



May 23, 2014

Mr. William Becker, Executive Director  
The National Association of Clean Air Agencies  
444 North Capitol Street, NW – Suite 307  
Washington, DC 20001

Re: Pennsylvania's Perspective on NACAA's, NASEO's, and NARUC's "Principles for Including Energy Efficiency in Section 111(d) of the Clean Air Act"

Dear Mr. Becker:

Pennsylvania believes that it is important to offer its perspective on NACAA's, NASEO's, and NARUC's "Principles for Including Energy Efficiency in Section 111(d) of the Clean Air Act" (Principles document) and the recently adopted "Evaluation, Measurement, and Verification (EMV) Preamble Language" (Preamble) for the U.S. Environmental Protection Agency's (EPA) consideration in integrating energy efficiency as a compliance option for meeting the pending existing power plant carbon dioxide emission guidelines under Section 111(d) of the Clean Air Act. Pennsylvania has a perspective on this matter that is somewhat different than the concepts represented in these documents. Consequently, it would be appreciated if you could identify that not all members of your organizations endorse the position and perspectives identified in your Principles and Preamble documents.

As you know, it is the states that are responsible for, and in the best position, to regulate the affected sources under a Section 111(d) Plan. It is the states that can more fully evaluate issues like fuel mix, asset inventory, current efficiency of existing assets, and other state-specific issues that influence program design. The Principles document establishes principles and proposals that are quite different than the concepts contained in *Pennsylvania's Recommended Framework for the Section 111(d) Emission Guidelines Addressing Greenhouse Gas Standards for Existing Fossil Fuel-Fired Power Plants* (PA White Paper). This PA White Paper was provided to NACAA during the period that the Principles document was being prepared.

In general, Pennsylvania believes that several of the principles outlined in the document are overly vague. It appears that the Principles document language proposes that Section 111(d) be used as a vehicle to introduce energy efficiency improvements "beyond the fence line" as part of the emission guidelines that EPA must develop under Section 111(d). An energy efficiency improvement made "beyond the fence line" is not made at an affected source under Section 111(b), the New Source Performance Standards, and therefore cannot be incorporated into the emissions guidelines for existing sources under Section 111(d). Energy efficiency improvements can be a part of a state energy plan; however, a state energy plan is not part of Section 111(d). A state may choose, however, to incorporate Section 111(d) into their state energy plan. Should a state decide to allow Section 111(d) "non-affected" carbon dioxide reductions from efforts such as energy efficiency projects to be used by Section 111(d) "affected sources," that should only be

accomplished at the discretion of a Section 111(d)-affected source to assist the affected source in meeting its reduction obligation.

While Pennsylvania does agree that energy efficiency projects should be available as an option to sources affected by Section 111(d) when developing their plans to comply with the Section 111(d) emission guidelines, the projects should be subject to high quality quantification of the amount to be credited and the same enforceability standards as required for affected sources. Without the criteria for accurate quantification and enforceability of energy efficiency projects, the integrity of the Section 111(d) program is compromised.

It also is important to recognize that many efficiency projects do not result in emission reductions. In many cases they simply reduce the amount of emissions increase. While highly desirable, these are emission avoidance projects - not emission reduction projects.

State energy programs and policies implemented before the baseline year established by EPA under the Section 111(d) program should not be considered as reductions for use by a Section 111(d) source. This is consistent with not considering reductions from Section 111(d)-affected sources that occurred prior to the baseline date. The reductions from the non-affected project or action may not be occurring by the time EPA's rule is promulgated, and therefore could simply be a mechanism to give "empty credits" for use by a Section 111(d)-affected source. It may be possible to credit future energy efficiency programs as described in the PA White Paper; however, their ability to avoid emissions must be enforceable and demonstrated as continuing to occur in order for the awarded credits to provide value to the Section 111(d) program.

The suggestions for the list of sources that EPA should recognize for EMV include the EPA's own "Model Energy Efficiency Program Impact Evaluation Guide," which was developed by Schiller Consulting, Inc., for the National Action Plan for Energy Efficiency. In this Guide, which references many of the other sources cited, it is explicitly stated several times that energy savings cannot be directly measured, as one cannot measure the absence of energy use. Even using the suggested EMV protocols, the degree of quantification and enforceability to avoid "empty credits" is not adequate.

