

December 31, 2015

Thomas Clarke, Senior Policy Advisor
West Virginia Department of Environmental Protection
601 57th Street
Charleston, WV 25304

RE: Comments on the Feasibility Study and State Implementation Plan for EPA's Clean Power Plan

Dear Mr. Clarke:

Please accept these comments on behalf of Energy Efficient West Virginia regarding the Department of Environmental Protection's feasibility study for the State Implementation Plan (SIP) under the Clean Power Plan (CPP). I would welcome the opportunity for further participation in the feasibility study, and any other planning for the SIP.

Sincerely,

Emmett Pepper
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Comments from Energy Efficient West Virginia on West Virginia's State Implementation Plan for the Clean Power Plan

Introduction

Energy efficiency will greatly reduce any detrimental impact on West Virginia's economy that may result from Clean Power Plan (CPP). Improving efficiency of buildings in the state is the lowest-cost method for reducing carbon dioxide emissions, as required under the CPP. There are currently, however, several impediments to rapidly improving energy efficiency, and several opportunities specific to the CPP that must be utilized early in the process. EEWV has identified four areas for addressing energy efficiency in the clean power plan: codes, finance, utilities, and state leadership.

EEWV background

Energy Efficient West Virginia is a group of concerned West Virginia residents, businesses and organizations formed in 2009, to come together to promote energy efficiency among residential, commercial, and industrial customers in our state. We advocate on behalf of West Virginian ratepayers who lack adequate energy efficiency programs, as well as the businesses that provide efficiency services. Our advocacy is performed at the West Virginia Public Service Commission (PSC); as well as at local, state, and federal legislative and administrative bodies. The goal of our advocacy efforts is to improve policies to help facilitate improving the efficiency of the buildings in the state, as well as engaging the community to increase participation in existing efficiency programs.

Energy efficiency, generally

The Department of Environmental Protection (DEP) should look to energy efficiency as the top priority for implementing the CPP, in order to minimize any negative economic impact from its implementation. On a per-kilowatt-hour basis, energy efficiency is competitive with generating energy from traditional sources, even from coal.¹ Additionally, energy efficiency provides an opportunity to empower West Virginians to take control of their energy bills when facing rising electric rates, even before the CPP is enacted, and create local jobs improving the building stock of the state. The main industries that are utilized to improve building performance – construction and manufacturing – result in greater amounts of employment than even the energy industry does on a per-dollar basis,² and these jobs are difficult to outsource, because they must be performed on buildings located within the state. Finally, on a philosophical level, operating buildings and systems in an efficient, cost-effective manner, is something that people of all political stripes and beliefs get behind. For example, the U.S. Congress has a bipartisan caucus co-chaired by Rep. Peter Welch (D-VT) and Rep. David McKinley (R-WV) called the “High-Performance Building Caucus” that seeks to increase federal energy efficiency programs.³ The DEP will find that building efficiency is the least-cost, least-controversial method for

¹ Costs per kWh range from two to five cents for energy efficiency. Molina, “The Best Value for America's Energy Dollar: A National Review of the Cost of Utility Energy Efficiency Programs,” *ACEEE* (2014),

<http://aceee.org/sites/default/files/publications/researchreports/u1402.pdf>.

² <http://aceee.org/files/pdf/fact-sheet/ee-job-creation.pdf>

³ <https://hpbccc.squarespace.com/leadership/>

addressing carbon dioxide emissions under the CPP. In order to effectuate significant increases in efficiency, however, the DEP and PSC must implement a variety of programs and policies, some of which may require legislative action.

Recommendations

According to the American Coalition for an Energy Efficient Economy (ACEEE), West Virginia is near the bottom of the list of states that facilitate energy efficiency performance. The ACEEE rankings are useful for identifying the key areas that need improving in the state, many of which directly relate to the Clean Power Plan. EEWV has divided its areas of focus into five areas: utilities, codes, finance, state actions, and the CPP-specific Clean Energy Incentive Program (CEIP). The codes updates relate to specific building codes that are adopted by the state, as well as their implementation and enforcement. Policy solutions relating to finance are targeted at making it easier for building owners to find private financing to make energy efficiency upgrades to their buildings. The utilities' energy efficiency and demand response programs are arguably the most important part of an energy efficient economy, so recommendations are focused on ways to improve, harmonize, and make utility efficiency programs more effective. Additionally, the state itself can play a role in improving efficiency in the state, while cutting costs to taxpayers. Finally, the early-implementation program, CEIP, offers a very important opportunity to help mitigate the cost to everyday West Virginians that will come from increased electricity rates.

