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January 21, 2016

Ms. Gina McCarthy  
Administrator  
U.S. Environmental Protection Agency  
Attention: Docket ID No. EPA-HQ-OAR-2015-0199  
Mail Code 2822T  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Subject: Comments on EPA's Proposed Clean Power Plan Federal Plan Requirements, Model Trading Rules, and Amendments to Framework Regulations (Docket ID No. EPA-HQ-OAR-2015-0199)

Dear Administrator McCarthy:

On behalf of the state of Wisconsin, the Wisconsin Department of Natural Resources (WDNR), in conjunction with the commissioners of the Public Service Commission of Wisconsin (PSCW), submits the following comments on EPA's proposed Clean Power Plan (CPP) Federal Plan Requirements, Model Trading Rules, and Amendments to Framework Regulations as published in 80 Fed. Reg. 64966 (October 23, 2015).

Submission of these comments should not be considered as supporting the CPP. The CPP is beyond the authority of the EPA under the Clean Air Act and is currently being litigated by several states, including Wisconsin. If the CPP is upheld after final adjudication, EPA should consider the attached comments when developing its final Federal Plan and Model Rules so that states can implement these aspects of the CPP in the most efficient and cost-effective manner.

Thank you for the opportunity to comment on this proposed rule.

Sincerely,

*Ellen E. Nowak*

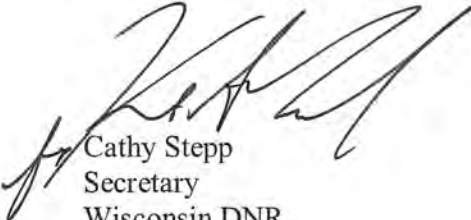
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Cathy Stepp  
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cc: Jeff Ripp, Administrator, Division of Energy Regulation, PSCW  
Pat Stevens, Administrator, Environmental Management Division, WDNR

Attachment

DL: 01283831

**Wisconsin's Comments on EPA's Proposed Clean Power Plan Federal Plan Requirements,  
Model Trading Rules, and Amendments to Framework Regulations**

**1. GENERAL COMMENTS**

**1.1 EPA should finalize model rules for both rate- and mass-based plans.**

*EPA proposed to finalize either (a) both rate- and mass-based model trading rules, or (b) only one type of model rule.*

EPA should not limit the types of presumptively approvable state plans available to states by finalizing only a rate- or a mass-based model rule. To allow states maximum flexibility, EPA should finalize model rules using both rate-based and mass-based structures.

**1.2 States should be able to choose whether a rate- or mass-based federal plan will be implemented in their state or, at a minimum, EPA should finalize different types of plans for different states, as appropriate.**

*EPA proposed to finalize the same type of federal plan for all states under a federal plan.*

EPA should not finalize just one type of federal plan (either rate- or mass-based). EPA should also not choose for states the type of federal plan that will be implemented. Instead, EPA should allow each state to choose the type of federal plan implemented in that state. To minimize compliance costs, it will be crucial that each state has enough potential trading partners to ensure that needed credits (emission rate credits [ERCs] or allowances) are available for purchase. Regional consistency in plan type will be important for reducing the cost of compliance because it allows neighboring states to trade with each other. Each state is in the best position to consider the types of plans being implemented by neighboring states in order to choose the most appropriate type of federal plan for their state. EPA should allow states this flexibility.

If EPA will not let a state choose the type of federal plan to be implemented in that state, it must at least consider the plan types chosen by neighboring states (and other potential trading partners) when choosing a federal plan for a particular state. EPA should also seek public input through a formal notice and comment process on the type of federal plan to be implemented in a state. EPA should officially notify the state of the type of federal plan it will be implementing with enough lead time to provide planning certainty to the regulated entities.

**1.3 EPA should finalize generic federal plans at the same time as it finalizes the model rules or, at a minimum, inform states which type(s) of federal plan it will finalize.**

*EPA proposed finalizing a federal plan only after it has found that a state has failed to submit a plan.*

The timing of finalization of the generic federal plan is very important. EPA must provide states and regulated parties certainty about the type and structure of a federal plan as soon as possible. States developing state plans need to know what type of plan will be implemented in federal plan states in order to know how many trading partners they would have under each plan type. States that may accept federal plans must be able to fully evaluate the impact of not submitting a state plan. Similarly, utilities need certainty about the type of program they need to comply with to assist their compliance planning processes.

