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Comments of the National Association of State Energy Officials (NASEO) on the U.S. Environmental Protection Agency's (EPA) proposed rule: Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Docket No. EPA–HQ–OAR–2013–0602

December 1, 2014

Gina McCarthy
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460

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 its proposed Clean Power Plan ("proposed rule"). 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.

While NASEO has taken no position on the merits or legality of the proposed rule, we believe it is important to elevate state priorities should the rule move forward. Our concerns were initially documented in a May 2014 set of joint comments filed by NASEO, the National Association of Regulatory Utility Commissioners, and the National Association of Clean Air Agencies in advance of EPA issuing the proposed rule (Attachment A). NASEO greatly appreciates EPA's efforts to address the concerns raised by the three state organizations in the draft rule. However, NASEO believes a number of the most cost-effective compliance options available to states face serious obstacles if EPA does not offer specific guidance over the next several months. We hope EPA recognizes the need for state flexibility, multi-state coordination, electric system reliability and affordability, and fuel diversity.

In particular, our comments below focus on aspects of the proposed rule that would leverage existing and future innovative energy policies and programs that typically take greater advantage of significant private sector delivered energy efficiency, renewable energy, and energy system modernization. While EPA's draft rule encourages the use of energy efficiency and renewable

energy as compliance options, it provides little guidance and limited support for the inclusion of non-ratepayer compliance options operated outside of conventional investor-owned utility programs overseen by state public utility commissions. NASEO is concerned that in not adequately addressing these options, EPA is making it extremely difficult for states to recognize emissions reductions resulting from the billions of dollars in annual energy investments in areas such as the following:

1. *Energy efficiency and renewable energy investments made as a part of federal, state, and local public facilities retrofits utilizing Energy Savings Performance Contracting and other innovative implementation mechanisms*. This significant set of programs operated by entities such as State Energy Offices, the U.S. Department of Defense, General Services Administration, and U.S. Department of Energy achieves $7 billion of energy efficiency and renewable energy investments annually utilizing private sector financing at little or no cost to taxpayers or ratepayers.

2. *Private sector compliance with existing residential and commercial state building energy codes and standards policies*. Most states have recently adopted more modern building energy codes with the potential to delivery billions in energy savings and accompanying emissions reductions. Ensuring builders comply with these codes offers the opportunity to realize these savings, and NASEO is working with the states, U.S. Department of Energy, and a consortium of private sector organizations to increase compliance rates. States should receive credit for these savings and emissions reductions.

3. *Private and public-sector investments in Combined Heat and Power (CHP)*. Low natural gas prices and resilience concerns are driving new CHP investments by manufacturers, local governments, and educational institutions. State Energy Offices and others have worked to ensure barriers to installing CHP units are removed so that private market operators can advance this highly efficient, reliable heat and power option. In fact, during Hurricane Sandy and other natural disasters, CHP systems allowed major hospitals and universities, for example, to operate independently of the electricity grid. The market opportunity for CHP was estimated at 130 GW in 2012.

4. *Private and public-sector investments in commercial and residential energy retrofits facilitated through state programs*. State-led initiatives, such as commercial property assessed clean energy (PACE) and low-income weatherization programs, produce substantial energy savings and associated emissions reductions each year. To date, 25 states have established commercial PACE programs. In addition, nearly every state operates low-income and/or market rate residential (including multifamily) energy efficiency programs which invest billions of dollars of federal, private, and non-ratepayer state funds annually. Most of these programs have a history of strong measurement and verification.

5. *Private industrial efficiency investments facilitated by state government agencies*. For decades, State Energy Offices and other state agencies have worked with industrial and manufacturing facilities to promote "best practices" investments in process improvements

that result in substantial energy savings. Many of these programs do not rely on utility rebates. Thus, the energy savings are often not tracked by utility or state programs.

6. *State energy financing programs*. NASEO's State Energy Loan Fund (SELF) database (http://www.naseo.org/state-energy-financing-programs) shows that there are 79 energy financing programs operated by 44 states and territories, representing a total of over $3 billion in capital available through State Energy Offices and their partners for energy efficiency, renewable energy, and clean technology deployment. This amount excludes important new ratepayer and taxpayer supported "green banks" and special purpose financing initiatives which add billions more to this amount. States are interested in determining how to include these programs in compliance plans.

