends federal with non-federal funding, federal facility energy efficiency and renewable energy projects, and energy efficiency projects in federally-assisted housing) to "count" under the CPP. Some have claimed that federal support precludes states counting such emission reductions.

Whether and what proportion of funding is federal should not be relevant so long as emissions reductions beyond a baseline occur. These emission reductions would automatically be reflected as reduced measured emissions from covered electric generating unit stacks under a mass-based plan. Assuming that mass and rate goals should be reasonably commensurate then emissions reductions from federally supported programs should count under rate-based plans as well.

If federal support was deemed to matter and to disqualify programs and measures from "counting" then arguably that would apply to production and investment tax credits for renewable energy projects or even tax preferences given to utilities for both energy supply and efficiency expenditures. This approach is not the intent of the rule and it presents impractical implementation barriers for states.

Also we note that EPA purposely avoided the Clean Air Act Section 110 term "additional" in the list of requirements for creditable/countable emission reductions under the CPP, instead using the term "non-duplicative," which is defined as not having more than one state count the same emission reduction.

Our reading of the rule and the law, agreed to by some EPA officials in discussions, is that there is nothing in the rule that precludes federally supported measures (energy efficiency, renewable energy, or others) from being issued ERCs in the CPP. This should also apply to ERCs or allowances issued under the CEIP.

Assure a Level Playing Field Between Energy Efficiency and Renewable Energy

Commensurate with preceding comments, we seek a level playing field in EPA's (and states') treatment and consideration of energy efficiency and renewable energy in the Federal Plan and Model Rule as well as under the CEIP. Again, as noted, omission of energy efficiency, CHP, and some renewable energy categories from the proposed rate-based Federal Plan is a significant concern.

We recognize that some renewable power generation options are easier to measure directly (e.g., metering solar, hydroelectric, and wind power generation) than other renewable energy generation technologies and end-use efficiency. However, there are established EM&V methodologies and new approaches (both protocols, such as those developed under the Department of Energy's Uniform Methods Project, and technologies, such as building energy management systems and data analytic tools) that permit adequate quantification of energy

savings or alternative generation. Also, such approaches need not be highly burdensome to energy efficiency project owners and implementers.

To concerns that may be expressed about the accuracy and reliability of energy efficiency EM&V and actual energy savings impacts, we note growing experience with energy efficiency, the integrity of energy efficiency as a reliable and valued resource to grid operators (for instance, ISO-New England's Forward Capacity Market and PJM's Reliability Pricing Model) and Public Utility Commissions, and increasing energy savings performance contracting (ESPC) markets that offer measured, guaranteed savings. Further, we also note that EPA and state air quality regulators accept for Clean Air Act Section 110 State Implementation Plan (SIP) purposes less certain quantification of mobile and area source measures and emission impacts.[6]

Allow States to Employ Least-Cost Approaches to Compliance and Build on State Programs (e.g., EERS, Building Energy Codes, Performance Contracting, Weatherization and Retrofits, and Financing)

We support wide flexibility for states to achieve their emission targets through approaches that best comport with their particular contexts. We thank EPA for providing multiple state plan pathway options, including choice of mass- or rate-based targets, use of subcategorized or blended rates, a "state measures" option, "trading ready" and other multistate compliance approaches, and a variety of technical options for emissions abatement.

While we are pleased that energy efficiency and CHP compliance options are available under the CPP, we reiterate the above noted concerns that energy efficiency and CHP can be disadvantaged under the proposed rules. A growing number of studies point to end-use energy efficiency providing least-cost "resources" to the grid. For instance, Lawrence Berkeley National Laboratory found utility ratepayer energy efficiency programs delivering an average of 4.6¢ per kWh saved, significantly less than any supply side option.[7] ESPCs, building energy codes, and other program and policy approaches deliver cost-effective energy savings while also avoiding emissions and supporting electric system reliability through reducing demand on grid supply and T&D assets.

The point is that energy efficiency is often a least-cost electric resource as well as an emission compliance approach while delivering reliability and other benefits. To the extent possible EPA rules and supporting documents should recognize and support existing and emerging state

[6] If mobile (transportation control) and area source measures can be recognized and credited under Sec. 110 SIPs, given emissions uncertainties, atmospheric chemistry complications, and weather variabilities, where direct public impacts are at stake, then evaluation of electricity savings (and concomitant CO_2 emissions avoidance) from energy efficiency should be significantly easier to accept. Further, even continuous emissions monitors (CEMs) upon which permit compliance depends are allowed to exhibit as much as 20 percent tolerances (40 CFR Part 60, Appendix B).

[7] Figure includes both utility and participant costs. Ian M. Hoffman, Gregory Rybka, Greg Leventis, Charles A. Goldman. Lisa Schwartz, Megan Billingsley, and Steven Schiller, 2015, "The Total Cost of Saving Electricity through Utility Customer-Funded Energy Efficiency Programs: Estimates at the National, Sector and Program Level," Lawrence Berkeley National Laboratory, http://emp.lbl.gov/sites/all/files/total-cost-of-saved-energy.pdf

energy efficiency programs and policies, including recognizing existing EM&V and other processes that have been demonstrated at the state level. State EERS and related utility savings target programs, ESPC programs, building energy codes, industrial energy efficiency and CHP implementation, low-income weatherization programs, above-code construction, local "stretch" energy codes, and energy efficiency retrofit programs are among a diverse set of policies and programs that can support CPP compliance.