Translating energy savings to avoided emissions is potentially problematic, as the avoided emissions will most likely be counted as coming solely from coal-fired facilities. Energy savings should not be applied to a single type of generating unit or fuel source. After electricity is produced, it is impossible to distinguish an electron generated in a coal-fired boiler from one generated by a natural gas-fired turbine or from a photovoltaic panel. Most appropriately, the energy savings and corresponding emissions reduction credits should be pro-rated based on generation profile in an individual state, Regional Transmission Organization (RTO), or Independent System Operator (ISO). This would be consistent with the process used to meet required portfolio standards.

Pennsylvania advocates the “inside the fence line” efficiency improvements at the affected facilities as the primary mechanism of achieving real emissions reductions. To maximize and optimize the efficiency improvements at Section 111(d)-affected facilities, Pennsylvania suggests that the EPA change the New Source Review (NSR) applicability test from the current mass-based standard (tons per year) to an output-based emissions rate standard (pounds per megawatt-hour). Many energy efficiency projects are not being implemented to their full potential because of the considerable cost of triggering the complex NSR requirements. By changing the applicability test, the industry can make significant energy efficiency improvements while generating electricity with lower emissions of carbon dioxide as well as all other pollutants at lower cost and resultant lower prices. This will protect fuel diversity and grid reliability, while preserving and expanding jobs and the economy. Fuel diversity is key to avoiding “brown outs” from occurring during weather events like we just experienced this past winter. Our recommended changes to the NSR applicability test would also provide the opportunity for Section 111(d) non-affected sources to make energy efficiency improvements in other sectors.

There is merit to the concept of crediting electrical transmission and distribution systems for energy efficiency improvements in a state energy plan, as the energy savings from these improvements would be directly quantifiable and enforceable. The energy savings from these improvements should also be pro-rated based on the generation profile of the appropriate state, RTO, or ISO when being awarded credits for emission avoidance in the state plan. Crediting these types of improvements would have the side benefit of encouraging the upgrade and improvement of our energy infrastructure.

While generation from non-affected sources may be credited (i.e., landfill gas-fired engines, waste-to-energy plants, or renewable energy sources), again stressing that the energy savings or emissions reductions are quantifiable, enforceable, and continuous, the environmental impacts of the project should be taken into consideration. The credits awarded for such projects should be based on the ability to achieve reductions in greenhouse gases (represented as CO<sub>2e</sub>) that otherwise would not be occurring. An example of this is crediting the methane emissions that would not occur due to the disposal of municipal waste. In this case, only the avoided methane that would otherwise not be collected in a landfill gas collection system would be creditable.

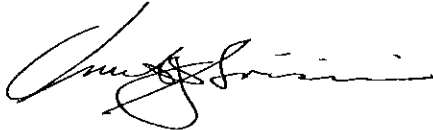
In both cases, it is important to note that a Section 111(d) program does not include “beyond the fence line” reduction obligations. The use of a non-affected source to achieve reductions that would be creditable to the affected source is solely at the discretion of the Section 111(d)-affected source. Pennsylvania does not support allowance-based programs. However, in the PA White Paper it is recognized that some states may want to use allowances.

The perspective of Pennsylvania is that, at this time, allowance-based trading inherently and possibly intentionally picks “winners and losers” in the market. Pennsylvania believes that it is possible to have a successful trading program without the use of allowances. Any awarded credits should be traded, without allowances, as part of an agreement between the affected and non-affected sources. These principles are explained in detail in the PA White Paper, including

our vision of a state budget, with a multiyear averaging period, and trading during a "true-up" period without the use of allowances.

We appreciate the opportunity to provide this feedback on your documents. Should you have questions or need additional information, please contact me by e-mail at [vbrisini@pa.gov](mailto:vbrisini@pa.gov) or by telephone at 717.772.2725.

Sincerely,

A handwritten signature in black ink, appearing to read "Vincent J. Brisini". The signature is fluid and cursive, with a large initial "V" and "J".

Vincent J. Brisini  
Deputy Secretary

cc: David Terry, Exec. Director, National Association of State Energy Officials  
Charles Gray, Exec. Director, National Association of Regulatory Utility Commissioners