7. *Energy efficiency and renewable energy investments made by municipally-owned electric utilities and cooperatively owned utilities*. In just one such example, the Austin, Texas City Council approved Austin Energy's investment to achieve 800 MW of energy efficiency and 200 MW of solar over the next several years.

As can be seen above, there is a substantial array of public and private energy efficiency and renewable energy investments made outside of traditional investor owned utility ratepayer funded energy efficiency and renewable energy programs. Each of these areas represents cost-effective, public and private sector investments which are facilitated by state government agencies, such as State Energy Offices, and until recently were largely overlooked by EPA as potential compliance options for the proposed rule. And, while EPA has recognized that states may propose means to recognize such programs, offering little or no guidance in advance of finalizing the rule will likely result in states: 1) not fully considering such options; or 2) determining these options are too difficult to document and negotiate with EPA, and assuming EPA will reject them; or 3) substantially delay their inclusion in state plans until EPA provides necessary guidance and thus add to the cost of compliance for consumers and businesses. None of these outcomes is in the interest of the states or EPA.

In order for the proposed rule to have as little consumer and ratepayer cost impact as possible, it is critical that EPA more fully consider these opportunities in the final rule. NASEO recommends the following:

1. At a minimum, EPA should recognize a set of non-exclusive, pre-approved EM&V protocols relevant to each of the above areas. In the draft rule, EPA mentions its plans to publish EM&V guidance regarding protocols or approaches that will be accepted for quantifying the impact of energy efficiency (and renewable energy) programs. NASEO strongly encourages EPA to release this guidance as soon as possible, preferably ahead of the final rule. While many states have a track record of conducting EM&V on energy efficiency programs, some states—especially those that lack EERS policies—are weighing the costs of EM&V with the benefits of including energy efficiency in their 111(d) compliance plans. Understanding EPA's expectations for EM&V will help states navigate these decisions. NASEO reiterates the list of recommended EM&V protocols and approaches highlighted in Attachment A. These existing protocols should be

accepted by EPA. In addition, these protocols could serve as the foundation upon which EPA should identify additional approved EM&V approaches.

One important distinction that should be made in the context of the proposed rule is that some of the existing energy efficiency program EM&V conducted in the U.S. is in relation to utility ratepayer-funded programs and has an impact on utility revenue, rate cases, and potential penalties or performance rewards. The types of policies and approaches that some states have developed regarding EM&V should be applicable for 111(d) compliance. On the other hand, given that the purpose of EM&V in the proposed rule (estimate avoided electricity consumption to give states credit for associated avoided emissions) differs greatly from how it is typically used in utility regulation, EPA should not default to requiring the utility program EM&V standards as the only acceptable approach. EPA should recognize that other nationally and internationally-recognized organizations focused on assessing environmental and climate programs, such as the Global Environmental Facility's Independent Evaluation Office, typically favor less-costly, more-flexible EM&V options for energy efficiency programs. We expect many states will likely pursue energy efficiency programs outside of formal utility regulatory action for compliance with the proposed rule (e.g., state energy efficiency loan programs, commercial PACE programs). EPA should allow EM&V options for these types of programs that balance accuracy and cost and might not be the typical EM&V procedures used in utility regulation.

In addition, NASEO encourages EPA to include guidance on what option(s) will be acceptable to translate electricity savings into emissions reduction alongside any EM&V guidance the agency provides. Similar to the concerns about EM&V costs and lack of experience, states have varying levels of experience conducting emissions modeling. If the only option is to conduct complex energy modeling, some states will likely be discouraged from using energy efficiency as a compliance strategy, which would run counter to EPA's intent in the draft rule. NASEO encourages EPA to outline several options for acceptable conversion approaches, and to also allow states to submit preferred emissions calculations methodologies and conversion approaches that are equivalent to EPA's options.

