



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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January 21, 2016

The Honorable Gina McCarthy, Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Re: Docket ID No. EPA-HQ-OAR-2015-0199

Dear Administrator McCarthy:

The Washington State Department of Ecology (Ecology) appreciates the opportunity to comment on the proposed federal plan and model trading rules to implement greenhouse gas emission guidelines for existing fossil fuel-fired electric generating units under the Clean Air Act (80 Federal Register 64966, published October 23, 2015). We also appreciate the opportunity to comment on the Clean Energy Incentive Program. These comments are submitted by the Department of Ecology in collaboration with the Washington State Utilities and Transportation Commission and the Washington State Department of Commerce.

The State of Washington intends to submit an approvable state plan in compliance with EPA's final Clean Power Plan rule. We support EPA's issuance of a proposed federal plan, which EPA would implement in any state that does not submit an approvable state plan. The federal plan provides an incentive for states to adopt plans that reflect their unique energy system, policy objectives, and local circumstances. It also provides greater assurance for achievement of the national reductions in carbon pollution from power plants.

Washington supports EPA's issuance of model trading rules. The rules establish a readily available path forward for states to incorporate a trading system into their Clean Power Plan implementation. We also support the concept of the Clean Energy Incentive Program, which is an optional program to provide early action incentives for certain types of renewable energy and low-income energy efficiency projects.



EPA's proposal provides clarity on EPA supported program design options that states may consider as we design our state plans. We appreciate the extensive thought, analysis, and outreach from EPA on this proposal. We offer the enclosed comments in the spirit of improving the proposed federal plan, model trading rules, and Clean Energy Incentive Program. We stand ready to continue to work with EPA to expeditiously implement the Clean Power Plan rule.

Sincerely,

A handwritten signature in blue ink, appearing to read 'SACCC', is positioned above the typed name.

Stuart A. Clark, Manager
Air Quality Program

Enclosure

cc: Dan Brown, EPA Region 10
Tony Usibelli, Department of Commerce
Deborah Reynolds, Utilities and Transportation Commission

State of Washington Comments on the Environmental Protection Agency's Proposed Federal Plan, Model Trading Rules, and Clean Energy Incentive Program

January 21, 2016

Docket ID Number EPA-HQ-OAR-2015-0199

The Washington Department of Ecology, in consultation with the Washington Utilities and Transportation Commission and the Washington Department of Commerce offers these comments in the spirit of improving the proposed federal plan, model trading rules, and Clean Energy Incentive Program. First, we provide comments on the proposed federal plan and model trading rules. Our comments on the model trading rules focus primarily on implementation of a mass-based trading program.

Second, we provide general comments to strengthen the Clean Energy Incentive Program (CEIP) and provide greater incentives to participate in the program. Third, we provide specific comments on CEIP provisions that EPA is seeking input on, as outlined in the "Clean Energy Incentive Program Next Steps" memo dated October 21, 2015. Finally, we provide comments on the energy efficiency evaluation measurement and verification guidelines.

1. Comments on the Proposed Federal Plan and Model Trading Rules

Washington State is committed to submitting an approvable state plan that complies with the emission guidelines. We support EPA's issuance of a federal plan, which would go into effect only in circumstances where a state fails to submit an approvable state plan.

In addition, we appreciate EPA proposing the mass- and rate-based model trading rules, which provide a range of potential compliance options for Washington State to consider as we develop our state plan. We support EPA's approach to allow states discretion to implement the final Clean Power Plan rule and to adapt the model trading rules to meet their individual state-specific policy objectives.

Our comments on the proposed federal plan and model trading rules focus primarily on a mass-based trading approach. Key recommendations include:

- Continue to provide state's discretion in developing their own allowance allocation method under both the federal plan and model trading rules.
- Finalize a mass-based federal plan and model trading rule. EPA has stated that it will finalize either a mass- or rate-based federal plan, and may finalize either or both the rate- and mass-based model trading rules. Washington State is in the process of gathering stakeholder input on the design of our state plan, and we have not yet made a firm

decision in pursuing mass- or rate-based emission limits. However, we see several benefits in pursuing a mass-based plan because it places a firm cap on carbon emissions, is easier to implement administratively, because a single mass-based federal plan type would potentially allow for a larger trading market with existing mass-based programs, and thus lower costs, and is of greater familiarity to states from experience with other successful mass-based plans like the Regional Greenhouse Gas Initiative, California's Cap-and-Trade program, and EPA's Acid Rain Program.