EPA's proposed approach to finalizing federal plans lacks certainty needed by states to conduct proactive planning. In order to assist states and utilities with planning, EPA should finalize generic federal plans (for both rate- and mass-based rules – see comment 1.2) at the same time as it finalizes the model rules. It is essential that states know the content of the final federal plan as early as possible. EPA must provide states this information to help them plan how to comply with the rule.

If EPA decides to only finalize one type of federal plan, states must be informed whether EPA will be implementing a mass- or a rate-based federal plan at the same time as the model rule is finalized.

**1.4 EPA should finalize federal plans and model rules that are trading-ready, and federal plan states must be able to trade with state plan states.**

*EPA proposed trading-ready federal plans and model rules and also proposed that states under a federal plan would be able to trade with states implementing a state plan.*

Any model rule or federal plan must allow states to trade with other states in order to provide the largest possible pool of trading partners. States under a federal plan must also be able to trade with states implementing state plans. EPA must finalize its proposal to make both the model rule plans and the federal plans trading-ready and to allow states to trade with each other regardless of whether the states are under a state or federal plan.

**1.5 A federal plan and model rule should allow for trading-ready programs in which natural gas combined cycle (NGCC) emission rate limits reflect actual operating emission rates.**

*EPA's proposed default trading-ready approach for a rate-based federal plan and model rule is to adopt the NGCC and coal electric generating unit (EGU) source category emission rate limits.*

EPA should allow a second default emission rate limit for NGCCs under a trading-ready federal plan or model rule in which states could choose a rate limit anywhere between the NGCC source category emission rate limit and each NGCC's actual emission rate during 2012.

Allowing states to tailor their NGCC limits in this way would remove some of the compliance burden on existing NGCC units. This would incentivize existing NGCC units to operate at higher capacity factors, thereby addressing leakage to new units as required under the CPP. This approach would also provide states considerable flexibility to tailor the rules to state-specific issues while still allowing them to trade freely with other states. At the same time, this approach would avoid creating inequities among NGCCs in different states, which was an issue under the proposed rule due to the wide range in average state emission rate limits. The range of limits outlined here is narrow enough to avoid the inequity issue and will maintain stringency under the rate-based program.

**1.6 EPA should provide a mechanism by which states under a rate-based plan can trade with states under a mass-based plan. This trading should be allowed under both a federal plan and a model rule.**

*EPA's proposal does not allow trading between rate- and mass-based programs. EPA stated that a mechanism for trading between the two programs may be complicated and compromise the stringency of the requirements.*

EPA should develop a mechanism to allow trading between rate- and mass-based programs. A broader trading region would increase compliance options for all states, improve electric reliability, and reduce compliance costs. Such an approach would avoid a scenario in which a state becomes isolated and can only trade in-state or with a few other states. Allowing all states to trade with each other, regardless of program type, would permit states to choose the type of plan that is most appropriate for their circumstances without being penalized if other states choose a different option. Having this alternative in place would greatly reduce the uncertainty that each state has in choosing a program, especially with regards to how its plan will relate to other states plans. EPA should propose a trading mechanism between the two programs for comment no later than summer 2016 in order to provide states additional information prior to the September 6, 2016 initial submittal deadline.

**1.7 EPA should expand the program elements that states could choose to implement under the federal plan and model rules.**

*EPA proposed allowing states to submit a "partial state plan" for state administration of allowances under a mass-based federal plan.*

In addition to administration of allowances, EPA should expand the options that could be implemented in a streamlined manner under a federal plan or model rule. These options include:

- Choosing whether EPA implements a rate- or mass-based federal plan in their state, as discussed in comment 1.2.
- Choosing alternative NGCC and coal rate limits, as discussed in comment 1.5.