2. NASEO believes that the Best System of Emissions Reduction (BSER) building block 4 creates some confusion regarding "non-traditional" energy efficiency programs. NASEO encourages EPA to stress in the final rule that states are not limited to energy efficiency resource standards (EERS) with respect to using energy efficiency for compliance with the proposed rule, even if these policies are the basis for how building block 4 contributes to setting emissions targets. While EPA based building block 4 on state EERS typically overseen by state public utility commissions or other designated entities, states are not limited to programs that fall under EERS policies for energy efficiency compliance options. State Energy Offices typically oversee and implement other energy efficiency and renewable energy program options, (e.g., energy savings performance contracting, building energy codes, residential retrofits, financing programs) and are in a position to work with their partner state air agencies on approaches for how to include these programs in state 111(d) compliance plans. NASEO encourages EPA to expand its treatment of "Incentives and Finance Mechanisms for Energy Efficiency" that was

included in the State Plans Considerations TSD to provide more detail on programs delivered outside of EERS policies and to provide additional guidance on how states can leverage these types of programs for 111(d) compliance. In fact, more energy efficiency is implemented outside of the utility programs in the United States than through these programs.

3. NASEO continues to work with several organizations to explore the feasibility and potential benefits/costs of establishing an energy efficiency registry to help track the impacts of energy efficiency programs and credits from those programs that could be used for 111(d) compliance. The main benefits of such a registry are that it could create a market for energy efficiency and avoided carbon emissions, while also potentially helping states avoid challenges associated with double-counting. However, such an approach requires determining the appropriate "use cases" for such a registry. EPA should provide additional guidance to states on how best to approach registries and avoiding double counting concerns from an EPA perspective. NASEO, like the other state groups (see Attachment A), supports the use of registries.

4. EPA requested comment on the use of "net" versus "gross" savings in the context of energy efficiency compliance approaches. One important distinction is that utility ratepayer-funded energy efficiency programs and other non-ratepayer programs (e.g., state energy efficiency loan funds, energy savings performance contracting, building energy codes) may not need to be treated in the same manner. The net-savings approach is linked to cost effectiveness issues and not emissions issues. Non-ratepayer funded energy efficiency programs are developed in a different context. If a state wants to leverage a revolving loan fund and the associated energy savings that are achieved through retrofits facilitated by the fund for 111(d) compliance, the state should not have to determine the net energy savings from those projects. The gross energy savings should be sufficient for 111(d) compliance.

   Overall, NASEO recommends that EPA allow gross energy savings from energy efficiency projects to be used for compliance purposes, at least on programs that operate outside of utility ratepayer-funded programs, which may have non-emissions reason to use a net energy savings approach. If individual states wish to use net energy savings on all or a subset of the energy efficiency programs included in their 111(d) plans, that should be their option.

5. EPA requested comment on the option of "limiting the eligible types of energy efficiency programs and measures that could be included in a state plan to a pre-defined list of well-understood program types for which evaluation is straightforward and energy savings results are subject to a relatively low level of uncertainty."[1] NASEO strongly disagrees with this approach. Such an approach will have negative impacts. Any restrictions on the scope of eligible energy efficiency programs and measures, including in the future EM&V guidance promised by EPA, will stifle innovation and prohibit the most cost-effective solutions. Detailing a predefined list of exclusive activities will hinder adoption of new energy efficiency and renewable energy strategies that are not on the list but

[1] State Plan Considerations TSD, page 50.

create emissions reductions and have EM&V options that are consistent with legal requirements. A more appropriate approach would be to provide a list of the types of energy efficiency programs that EPA suggests states consider using for compliance, especially programs that have a strong track record of being used by states to achieve other energy efficiency or economic development goals.

NASEO greatly appreciates the opportunity to provide our comments for EPA's consideration under the proposed rule. NASEO's intention is to provide a set of vetted case studies of energy efficiency programs that should be explicitly approved in advance by EPA no later than the planned release of the final rule. We look forward to continuing our dialogue with EPA and the states in the coming months.

Best regards,

David Terry
Executive Director

Attachment 1: Principles Regarding the Use of Energy Efficiency as a Compliance Measure Under Section 111(d) of the Clean Air Act[2]

Version submitted to EPA on May 12, 2014 is included below.

[2] The document is also available at: http://www.naseo.org/Data/Sites/1/principles_3n_2014.pdf

May 12, 2014

Gina McCarthy
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460

Dear Administrator McCarthy:

On behalf of the National Association of Clean Air Agencies, the National Association of Regulatory Utility Commissioners and the National Association of State Energy Officials, we are pleased to submit to the U.S. Environmental Protection Agency the attached principles regarding the use of energy efficiency as a compliance measure under Section 111d of the Clean Air Act. As you know, while our associations may not all agree about other aspects of Section 111d (including whether it should go forward), we believe that state plans should allow demand side energy efficiency measures to be considered as a potential option.

