



March 9, 2016

Mr. David Paylor
Director, Virginia Department of Environmental Quality
629 East Main Street
Richmond, VA 23219

Comments to the Commonwealth of Virginia on Design Elements of the State Plan under the Clean Power Plan Regulating Existing Power Plants under Section 111(d) of the Clean Air Act

Dear Mr. Paylor,

The Business Council for Sustainable Energy (BCSE or the Council) appreciates the opportunity to provide Virginia with recommendations on design elements for its state compliance plan under the US Environmental Protection Agency's (EPA) Clean Power Plan (CPP). The Council offers its views with the aim of shaping Virginia's final plan and to assist the state as it continues the process of implementation planning.

BCSE is a coalition of companies and trade associations from the energy efficiency, natural gas, propane, and renewable energy sectors, and also includes independent electric power producers, investor-owned utilities, public power, commercial end-users, and environmental and energy market service providers. Founded in 1992, the Council advocates for policies at the state, national, and international levels that increase the use of commercially-available clean energy technologies, products, and services. The coalition's broad-based business membership is united around the revitalization of the economy and the creation of a secure and sustainable energy future for America.

BCSE believes that a properly designed state plan will help the state move toward a more diverse, affordable, and clean energy portfolio that meets the Clean Power Plan's emissions reduction targets. A state plan can best achieve the goals of the Clean Power Plan by harnessing the vast potential of the wide range of clean energy technologies – renewable energy,¹ energy efficiency, natural gas, and propane – to improve reliability, increase flexibility, and produce energy savings, as well as reduce emissions. Of note, as a diverse coalition, not all members take positions or endorse all the issues discussed in this submission.

BCSE Recommendations for Virginia's State Plan

BCSE would like to offer the following recommendations for Virginia's state plan:

- Virginia should adopt a "trade ready" approach in either a mass-based or rate-based plan, and should consider market-based elements to ensure cost effective compliance.

¹The portfolio of renewable energy should include: biopower, geothermal, hydropower (including freeflow), marine energy, solar (concentrated solar power, photovoltaics, solar thermal, and solar daylighting), waste to energy, and wind (including small-scale). Definitions should include renewable hybrid systems composed of the above technologies.

- The plan should allow the full portfolio of clean energy technologies and resources to be utilized for compliance planning.
 - This includes rate-payer and non-rate payer programs and actions, including third party delivered energy efficiency, whether implemented in mass-based complementary programs or integrated rate-based compliance programs.
- Further, if the plan allocates or auctions allowances under its plan, it should provide allowance value to clean energy technologies and resources to spur further investment and provide clean energy market signals.
- The plan should consider how set-asides or other mechanisms can be used to foster increased deployment of energy efficiency and renewable energy.

Trade Ready Approach

In order to enable lower-cost compliance, Virginia should ensure adoption of a “trade ready” approach that permits transfers of emissions allowances (mass-based) or Emission Reduction Credits (ERCs) (rate-based) between states. Clean energy technologies in the energy efficiency, natural gas, propane, and renewable energy sectors can be deployed under either a mass-based or rate-based approach. However, the structure that underpins either approach is critical. BCSE offers its perspectives on this topic below.

In considering the mass-based or rate-based approach, several issues are of importance:

- The ability to engage in interstate trading and transfers. This question should be considered in the context of what other states are considering. This impacts the demand and pricing for allowances and ERCs.
- Ease of implementation.
- How new fossil fuel plants are addressed, to avoid leakage concerns.

Technology Eligibility for Plan Design

Utilizing a diverse portfolio of clean energy options available for compliance will make the Virginia economy stronger, reduce emissions and increase resiliency. BCSE recommends that Virginia affirmatively indicate that technologies, resources, and practices that are not included in the Clean Power Plan Building Blocks can be eligible as compliance strategies, this includes energy efficiency efforts.

Through Virginia’s state plan, states should be encouraged to support local governments’ investments in renewable energy and other clean energy and greenhouse gas (GHG) mitigating facilities to avert net or off-system carbon increases. Under a mass-based approach, this can be done through allowance allocations, set asides or auctions. Through a rate-based plan, Virginia should allow the full portfolio of renewable energy and energy efficiency actions to generate Emission Reduction Credits (ERCs). This would include third-party delivered energy efficiency in buildings and at industrial facilities.

For energy efficiency and renewable energy to be effectively included as compliance options, a clear and standardized reporting system must also be established. We encourage Virginia to collaborate on the

development of a national energy efficiency and renewable energy project registry that accounts for zero-emitting generation/energy savings and GHG reductions. A registry of transparent, verified energy efficiency and renewable energy projects would provide the basis for distribution of allowances (in mass-based plans) or ERCs (in rate-based plans).