- Demonstrating that state policies address leakage without requiring the use of set-asides, as discussed in comment 3.2.
- Approving types of biomass as eligible renewable fuels for compliance with a federal plan, as discussed in comment 5.2.
- Approving energy efficiency (EE), combined heat and power (CHP), waste heat power (WHP) and other emission reduction measures as eligible compliance mechanisms under a federal plan, as discussed in comments 6.1 and 9.1.
- Choosing allowance allocation methods and updates as discussed in comments 7.5 and 8.1 and the period for retaining retired EGU allowances as discussed in comment 7.6.

EPA should include these as default options under the model rules with presumptive approval. Under the federal plan, EPA, where possible, should streamline the process by allowing states to make these selections through notices to EPA or program delegation. At a minimum, states should be able to submit partial state plans that use these alternative approaches.

**1.8 States should be able to use additional low- or zero-emitting measures for compliance with a rate- or mass-based federal plan or model rule.**

*EPA proposed allowing certain specified emission reduction measures to count towards compliance with a federal plan or model rule and is taking comment on allowing other measures to qualify.*

EPA should allow states the flexibility to approve additional low- or zero-emitting Clean Power Plan (CPP) compliance measures. For example, states should be able to count generation from offshore wind towards compliance. These additional measures would be required to meet the same evaluation, measurement, and verification (EM&V) requirements as apply to the measures discussed by EPA in the rules. EPA should also develop a mechanism so that, over time, new technologies or measures could be counted towards compliance.

**1.9 EPA should allow unlimited banking of ERCs and allowances under the federal plan and model rules.**

*EPA proposed allowing unlimited banking of ERCs and allowances under a federal plan and model rule.*

EPA should finalize its proposal to allow unlimited banking of credits (ERCs and allowances) under a federal plan and model rule. EGU operators must be able to bank credits for use in future years and compliance periods without limits. This approach encourages early action, provides regulated parties flexibility in deciding when to retire credits for compliance, and has been successfully applied under other federal trading programs, including the Acid Rain Program.

**1.10 The federal plan and model rules should allow compliance shortfalls to be made up without additional penalties or time limitations.**

*Under EPA's proposal, both rate- and mass-based programs require EGU operators to surrender an additional two credits (ERCs or allowances) for every one credit of shortfall in compliance. The shortfall and penalty must be made up as soon as the credits are available.<sup>1</sup>*

EPA should allow EGU operators to make up compliance emission shortfalls without additional allowance penalties. EPA has authority under section 113 of the Clean Air Act (CAA) to specifically levy fines of up to \$25,000 per day for excess emissions, issue orders, and to pursue civil and criminal judgments. This type of penalty is sufficient to address any EGU operator that is not acting in good faith. Further, EPA is likely overreaching its authority in establishing a 2-for-1 penalty since such an action is not specifically provided in the CAA.

Similarly, EPA should not require credit shortfalls (and any credit penalty, if applied) to be made up as soon as credits are available. A compliance shortfall would likely be the result of an inability to implement the necessary emission reduction measures, a lack of credits, or other utility system conditions which are outside the control of the EGU operator. Requiring makeup of a shortfall as soon as possible will only exacerbate this type of issue, particularly through the interim periods of the CPP. The EGU operator should be able to make up any shortfall over an extended period, particularly since EPA has stated that CO<sub>2</sub> is a long-term pollutant.

For these reasons, EPA should neither levy additional emission reduction requirements nor require compliance shortfalls to be made up as soon as allowances are in the operators account. Instead, operators should be able to notify the state or EPA of the expected timeframe for making up the compliance shortfall.

**1.11 EPA should ensure that there is a pool of compliance credits (ERCs or allowances) for small entities to ensure that they can comply with a federal plan or a model rule.**

*EPA requested comments on whether it is possible to grant certain affected EGUs, particularly small entities, additional flexibility in meeting CPP requirements.*

Small utilities, often run by municipalities or cooperatives, that operate relatively small or few affected EGUs will be limited in their ability to average emissions over their generation system and less capable of implementing alternative generation or trading for credits. It is reasonable for EPA to provide a small entity compliance pool of ERCs or allowance credits under the federal plan and model rules, depending on the program type. EPA or the states could provide the credits to the EGU

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<sup>1</sup> Under a mass-based program, allowances would be withdrawn from the operator's next year's compliance pool. Under a rate-based program, ERCs would be withdrawn from the operator's account as soon as they are available.

operators based on a demonstration of need. Access to this pool should not be limited based on size of the EGU unit, as a small entity or utility may operate one large EGU, but still have limited access to compliance options. Access to the pool should be provided based on a demonstration of need or impact to ratepayers. Any allowances provided in this manner should be in addition to any allowances allocated under the existing CPP requirements.