Our three organizations have worked diligently over several months to accommodate the states' various interests, and we believe these principles set forth a road map that is worthy of consideration.

Please let us know if you and your staff are interested in discussing these matters in more detail.

Respectfully submitted,

Bill Becker
Executive Director,
National Association of
Clean Air Agencies

Charles Gray
Executive Director
National Association of
Regulatory Utility Commissioners

David Terry
Executive Director
National Association of
State Energy Officials

cc: Janet McCabe
Joe Goffman

Principles for Including Energy Efficiency in 111(d) of the Clean Air Act

The undersigned organizations collectively believe that energy efficiency should be an integral, creditable part of state and tribal plans to be developed in response to EPA Clean Air Act Section 111(d) emission guidelines for carbon dioxide (CO_2) emissions from existing power plants. These guidelines should recognize the states' obligation to ensure affordable and reliable electric service as well as to protect the environment. EPA should provide flexibility and deference to state decision making as to how states comply with the 111(d) regulations.

EPA will require states to develop plans for addressing greenhouse gas emissions. The EPA rule and accompanying and subsequent guidance should recognize the significant emission reductions that are achievable through energy efficiency and specifically allow states (and tribes) to credit energy efficiency activities in their compliance plans. By including reduction options available throughout the interconnected interstate power generation and consumption system, states have expanded options for cost-effective compliance.

Energy efficiency programs and activities may vary substantially by state to reflect local conditions. Recognizing this diversity, EPA should invite multiple approaches to allowing energy efficiency emissions reductions to be part of state plans. To aid states in developing their plans, EPA should offer a draft of its likely approach for assessing the CO_2 reductions associated with energy efficiency as soon as practicable but no later than June 2015. EPA should work with states to develop clear paths to evaluate and approve state 111(d) plans that may incorporate energy efficiency. EPA should encourage transparent reporting protocols that will help determine whether CO_2 reductions are occurring as planned.

Appropriate environmental rigor, administrative ease, cost-effectiveness, flexibility, and periodic review and timeliness are criteria that should guide policymakers at the state and federal level. These criteria should inform the administrative processes and evaluation, measurement and verification (EM&V) protocols and approaches for crediting energy efficiency.

To ensure that energy efficiency can be incorporated and effectively implemented under 111(d), we offer the following principles:

1. **Guidance on inclusion of energy efficiency**: EPA should provide guidance to states, as soon as practicable, but no later than June 2015, setting forth a non-exhaustive list of approvable approaches/provisions that may be included in state compliance plans. States should have the option to adopt those and other policies and programs in their state compliance plans.
2. **State energy program recognition**: EPA should afford great deference to state energy efficiency programs and policies and allow states to credit energy efficiency programs and policies that utilize EM&V protocols and standards as described in this document. EPA should

acknowledge and support state program competency in energy program design and delivery. State energy efficiency program experience, energy savings goals, and structures have varied based on state circumstances. EPA should therefore recognize:

a. **Historical emissions reductions**: EPA should allow states to recognize past emissions reductions from existing energy efficiency programs to the extent that energy efficiency program measures continue to provide quantifiable emissions reductions.

b. **Future emissions reductions**: EPA should allow states to recognize future emissions reductions from energy efficiency programs and activities that were initiated after the promulgation of the final rule. EPA should allow states to take credit for all new activities, programs and installations utilizing EM&V protocols and approaches listed below.

3. **Non-utility delivered efficiency**: EPA should encourage states to develop a clear path for inclusion, crediting, and administrative review and oversight of non-utility-delivered energy efficiency activities providing emissions reductions included in state plans. This may include energy savings performance contracts, low-income weatherization programs, industrial energy efficiency and other privately contracted and delivered energy efficiency historically unaccounted for in ratepayer and state programs.