Utilities

The most important way that the state can encourage energy efficiency is through utility spending on efficiency programs. By law, utilities must manage the electrical generation, distribution, and transmission systems in a way that is well-planned, and efficiently run.⁴ In order to accomplish this, modern utilities look to meeting energy demand both by identifying adequate generation resources, as well as reducing demand through efficiency and demand response programs. Currently, West Virginia ranks 40th in spending on energy efficiency programs, as a percentage of electricity revenues, spending 0.44%, compared to most states spending between 1.25% and 7%.⁵ Currently, AEP has the most robust programs in the state, with FirstEnergy's utilities (Mon Power and Potomac Edison) spending only about 1/4 of what AEP's utilities spend. Additionally, EEWV believes that the natural gas utilities and the other, smaller electric utilities have no efficiency programs whatsoever.

The discrepancy between utility programs in West Virginia means that customers in certain parts of the state have more opportunities to take control of rising energy bills than in other parts. For example, a customer in Bridgeport, in Mon Power's service territory, will pay more for certain energy efficient lightbulbs, at the same chain hardware store, than a similar customer in Huntington, simply because shoppers in Huntington benefit from AEP's incentive programs for buying energy efficient lightbulbs. Additionally, program participants in areas that have natural gas heat are often precluded from some programs being offered by AEP, because some programs are only offered to customers with electric heat.

⁴ *W.Va. Code § 24-1-1, et seq.*

⁵ *See, 2015 State Energy Efficiency Scorecard, ACEEE, 26,*
<http://aceee.org/sites/default/files/publications/researchreports/u1509.pdf>

EEWV recommends that the Public Service Commission (PSC) adopt a central, statewide energy efficiency program that applies to all utilities, funded uniform energy efficiency charges to all customers, of both electric and natural gas utilities. Such a program would harmonize efficiency and demand-response programs throughout the state, and reduce overhead and confusion that stems from having inconsistent programs in the state. Additionally, EEWV recommends that efficiency spending be increased over time, so as to empower ratepayers to mitigate increases in electric rates expected to result from the Clean Power Plan. EEWV believes that the PSC has the authority under current statutory authority to implement these changes.

Codes

Like most states, West Virginia has two main building codes that impact energy efficiency: the International Energy Conservation Code (IECC), which addresses residential buildings, and the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1 Code, which applies to non-residential buildings. Currently, neither code is consistently enforced throughout the state, and each code should be updated in the coming years.

Improving enforcement of building codes is the most important code-related energy efficiency improvement. Currently, few counties have adopted the state codes, according to anecdotal discussions that EEWV has conducted with construction industry insiders. Indeed, it is voluntary for counties and municipalities to adopt the state code,⁶ unlike many other states.⁷ Increasing enforcement of building codes also has the added value of creating demand for skilled workers in search of employment, as well as creating more reliable building stock for businesses and residents.

While West Virginia could upgrade both its residential and commercial codes, the commercial codes are comparatively further behind the rest of the country. West Virginia's commercial building code, ASHRAE 90.1-2007, lags behind the majority of the bordering states that follow ASHRAE 90.1-2010 standards or higher.⁸ Many states across the country upgraded from 2007 to 2010 in 2015. By comparison, most states have adopted the same IECC-2009 standard utilized in West Virginia, though Virginia and Maryland are adopting more modern standards.⁹

In the past, it has been difficult to find building materials in the state that comply with the newer standards, but within a few years, as the newest standards get adopted elsewhere, the materials become commonplace. One way to address this problem is to write into the code that the most recent ASHRAE and IECC standards must be adopted as mandatory within some number of years. Adopting such a policy serves two purposes: first, it allows distributors and suppliers time to identify a source for the compliant materials; second, it gives regulatory certainty for suppliers and distributors, giving them notice in advance when the code will change,

⁶ *W. Va. Code* § 29-3-5b(a).

⁷ For example, Ohio requires statewide compliance with its codes. For further information visit: <http://database.aceee.org/state/commercial-codes> and <http://database.aceee.org/state/residential-codes>.

⁸ Kentucky, Maryland, and Virginia follow these higher standards, while Ohio and Pennsylvania follow the same ASHRAE 90.1-2007 standards followed by West Virginia.

<http://database.aceee.org/state/commercial-codes>

⁹ <http://database.aceee.org/state/residential-codes>

with several years to plan ahead after new standards are adopted by the respective bodies, ASHRAE and the IECC.