**1.12 EPA should not create an incentive under the federal plan and model rules for the increased operation of simple cycle combustion turbines (SCCTs).**

*Under EPA's proposal, the federal plan and model rule requirements do not apply to simple cycle combustion turbines<sup>2</sup>.*

Since simple cycle combustion turbines are not regulated under the CPP, there may be an incentive for utilities to increase the operation of these units in place of operating NGCCs. These SCCTs are less efficient than NGCCs and therefore will emit more CO<sub>2</sub> than a NGCC for a given amount of generation. EPA should provide additional ERCs or allowances to the affected EGU pool in a way that allows affected EGU operators to displace this potential upturn in SCCT generation and avoids incentivizing their operation.

**1.13 EPA should finalize its proposal that EGUs undergoing modification or reconstruction are not regulated under section 111(d).**

*EPA proposed that EGUs undergoing modification or reconstruction are subject to section 111(b) emission limitations and would no longer be subject to CPP section 111(d) emission limitations.*

EGUs undergoing modification or reconstruction should no longer be subject to CPP emission limitations for existing units. The CAA clearly makes this distinction by requiring emission limits to be established for both existing and new sources, including modified and reconstructed sources. However, if operators make a modification to, or reconstruction of, an existing EGU to increase efficiency or otherwise comply with CPP requirements, EPA should allow these changes to be counted towards CPP compliance.

Some of the most cost-effective actions for improving existing EGU efficiency could potentially trigger section 111(b) requirements. If so, utilities may not pursue these options if they cannot be used to also demonstrate compliance with the CPP (should that be necessary). This could delay improvements to the more efficient EGUs and discourage or delay the retirement of older, less efficient EGUs. Operators should therefore have the option to include modified or reconstructed EGUs into the CPP and include them when calculating compliance emission rates. These opted-in

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<sup>2</sup> A simple cycle combustion turbine is defined under the CPP as a combustion turbine which does not recover heat from the exhaust gases to enhance the performance of the combustion turbine itself.



EGUs should also be able to generate or receive ERCs and allowances like any other EGU affected by the CPP.

## **2. COMMENTS ON ELECTRIC RELIABILITY PROVISIONS IN THE FEDERAL PLAN AND MODEL RULES**

Wisconsin has requested that EPA reconsider the final CPP rule and is also currently involved in litigation over the CPP.<sup>3</sup> In its reconsideration request, Wisconsin presented substantial evidence and analysis that EPA was deficient in analyzing the interactions of the building blocks when setting the standards and in evaluating electric transmission constraints, natural gas supply and infrastructure, and the time necessary to develop the necessary infrastructure for each state. These issues, among others, must be resolved before the states can fully comment regarding electric reliability under the proposed federal plan and model rules. In this context, Wisconsin offers the following comments. Addressing these comments by themselves would not fully address the electric reliability issues raised in Wisconsin's reconsideration request.

### **2.1 The electric reliability safety valve provision should be available under the federal plan and model trading rules.**

*In the final CPP rule, EPA limits the electric reliability safety valve provision to state plans that do not include interstate trading of ERCs and allowances. EPA asserts that trading-ready rules such as the federal plan and model rules provide enough flexibility such that states under these plans do not need an electric reliability safety valve.*

The electric reliability safety valve should be available to states under any compliance scenario, including those under plans involving trading. There is considerable uncertainty about how trading under the CPP will work, including how trading programs will operate and how many states will participate in them. Some states may have only limited trading options, which would hinder their ability to maintain compliance with the CPP during a reliability event. This is particularly true during the initial compliance years, when significant credits have not yet been generated and the trading market is still developing. Energy market operations will also best be supported if EPA applies the same electric reliability safety valve approach to all plans.