Simplify Approvable Compliance Pathways Across States as Much as Possible and Provide and/or Approve Guidance and Model Plans to Facilitate State Implementation and Standardization

We recognize that whether or not specific energy efficiency policies, programs, and measures must be included in state CPP compliance plans depends on the compliance pathway a state may choose. Significant detail may be required under the state measures approach. Under other mass-based options in which all compliance obligations are placed on covered EGUs, they may not need to be in the state's compliance plan but may be viewed as "complementary" policies and measures. And under rate-based options, EM&V related provisions will need to be included.

We suggest that EPA and its regional offices apply as simple and streamlined processes as possible in reviewing and approving state compliance plans, and that there be assurance of consistency across EPA Regions in such processes and criteria for plan approval. We recommend that EPA indicate, on a non-exclusive basis, models and templates for inclusion of various energy efficiency policies and programs that could be approved as part of state measures plans or be viewed favorably as complementary measures supporting an approvable state plan. For instance, NASEO developed example plan language[8] and the American Council for an Energy-Efficient Economy (ACEEE) has developed several templates.[9] Further, we understand that the National Association of Clean Air Agencies (NACAA) is developing pertinent materials.

Evaluation, Measurement, and Verification (EM&V) Requirements

EM&V matters are addressed in the CPP rule, the proposed Federal Plan and Model Trading Rules, and in draft EM&V Guidance. EM&V requirements should not be overly burdensome or expensive so as to dissuade use of energy efficiency as a compliance approach.

To the extent possible EPA should allow states to rely on their existing EM&V processes[10] and procedures, including use of existing Technical Reference Manuals, the International Performance Monitoring and Verification Protocol (IPMVP), and deemed savings resources. We

[8] NASEO, "Energy Efficiency Strategies for Clean Power Plan Compliance: Approaches and Selected Cases Studies" (July 2015) http://111d.naseo.org/Data/Sites/5/media/documents/naseo-ee-for-cpp-2015-aug-20.pdf
[9] http://aceee.org/topics/section-111d-clean-air-act
[10] See note 1.

also reiterate from earlier points that EPA could clarify that states can designate SEOs, PUCs, or other pertinent state agencies as certifying or vetting agents for energy efficiency programs, including the vetting of EM&V.

We understand the need to assure that energy savings are real, particularly under rate-based CPP compliance and for issuance of incentive ERCs or allowances under the CEIP. However, the desire for rigor must be balanced with the need to avoid costly and cumbersome processes that can impede energy efficiency investments and may militate toward greater use of emitting supply side compliance options. We recall that under the NOx SIP Call a number of states created energy efficiency/renewable energy (EE/RE) NOx set-aside allowance pools which in most cases were hardly utilized because transaction costs (EM&V and administrative requirements) were high relative to the value of the allowances. We fear a "perfect being the enemy of the good" scenario if EM&V and related processes are too cumbersome.

With respect to the CEIP we are also concerned that states opting for mass-based targets and, thus, do not need to include EM&V in their state compliance plans, may be required to demonstrate to EPA their establishment of EM&V processes and systems at the level required for rate-based compliance pathways in order to participate in a mere two-year program. Hence, we recommend that EPA allow states to employ existing EM&V processes and practices, including existing Technical Reference Manuals, the IPMVP, and deemed savings resources under the CEIP.

Supplemental Comments on the CEIP

On December 14, 2015 NASEO submitted comments to the EPA on design and implementation of the CEIP under Docket No. EPA-HQ-OAR-2015-0734. We cite those comments for inclusion in this docket. Those comments centered on:

- Definitions of "low-income community,"
- Eligibility of federally funded and supported energy efficiency activities,
- Eligibility of combined heat and power (CHP) and waste-heat-to-power (WHP),
- Eligibility of other renewable energy categories, and
- EM&V requirements

In addition, we support two other points concerning the CEIP:

- Non-low-income community end-use energy efficiency should be included on an equal footing with qualifying renewable energy as eligible resources for the federal match ratio of 1:1 for ERCs or allowances (as appropriate) while still affording the greater match ratio (2:1) for qualifying low-income energy efficiency programs, projects, and measures.
- To avoid disincentives for early action, the CEIP should be expanded to reward early actions as soon as state compliance plans are finalized for states opting to participate in the CEIP and no later than 2018.

NASEO greatly appreciates the opportunity to provide our comments on the CPP's proposed Federal Plan and Model Rules. We look forward to continuing our dialogue with EPA and the states in the coming months.

Best regards,

David Terry
Executive Director
National Association of State Energy Officials
2107 Wilson Boulevard, Suite 850
Arlington, Virginia 22201