EEWV recommends adopting legislation that improves participation in the state energy code, either by adopting mandatory statewide compliance, or phasing in compliance over time. Additionally, EEWV recommends adopting legislation that adopts the most recent version of both ASHRAE and IECC standards within three to four years after a standard has been issued.

Finance

One of the largest impediments to making efficiency upgrades to a building is that there is an up-front cost. Even though it is not difficult to identify upgrades that will pay for themselves within a few years, the upfront costs can be difficult to overcome for some building owners. The government can play a role in helping connect building owners to investment capital, in order to improve their buildings. EEWV recommends two key policies to make it easier to finance energy efficiency projects: LEEP (also called PACE) financing, and on-bill financing.

A Local Energy Efficiency Partnership (LEEP)¹⁰ is a funding mechanism that allows a building owner to repay energy efficiency upgrades on her or his property tax ticket. Currently, thirty states have LEEP laws in place that authorize local governments to set up this mechanism. Such legislation would empower local governments to improve their local building stock by encouraging private investment locally. A building owner puts together a proposal in consultation with energy efficiency experts, and the local government sells bonds backed by the energy savings (not backed by the governments themselves). After the upgrades are made, the building owner repays the cost on the tax ticket. If the building is sold, the payments stay with the building. In the 2015 legislative session, EEWV worked with a bipartisan group of legislators in both houses to introduce a bill to enact LEEPs.¹¹ EEWV expects that a similar bill will be reintroduced again in the 2016 session.

Currently, many states have either allowed or required utilities to offer customers the opportunity to repay energy efficiency upgrades on their electric bills. This can be accomplished either by utilities creating low- or no-interest loans for upgrades, or by leveraging private finance to accomplish the same goal.¹² Most states have allowed on-bill financing for residential, though states vary as to whether on-bill financing is also available to commercial customers.

EEWV recommends the adoption of the LEEP Act. Additionally, EEWV recommends that the PSC authorize utilities to establish on-bill financing, and the legislature consider requiring utilities to offer on-bill financing or repayment.

¹⁰ Many places refer to LEEP as Property-Assessed Clean Energy, or PACE.

¹¹ See SB520 and HB2945 during the 2015 legislative session.

http://www.legis.state.wv.us/Bill_Text_HTML/2015_SESSIONS/RS/Bills/sb520%20intr.htm

http://www.legis.state.wv.us/Bill_Status/Bills_history.cfm?input=2945&year=2015&sessiontype=RS&btype=bill

¹² On-bill financing and on-bill repayment have been implemented in a variety of ways in many states. For example, some states limit the repayment period to a certain number of years, the amount of the loan and/or interest rate, etc. See <http://www.ncsl.org/research/energy/on-bill-financing-cost-free-energy-efficiency-improvements.aspx>.

State leadership

The state itself can play a crucial role in helping create demand for energy efficiency services, while also reducing taxpayer-funded utility bills. First, the state should assess all state buildings for wasteful energy use. EEWV is not aware of data being collected as to how much energy is being used in each building, much less an efficiency rating of each building. After assessing the efficiency of state buildings, the state should endeavor to cost-effectively increase the building performance in each of the worst-performing buildings.

The Clean Energy Incentive Program

The EPA has indicated that it will offer double credits for early implementation of clean energy and energy efficiency in “low-income communities” through its Clean Energy Incentive Program (CEIP). The term “low-income communities” has not yet been defined and the EPA has sought comment on the scope of that program. EEWV recommends that the state issue comments that “low-income communities” should be broad, possibly allowing any projects within counties, municipalities, and/or ZIP codes that have a poverty rate above the national average of approximately 13%. If that standard were adopted, every county in the state would be covered except Jefferson and Putnam counties.

Regardless of the final definition for “low-income communities,” the state would benefit from having a plan to maximize participation in the CEIP. By focusing on energy efficiency projects in low-income communities, the state can supplement its overextended low-income weatherization programs, help create locally-sourced construction jobs making efficiency upgrades, and begin to minimize the impact on the state from the CPP.

Conclusion

Energy efficiency policies and programs will be the most cost-effective and job-creating method for addressing the Clean Power Plan. While West Virginia may be more adversely impacted from the CPP, due to our high reliance on coal, we also have some of the greatest unrealized potential to reduce greenhouse gas emissions through energy efficiency, due to our lagging programs. EEWV encourages the DEP and PSC to give close consideration to the above recommended programs. We welcome the opportunity for further participation and assistance in implementing them.