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<sup>3</sup> *Request for Reconsideration of EPA's Final Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units (Clean Power Plan)*, Docket ID No. EPA-HQ-OAR-2013-0602, submitted December 22, 2015.

## **2.2 Affected EGUs should not have to make up excess emissions resulting from an electric reliability issue.**

*Under the CPP, EPA requires that excess emissions resulting from long-term reliability issues lasting more than 90 days must be offset by the EGU operator or the state.*

Long-term electric reliability issues are often beyond the control of any individual EGU, utility, or transmission operator. EPA should not penalize a state or EGU by requiring them to make-up excess emissions resulting from generation needed to ensure reliability, as this would increase the stringency of emission requirements in subsequent years and potentially exacerbate reliability concerns. Any condition which results in a long-term electric reliability issue will require planning and system upgrades that could take ten or more years to complete. EPA should also acknowledge that the CPP is, for the first time, requiring wholesale changes in the electric supply structure. Compliance with the rule cannot be simply achieved by adding control equipment on the EGU. This added level of decision-making among multiple EGU operators, states, and electric reliability authorities requires long term planning and implementation timeframes. Therefore, EPA should structure an electric reliability safety valve such that it provides states with an ability to address long term issues over at least a ten-year period.

Examples of the types of projects with long lead-times that could be required to address electric reliability issues include:

- Capacity additions. The installation of new NGCC plants in Wisconsin takes approximately 5-7 years from inception to generation. This timeframe could expand if upgrades or new installation are needed for natural gas infrastructure.
- Transmission projects. From concept-to-in-service date, major transmission projects typically take over a decade to complete. For example, planning in the Midwest for the CapX2020 string of projects began in 2004; the last of the projects are scheduled to be in-service around 2020. Wisconsin's Badger-Coulee Transmission Line Project was initially analyzed by the developer in 2008, approved by MISO in 2011, and received approval from the Public Service Commission of Wisconsin (PSCW) in 2015. By the time Badger-Coulee is in-service in 2018, it would have been ten years since the initial need was identified.

All of these projects are implemented through lengthy processes which involve multiple steps, including: 1) identification of an issue by a utility, transmission owner, or grid operator; 2) completion of reliability studies; 3) evaluation of the project through the regional planning processes; 4) study of generator interconnection and transmission expansion planning; 5) approval of project(s) through the regional planning process; and 6) approval of project(s) by the state commission(s). Most projects also require the completion of environmental assessments and permits from other state and federal agencies, obtaining right-of-ways and easements from private and public landowners, and extensive public involvement.

For these reasons, EPA should not require EGUs to make up excess emissions due to reliability concerns that require long-term solutions. In addition, EPA should provide mechanisms which allow states to make adjustments for long-term electric reliability over at least a ten-year timeframe.

**2.3 EPA should provide a supplemental compliance pool to make up compliance shortfalls due to long-term electric reliability issues.**

EPA should provide a supplemental pool of compliance credits (ERCs or allowances) that EPA or the states can distribute to affected EGUs that experience compliance shortfalls under the electric reliability safety valve. These extra credits would be in addition to the pool of ERCs or mass allowances in place under other rule requirements and would be available for both short- and long-term compliance issues. This pool should be of sufficient size to handle any reliability shortfalls.

**3. COMMENTS ON APPROACHES TO ADDRESS LEAKAGE IN THE FEDERAL PLAN AND MODEL RULES**

*The federal plan and model rules contain provisions designed to minimize switching of generation from EGUs subject to the CPP requirements to new EGUs not subject to CPP requirements. EPA refers to this shift in generation as “leakage.” EPA’s intent is to minimize the leakage that might occur under mass-based programs relative to what might occur under a rate-based plan by requiring output-based and renewable energy (RE) set-asides under the federal plan and model rules.*

As discussed in Wisconsin’s request to EPA to reconsider the CPP,<sup>4</sup> EPA does not have the authority to regulate leakage under section 111(d). EPA does not have the authority to dictate how the states or affected EGUs comply with the CPP, which means EPA cannot require leakage set-asides that force specific compliance actions. The leakage set-asides are also beyond the Best System of Emission Reduction (BSER) and problematic because they make CPP requirements more stringent than BSER, as discussed in comment 3.1. Accordingly, EPA should not require implementation of leakage provisions under a federal plan or model rule. If the unauthorized leakage provisions are nevertheless retained by EPA in the final federal plan and model rules, comments 3.2 and 3.3 provide additional information for EPA to consider.