- Require the use of a regional or national emission factor for evaluating and measuring greenhouse gas emissions reductions resulting from increased renewable energy (RE) generation or energy savings from energy efficiency projects.
- Maintain requirements that states follow industry best practices, protocols, and guidelines for evaluation, measurement, and verification of renewable energy and energy efficiency savings. However, the requirement for third-party verification of the projection of future renewable energy generation for the Renewable Energy (RE) set-aside should be removed. Third-party verification of advanced projections of RE generation is unnecessary; verification after the RE generation occurs is sufficient.
- Allow states to set-aside allowances for voluntary RE as a component of a mass-based federal plan and model trading rule. This set-aside could be structured similar to California's Voluntary Renewable Electricity Reserve Account and/or the Regional Greenhouse Gas Initiative's voluntary renewable energy market set-aside provision. This will help ensure the robustness of the voluntary RE market, and will continue to allow businesses and households a viable path for purchasing RE that results in additional greenhouse gas reductions.
- Maintain states' discretion in determining eligibility requirements for issuing any output-based set-aside. In the model trading rule, output-set-asides are allocated for generation from existing NGCC units for generation above a 50 percent capacity factor, based on net generation and net summer capacity in the preceding compliance period. However, the preceding compliance period may not accurately reflect the full need for allowances. For example, NGCC plants may be required to ramp up generation to offset any coal plant closures or due to a prolonged drought. And, if the allowance allocation is based solely on the preceding compliance period, NGCC plants could be ineligible for any output-based set-aside. This could cause challenges, especially since EPA will not allow borrowing against future allowances. A state allowance bank may be needed to provide liquidity in the market to reduce these adverse impacts.
- Provide more supportive language in the federal plan on real-time quantification as the leading edge of best-in-practice energy efficiency evaluation measurement and verification (EM&V). The common practice baseline (CPB) is estimated as what a consumer would have installed at the time, which is often current codes and standards.

The quantified savings is measured as the delta of the energy efficient widget and the current standard. In reality, we know that consumers often have products that operate below current standard, and if measured against the CPB the evaluator will not identify all actual savings. Advanced metering infrastructure and data analytic tools are evolving to measure savings on a near real-time basis and represent the best opportunity for program implementers to most accurately quantify and measure efficiency savings. We suggest the federal plan and the EM&V guidance make note of these developments and support their use.

2. General Comments to Improve the Clean Energy Incentive Program

We support the concept of the Clean Energy Incentive Program and providing early action incentives to certain types of renewable energy and low-income energy efficiency projects. However, we are concerned that the limitations on the timeframe, limitations on types of eligible projects, and the significant verification and reporting requirements for participation in the program could limit the value of such a program.

In particular, the proposed amount of incentives is unlikely to motivate new projects, leaving the CEIP as a mechanism that provides a small reward to projects that would have happened anyway and yields no additional greenhouse gas reductions. For example, we estimate that the weatherization of a single low-income home, which has a typical cost of \$7,000, would earn a CEIP award of 3.5 tons per year for two years. If allowances were to have a market value of \$20 per ton, the CEIP award has a value of \$140. Of that amount, half would come from the state's interim goals. The \$70 net value of the matching allowances amounts to only 1 percent of the project cost, and thus would do little to encourage investment in the project. Also, as proposed, the CEIP program may have the unintentional effect of delaying already planned projects.

We offer the following comments to improve the CEIP and provide greater incentives for new renewable energy and energy efficiency projects. Key recommendations include:

- Maintain reasonable discretion for states in administering their CEIP programs, while recognizing that consistent national standards are necessary to ensure equitable distribution of the national pool of incentive allowances.
- Establish an earlier date for the construction/commencement of eligible projects, such as the submission of an initial state plan on September 6, 2016 or August 3, 2015, the date the EPA adopted the Clean Power Plan rule. In the proposed rule, eligible projects must begin construction after a final state plan submission, which could be as late as September 2018. Delaying the eligibility date as proposed could prevent development of certain types of projects that have extended lead times, especially renewable energy projects. In addition, it may encourage project developers to delay construction or commencement of projects in order to become eligible for CEIP incentives.

- The time period for projects to accrue early action credits for energy savings should also be expanded and should begin on the date of the submission of a final state plan. EPA's proposal allows eligible projects to receive credit for energy savings that occur in 2020-2021. An earlier start date will provide greater incentive for program participation.
- Allow states the discretion to expand the types of eligible renewable energy projects, and maintain the state and EPA credit multiplier for low-income energy efficiency projects.
- EPA matching allowances should be additional, and should not be subtracted from interim or final state goals as long as the overall stringency of the program in reducing national carbon emissions is maintained.
- Streamline the administrative requirements for CEIP program application and EM&V, as long as the overall stringency of the program can be maintained. These administrative requirements may be a barrier to participation for certain organizations.

3. Comments on specific CEIP provisions EPA is seeking input on

In the "Clean Energy Incentive Program Next Steps" memo dated October 21, 2015, EPA requested input on several specific issues in **bold** below. Our responses follow.