4. **Recommended EM&V protocols and approaches**: EPA, in consultation with the U.S. Department of Energy (DOE) and the states, should recommend protocols and approaches, and provide technical assistance for EM&V of state, utility and non-utility provided energy efficiency projects and programs. With respect to 111(d), EPA and DOE should work with states to ensure that EM&V protocols and approaches are consistent with the list below. EPA should also provide a process for states and industry to submit additional methodologies for consideration and approval, with deference to existing protocols and programs in place in many states. States should have the option to select or participate in regional and national EM&V initiatives. The following is a non-exclusive list of EM&V protocols and approaches that EPA should consider recognizing and recommending:

   a. Model Energy Efficiency Program Impact Evaluation Guide issued by the State and Local Energy Efficiency (SEE) Action Network;

   b. International Performance Measurement and Verification Protocol issued by the Efficiency Valuation Organization;

   c. ASHRAE Guideline 14-2002 Measurement of Energy and Demand Savings;

   d. Superior Energy Performance Measurement and Verification Protocol for Industry;

   e. DOE Uniform Methods Project protocols;

   f. Technical Reference Manuals (TRMs) developed and/or adopted by states, utilities and regional bodies such as the Northwest Power and Conservation Council Regional Technical Forum (RTF) and the Northeast Energy Efficiency Partnerships (NEEP) EM&V Forum;

   g. Other SEE Action Network and regional products; and

   h. Other modeling and/or statistical approaches.

States should be allowed to recognize any or all of these recommended methods or develop an equivalent state specific approach in their state compliance plans. EPA could consider modeling-based approaches for evaluating reductions in similar ways as has been approved for other criteria pollutants from stationary and mobile sources in the Clean Air Act.

To ease administrative burdens on the states, the federal agencies, states and industry should work together to develop transparent methodologies for evaluating the energy savings associated with energy efficiency measures.

5. **Translating electricity savings to avoided emissions**: EPA may recommend tools, such as the Avoided Emissions and Generation Tool (abbreviated as AVERT), dispatch modeling, and independent system operator/regional transmission organization (ISO/RTO) forecasting approaches, to calculate the emissions impacts of energy efficiency projects, programs and policies. In addition, it may provide methodology options on how to apply these emissions reduction credits toward state goals or regulated facility obligations. EPA should allow states to submit preferred emissions calculations methodologies and conversion approaches for consideration.

6. **Avoiding double counting:** EPA should offer guidance on options for avoiding double counting of emissions reductions from public investment, utility programs, and non-utility delivered efficiency efforts. Double counting could occur if an entity funds an efficiency project within a utility's service territory and transfers the credit to another regulated party or another state. Since the efficiency project would reduce emissions, this could result in double counting in the absence of a clear accounting methodology. States should specify, recognize and ensure clear attribution of energy savings and emissions reductions achieved using public funding, or as part of Energy Efficiency Resource Standards (EERS), utility programs, or state goals.

7. **Transmission and distribution efficiency**: EPA should encourage and credit energy efficiency in the electrical transmission and distribution system. Commercially available technologies exist today (such as voltage control and optimization) that may provide states with cost-effective emissions reductions and compliance options.

8. **Multi-state or regional efficiency programs**: EPA should recognize and encourage multi-state and regional energy efficiency efforts and compliance strategies, particularly where those programs use harmonized, consistent and transparent efficiency EM&V protocols and approaches and accounting standards for quantifying electricity savings and CO_2 reductions.

9. **Energy Efficiency Registry**: 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. A registry should provide clear attribution and ownership of energy savings and be used by the state to perform audits and assure credibility of savings and emissions reduction claims.

10. **Accountability for energy efficiency in state 111(d) plans:** We acknowledge that EPA and many states believe that section 111(d) requires that state plans generate reliable, verifiable and enforceable greenhouse gas reductions. Energy efficiency efforts can meet these requirements, and in many cases at lower cost than other options. Because energy efficiency programs and policies may vary significantly, EPA should invite multiple approaches to achieving quantifiable and reliable reductions while avoiding imposing onerous and potentially expensive requirements on the states. EPA should work with states to develop

clear paths to evaluate and approve state 111(d) plans, as well as clear and transparent reporting protocols to determine whether carbon reductions are occurring as planned. EPA and states should consider interim reporting and periodic updating of state 111(d) plans.

These principles will enable states, utilities and non-utility energy efficiency providers to further expand on efficiency efforts underway and support state carbon reduction goals. By recognizing the significant emission reductions that are achievable through energy efficiency, EPA will enable states and tribes to design the most cost-effective 111(d) compliance plans.