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<sup>4</sup> Wisconsin Clean Power Plan Reconsideration Request, Docket ID No. EPA-HQ-OAR-2013-0602, December 22, 2015, Attachment, comment 2.3.

### **3.1 The output-based and RE set-asides under the federal plan and model rules go beyond what is warranted to address leakage and will increase uncertainty and compliance costs for affected EGUs.**

The output-based and RE set-asides go beyond what is necessary to address leakage in the federal plan and model rules. The emission limits under the CPP were set assuming expansion of NGCC operation and significant amounts of new RE generation. These limits are sufficient in and of themselves to provide incentive to expand these types of generation. In addition, EPA has stated that a mass-based program already incentivizes lower-emitting generation. Because of these inherent incentives, EPA should work directly with each state to determine whether leakage is an issue and whether set-asides are warranted under either a federal plan or a model rule for that state. Inherent problems with the set-asides are as follows:

- Set-asides increase compliance cost. Including the output-based and RE set-asides would only serve to unnecessarily increase compliance costs under the CPP. Set-asides move value from one entity to another inherently increasing compliance costs without additional environmental benefit. Utility operators have always had to weigh continuing operation of existing EGUs versus implementing other options. Under the CPP, EPA should similarly allow operators to choose compliance options based on efficacy, cost-effectiveness, and specific state circumstances without the added cost of set-asides
- Set-asides increase stringency and uncertainty. The leakage provisions will also create more uncertainty and potentially more stringency for the affected EGUs, which will also make the CPP more costly. As pointed out in comment 7.9, the cumulative size of all of the set-asides proposed under the mass-based federal plan and model rule is very large. The set-asides reduce the number of allowances provided directly to affected EGUs, with no certainty that the set-aside allowances will be available for compliance. Since the entities who receive these allowances could choose to withhold them from use towards compliance or bank the credits for extended periods, this could make the rule more stringent, as those allowances would not be available to the affected EGUs when needed.
- Set-asides are likely to contribute to leakage instead of mitigating the problem. Implementing set-asides may potentially contribute to leakage rather than mitigating it because the set-asides will inherently increase the overall cost of compliance with the rule for the affected EGU operators. As the costs of operating existing EGU's increase, new NGCCs become more cost-effective in meeting overall demand. Market participation, rather than leakage set-asides, should drive the switch to these units.

For these reasons, the federal plan and model rules should not implement set-asides to address leakage.

### **3.2 EPA should allow states under a federal plan or model rule to demonstrate that state policies or actions are sufficient to address leakage.**

*In the final CPP, EPA indicated that states could address leakage through a demonstration that leakage is unlikely given state circumstances or policies. However, EPA did not include this option in its proposed federal plan or model rules.*

PSCW is required to determine whether a proposed utility project should move forward using the criteria established by the state's energy policy codified in Wisconsin Statute § 1.12(4). This statute requires PSCW to implement actions to meet energy demand in the following order: EE, non-combustible RE, combustible RE, natural gas generation, oil or low-sulfur coal generation, and then generation from all other carbon-based fuels. Because of this policy, utilities would not receive a "certificate of public convenience and necessity" to build new NGCC plants unless they could first prove that the demand could not cost-effectively be met through expanded EE or RE. Implementation of this policy directly addresses EPA's concerns relative to leakage for any new project in Wisconsin.

EPA should allow all states to make a default demonstration under both the federal plan and model rule that leakage is addressed via existing state statute, rule, or policies such as the one described above. Under the federal plan, this demonstration could be allowed as a partial state plan submission. States that can make this demonstration should not be subject to output-based and RE set-asides under the federal plan or model rules.