Criteria for eligible projects, including those for EE projects implemented in low-income communities

For the federal plan and model trading rules, EPA proposes that CEIP-eligible projects include metered wind, solar, and energy efficiency in low-income communities that accrue savings in 2020 and 2021. EPA should grant states broad discretion in designing their CEIP programs and in determining criteria for eligible projects and the types of eligible projects.

We support providing the multiplier for low-income energy efficiency projects (where 2 MWh energy savings would receive allowances equivalent to 2 MWh from the state set-aside and 2MWh matching EPA credits).

Definitions for 'commence construction' of an eligible RE project and 'commence operations' of an eligible low-income EE project

"Commence construction" should be defined the same as it is for the major NSR permitting programs (i.e. 40 CFR 52.21(b)(9)). This leads to a consistent definition of the term.

Definition of 'low-income community' for eligible EE projects

We suggest that the EPA use existing federal definitions of low-income households to determine eligibility. The Department of Energy's Weatherization Assistance Program (WAP) defines low-income households as those with incomes at or below 200 percent of the Federal Poverty Level. The Housing and Urban Development defines low-income households as those with incomes not exceeding 80 percent of the median income of an area.

The program could allow states to determine the appropriate existing federal definition, or allow for a state-level determination derived from federal data if the state currently uses it or deems it the most appropriate. Creating new low-income eligibility criteria will needlessly cause confusion and adversely impact states that are already implementing low-income energy efficiency programs.

We support EPA preserving the right for states to qualify low-income communities, in addition to individual households, through a variety of pathways such as census tract data, zip codes, registered distressed counties, and other mechanisms that states can develop to support broad participation in the CEIP by low-income households.

The date from which a project may be deemed eligible to qualify for the CEIP

EPA proposes that eligible projects must commence construction or operation after September 6, 2018 for states with a federal plan, or by the plan submittal date for states with state plans. This does not leave a lot of time for construction or commencement of projects, especially for RE projects that require more lead time. It could also create the unintended incentive to delay such projects. We suggest that EPA uses an earlier date for all projects, such as September 6, 2016 or August 3, 2015, the day EPA issued the final emission guidelines.

EM&V requirements for eligible projects, requirements for M&V reports of quantified MWh, and requirements for verification reports from an independent verifier.

We suggest that EPA minimize the administrative burden. If the requirements are equivalent to the criteria for the renewable energy set-aside, this may be burdensome for smaller entities and may discourage participation in the program. This is especially true because the program lasts only 2 years, and project proponents may not view conforming to the standards as worth the investment. RE projects could apply for RE-set aside credits beyond the 2 year CEIP program. It may also encourage greater participation of EE providers in the CEIP program if they could also continue to receive set-asides (such as from output set-aside) through the remainder of the program.

EPA should also clarify whether allowances will be allocated before the projects occur or after the savings occur. It may reduce the EM&V burden on small entities if the allowances are allocated after the savings occur.

Mechanism for reviewing project submittals and issuing early action allowances/ERCs**

States are already required to make the initial review and determination of early action requests to meet the criteria for allowances under the CEIP. In this case, any EPA review should be minimal, consisting of a review of the state's review, rather than an additional, full review by EPA. However, if EPA insists that it must perform a full review of the early action submittal, the reviews should be parallel, with the states and EPA jointly determining if the request qualifies.

Size of the two matching allowance/ERC reserves under the CEIP – one for low-income EE projects, one for wind and solar projects**

We suggest EPA should give states discretion in determining the amount of allowances and the method of their allocation between RE and low-income EE projects. The relative size of the potential EE and RE resources is likely to vary from state to state, depending in part on the amounts of each resource type already acquired. It may be more appropriate for each state to divide the available incentives based on its own circumstances or to elect not to make any prior division at all.

Timing of allocation of matching allowances/ERCs to a state by the EPA as well as timing for awards from these allocations to eligible project providers**

All allocations need to be completed prior to the year in which they must be surrendered for compliance by affected EGUs. They should be allocated, preferably, as close to the start of the first interim compliance period as possible.

Redistribution method for matching allowances/ERCs that are allocated to a state but not awarded to eligible projects, as well as timing for this redistribution**

The federal plan states that any unused matching EPA allowances that remain in a state's account on January 1, 2023 will be retired by EPA, whereas allowances in the state CEIP set-aside will be redistributed to affected EGUs based on a pro rata share. We suggest that if EPA creates separate matching reserves for RE and EE credits, that any remaining unused matching credits should be awarded to any eligible CEIP project first, and retired if not used. For the allowances that are drawn from a state's interim goals, any unused amounts should be allocated by the state consistent with the allocation method that it adopted. There should be no automatic redistribution to affected EGUs if that is inconsistent with a state's plan. Alternatively, we suggest allocating the matching allowances back to the state, which would, through its state plan, determine how to allocate the remainder.