Mass-Based Plan Design Issues

Advantages of a mass-based approach include its similarity to other air quality trading programs that many states are familiar with and possibly a broad scope of interstate trading opportunities. However, under a mass-based approach, allowance allocation decisions are fundamental and pathways for clean energy technologies to receive allowance value need to be established.

In this context, BCSE supports an updating, output based allocation. BCSE is also considering how set-asides or other mechanisms to transfer allowance value to energy efficiency and renewable energy can be structured to ensure that these resources can play a meaningful role in compliance and assist to avoid leakage or other market distortions. Other allowance allocation methods, including auctions, can also be effective if properly structured.

i. Principles in Allowance Allocation Approaches

BCSE urges Virginia to adopt an allocation approach that achieves the following objectives:

- Recognizes and rewards the emissions attributes of different generation sources and energy efficiency
- Provides allowances to new entrants
- Addresses leakage concerns

Finally, should a mass-based approach be adopted, Virginia should encourage complementary energy policies to further support the deployment of projects and activities in clean energy sectors to ensure that they deliver on the low-cost carbon reductions that the Clean Power Plan is built upon.

ii. Addressing Leakage under a Mass-Based Plan

In considering state plan development, effectively controlling leakage under all compliance pathways is an essential element of the Best System of Emissions Reduction (BSER).²

The problem is particularly acute in mass-based trading approaches to BSER implementation, where, absent correction, compliance obligations for existing natural gas combined cycle (NGCC) generation could incentivize construction of new, unaffected NGCC generation as a pathway to Clean Power Plan compliance. This would result in illusory reductions and compliance with the Clean Power Plan's mass-based goals.

² Federal Register at 64822

The primary leakage concern is that new fossil generation would benefit from its carbon emissions not being regulated under that approach, incentivizing a shift to new fossil generation that would increase total electric sector emissions because those new fossil emissions are not capped under that CPP approach. A related leakage concern is that states choosing different compliance pathways could result in different incentives that could increase total electric sector emissions or harm economic efficiency.

BCSE members have a range of views on the options that EPA has put forward to address this issue. However, there is general agreement that an optimal way to address leakage is to include new sources in the existing source mass-based plan.

A second avenue to address leakage under a mass-based plan is to allocate allowances on an updating, output-basis. This approach would allocate allowances based on the generation and emissions profiles of all eligible resources as identified in the CPP and existing natural gas combined cycle generation during the CPP compliance period.

This allocation method controls leakage by putting existing gas, existing renewable resources, and new gas generation on a level playing field, offsetting the unfair and inefficient benefits that accrue to new gas because it is not being regulated by the existing-source-only compliance pathway.

While output-based allocation strategies provide many benefits relative to alternatives, a primary benefit is that they solve the significant concerns about emissions leakage under the existing-source-only mass-based compliance pathway, preserving the integrity of the CPP rule. Of note, there are several proposals under consideration that embody the output-based allocation approach, including performance-based models.

Further, one of the most effective ways to prevent gas leakage in future years is for EPA, under its 8-year review authority, pursuant to 111(b), to reclassify new facilities, at that point, as existing. BCSE has urged this in its comments to EPA on the proposed Federal Plan.³

Rate-Based Plan Design Issues

For energy efficiency activities under a rate-based plan, Virginia should consider utilizing compliance crediting mechanisms similar to Renewable Energy Certificates (RECs). Translating energy savings into carbon savings is already in practice in independent system operators' accounting mechanisms such as the PJM Environmental Information Services' Generation Attribute Tracking System (GATS).

These systems report emissions data associated with the generation mix for the region, and can be used as a verifiable proxy to count emission reductions due to energy efficiency projects. In addition, Evaluation, Measurement and Verification or EM&V requirements for energy efficiency initiatives need to be verifiable, but they should not be too burdensome or costly which would discourage states from adopting robust energy efficiency programs and projects in their plans.

³http://www.bcse.org/images/2016CleanAir/BCSE%20Comments%20on%20CPP%20Fed%20Plan_01%2021%2016_FNL.pdf

CONCLUSION

BCSE appreciates the opportunity to provide the state of Virginia with its recommendations for design issues for its state compliance plan under the Clean Power Plan and hopes these views will be useful as the state develops and finalizes its plan. BCSE would like to be viewed as a resource to Virginia during this process to help ensure the full portfolio of clean energy technologies and their full emissions reduction potential are recognized in Clean Power Plan compliance planning. Please contact the Council on the issues discussed if there are questions.

Sincerely,

A handwritten signature in black ink that reads "Lisa Jacobson". The signature is written in a cursive, flowing style.

Lisa Jacobson, President
Business Council for Sustainable Energy