### **3.3 The output-based leakage provision should sunset based on the operating lifetime of the existing NGCCs.**

*The leakage provisions do not sunset under the proposed federal plan or model rules.*

Since all EGUs have an effective useful life, there will be a point when the continued operation of existing NGCC units should no longer be incentivized. At this point, it would be reasonable to build new, more efficient EGUs to meet demand, whether they be NGCC, RE, or other types of generators. As a result, the requirement to address leakage should not continue indefinitely under the federal plan and model rule.

The leakage provisions should sunset based on the installation dates and useful lives of the NGCC units in each state.<sup>5</sup> Since most of Wisconsin's NGCC capacity was installed before 2005, and assuming that new NGCCs would be more efficient within 20 years, the leakage provision should sunset in Wisconsin no later than 2025.

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<sup>5</sup> Nationally, 91 percent of the NGCC fleet was installed prior to 2009. U.S. EPA, Technical support document for the CPP, *Greenhouse Gas Mitigation Measures*, Table 3-1, August 2015, Docket ID No: EPA-HQ-OAR-2013-0602

#### **4. COMMENTS ON THE CLEAN ENERGY INCENTIVE PROGRAM (CEIP) IN THE FEDERAL PLAN AND MODEL RULES**

*EPA proposed that the federal plan and model rule include participation in the CEIP under both mass-based and rate-based plans. The program incentivizes the implementation of certain compliance measures before the first compliance period, specifically EE in low-income areas and wind and solar generation. Eligible projects would earn early action allowances or ERCs that are matched by an additional pool of federal allowances/ERCs and may be borrowed from the regular compliance period. EPA is taking comment on how to implement the CEIP in the federal plan and model rule.*

Setting BSER does not grant EPA the authority to dictate how the regulated utilities achieve the emissions limits. Requiring CEIP participation under a federal plan inappropriately forces certain compliance strategies because allowances/ERCs are borrowed from the regular compliance periods and reserved for wind and solar generation and low-income EE. It is not EPA's role, nor is it within its authority, to design state incentive programs. For this reason, the CEIP should not be finalized as proposed, and it should not be a required component of the federal plan and model rules. Comment 4.1 below offers an alternative approach to the CEIP that does not borrow allowances/ERCs from the regular compliance periods.

##### **4.1 The CEIP should reward early action using the federal pool of allowances or ERCs alone without a CEIP set-aside or borrowed ERCs provided by the state.**

*Under a mass-based plan, CEIP-eligible projects would earn early action allowances from a CEIP set-aside, essentially borrowing allowances from the regular compliance period, and from a federal match. EPA requested comments on how to develop a similar program structure under a rate-based plan, which would not have a preexisting pool of ERCs from which to borrow. EPA is requiring that the provision of early action credits by the state not reduce the stringency of the standard by introducing extra allowances or ERCs into the system. However, this stringency requirement does not apply to the federal pool of matches.*

EPA should reward early action using only the federal pool of allowances or ERCs ("credits"). This approach incentivizes early action without borrowing credits from the regular compliance periods. Borrowing credits from the regular compliance periods is problematic because it could lead to requirements that are more stringent than BSER, it would increase compliance costs, and EPA's proposals for maintaining the stringency of the standard under a rate-based plan are not feasible. These three issues are described in greater detail below.

- Borrowing credits could result in a program structure that is more stringent than the BSER.

If the CEIP allowances are not earned by or sold to affected EGUs, but are instead withheld by the entity that generated them, the affected EGUs would not have access to the full pool of allowances. The EGUs would have to implement additional reduction measures to comply

with the rule, resulting in requirements more stringent than the BSER. This problem is similar to those associated with the output-based and RE set-asides, as described in comment 3.1). EPA does not have the authority to implement standards that are more stringent than the BSER.

- Borrowing credits increases compliance costs.

Under a mass-based plan, compliance would be more costly as a result of the CEIP because the affected EGUs would have to purchase CEIP allowances that would otherwise have been allocated to the units. In addition, incentivizing low-income EE over more cost-effective EE measures will lead to more expensive compliance. Greater compliance costs would have detrimental impacts on all energy users, including low-income households.