Approach for distributing the 300 million short ton CO2 emissions-equivalent matching pool among states participating in the CEIP

We support EPA's proposed approach to distribute the 300 million matching CEIP allowances proportionally, based on the CO2 reductions that each state is required to achieve by 2030 and relative to the reductions required of the other participating states. If all states participate in the program, then Washington would be allocated 0.8 % of the CEIP set-aside, or 2,254,302 allowances (equivalent to the state-set aside of 751,434 allowances each year from 2022-2024.)

How to convert the 300 million short ton CO2 emissions-equivalent matching pool into ERCs, which are based on MWh

We suggest that EPA use the state's current interim rate-based goal, and then the final goal after 2030. The relevant state's average rate-based goal could be used during the interim period. This preserves the equivalence of the mass- and rate-based approaches in each individual state. For example, Washington's proposed CEIP allocation from the matching pool is 2,254,302 tons, and its average interim period state goal under the rate-based approach is 1,111 pounds per MWh. If Washington elects the rate-based approach, its CEIP allocation should be 4,058,279 ERCs.

Proposed approach of requiring states to implement this program as a condition of a state choosing to determine its own allocation approach via a partial state plan or a delegation of the federal plan.

EPA should not require CEIP participation as a condition of using the streamlined partial state plan or delegation of federal plan approaches. State participation in the CEIP should remain optional. The use of streamlined state plans is optional. The EPA should make the necessary changes to the CEIP so that it can stand alone as an attractive option for states. Moreover, a state's allowance allocation method may well address the objectives behind the CEIP, notably encouraging the development and implementation of RE and EE projects prior to the compliance period, which may curtail the need or desire for a state to participate in the CEIP.

4. Comments on energy efficiency evaluation measurement & verification

In the "Evaluation Measurement and Verification (EM&V) Guidance for Demand-Side Energy Efficiency (EE)" memo dated August 3, 2015, EPA requested input on several specific issues in **bold** below. Our overall comment is that the Guidance is useful and usable, and sufficient to ensure that an implementer can accurately quantify energy efficiency savings.

Does the guidance provide enough information to help EE providers determine what EM&V methods?

Yes, the three quantification methods presented (deemed savings, project-based measurement and verification, and comparison group) are all appropriate and useful methods for quantifying savings. Furthermore, all three methods are necessary tools for implementers to quantify savings. Some methods are better suited for a specific measure than another.

Does the guidance include sufficient information about the appropriate circumstances and safeguards for the use of deemed savings values?

Yes, the Guidance provides sufficient safeguards to ensure the integrity of deemed savings values. For example, the public process (at least a 2-month commenting period), the publication of a Technical Reference Manual, and mandatory review every 3 years, are important and necessary steps to ensure the validity of the values in an ever-changing market.

Should the guidance specifically encourage greater use of comparison group approaches?

No. Although comparison groups are an important methodology for quantifying savings, it can be intensive and expensive and may not always be the best method. This is especially true for new programs. Implementers should work with the state and stakeholders to determine which methodology is best suited for a measure or program.

Is the guidance on important technical topics (e.g., common practice baselines, accuracy and reliability, verification) helpful, clearly presented, and sufficient/complete? Can this guidance be reasonably implemented, considering data availability, cost effectiveness, accuracy of results, and other factors?

Yes, the applicable guidance on technical issues like common practice baselines, accuracy and reliability, and verification, are helpful and complete. The myriad of programs around the country already using similar methodologies is evidence that robust energy efficiency programs with rigorous EM&V can be reasonably implemented, cost-effective, and accurate.

How can the guidance most effectively anticipate the expected changes and evolution in quantification and verification approaches over time (given the time horizon for the emission guidelines)?

We have two recommendations. First, like the requirement for deemed savings, set a periodic review of the EM&V guidance (every 2 or 5 years) to update its methodology. Invite public feedback and republish the guidance.

Second, provide more supportive language in the federal plan on real-time quantification as the leading edge of best-in-practice energy efficiency EM&V. The common practice baseline (CPB) is estimated as what a consumer would have installed at the time, which is often current codes and standards. The quantified savings is measured as the delta of the energy efficient widget and

the current standard. In reality, we know that consumers often have products that operate below current standard, and if measured against the CPB the evaluator will not identify all actual savings. Advanced metering infrastructure and data analytic tools are evolving to measure savings on a near real-time basis and represent the best opportunity for program implementers to most accurately quantify and measure efficiency savings. We suggest the federal plan and the EM&V guidance make note of these developments and support their use.