- EPA's proposed approaches for maintaining the stringency of the CPP rule requirements under a rate-based plan are not feasible.

EPA proposed two possible approaches for offsetting the additional ERCs generated before the first compliance period: 1) retiring an equal number of ERCs generated during the regular compliance period; or 2) lowering the level of the emission standards. Neither of these approaches is appropriate. Retiring ERCs places an unreasonable burden on either the state or the RE and EE providers that generate ERCs during the regular compliance period, requiring them to compensate for ERCs generated during the early action period. In general, the State of Wisconsin does not have the means to generate ERCs in order to retire them, and purchasing them would be prohibitively expensive. Retiring ERCs without compensating the RE and EE providers that generated them is not a reasonable option since it would decrease the incentive to develop EE, RE and other emission reduction measures. It would also be difficult to retire ERCs equitably across EE and RE providers (e.g., proportional to credit generation) given that the total number of ERCs that will be generated during the regular compliance periods is unknown. Finally, maintaining the stringency of the standards by lowering them to offset early action ERC generation is not legal because the standards would be more stringent than the BSER.

#### **4.2 EPA should demonstrate that the quantity of early action allowances/ERCs provided per megawatt-hour (MWh) of RE or energy savings provides sufficient incentive for early action.**

*In the final CPP, EPA states that it will provide up to 300 million matching early action allowances to incentivize EE projects in low-income communities and wind and solar generation. In addition, the final rule states that under a rate plan, one early action ERC would be provided per MWh of RE generation and two early action ERCs per MWh of energy savings from low-income EE projects. An equivalent number of allowances would be provided under a mass plan.*

EPA should evaluate the level of early action incentive that will be provided by the CEIP and assess whether the full pool of available early action allowances/ERCs (“credits”) would be used under the allocation rate described above. EPA evaluated the level of incentive provided by the RE set-aside in a technical support document and should do the same for the CEIP. If EPA is committed to providing up to 300 million early action allowances but finds it is unlikely that all credits will be used at the proposed rate of allocation, EPA should increase the allocation rate to incentivize a greater number of early action projects.

#### **4.3 Wisconsin’s previously submitted comments on specific elements of the CEIP also apply to the program’s implementation under a federal plan or model rule.**

*EPA requested input on the design and implementation of the CEIP via a non-regulatory docket. Wisconsin submitted its comments on December 15, 2015.<sup>6</sup>*

The comments Wisconsin previously submitted emphasize that EPA should define CEIP program elements broadly, maximizing opportunities for early action by ensuring that the program can be adapted to the existing resources in each state. Specifically, the comments recommend expanding project eligibility to all types of RE, low-emitting measures, and EE; flexible definitions of “low-income”; and flexible allocation of early action allowances between the RE and EE reserves. In addition, the comments recommend an earlier implementation date threshold for projects and that eligible projects should earn matching early action allowances through the first compliance period (i.e., through 2024) instead of through 2021. Finally, the comments provide general recommendations for EM&V requirements to ensure they can be met using existing state programs.

## **5. COMMENTS ON THE USE OF BIOMASS-BASED ENERGY UNDER THE FEDERAL PLAN AND MODEL RULES**

The final CPP stated that “qualified biomass” could be used for compliance, but EPA has neither clearly specified how this would be defined nor how biomass emissions would be quantified. EPA is currently taking comment on the inclusion and treatment of biomass as a compliance option under a federal plan and model rule. EPA has also requested comment on the use of a list of pre-approved qualified biomass fuels as a mechanism to allow biomass to be used for compliance under a federal plan and model rule.

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<sup>6</sup> Wisconsin’s Comments on EPA’s Clean Energy Incentive Program (CEIP), Docket ID No. EPA-HQ-OAR-2015-0734, December 15, 2015.



### **5.1 Biomass energy must qualify as an eligible renewable resource for compliance with both rate- and mass-based plans under a federal plan and model rule.**

As Wisconsin stated in comments on the proposed CPP<sup>7</sup>, biomass is an important renewable resource for the state of Wisconsin that must be included as a compliance option for both rate- and mass-based plans under a federal plan and a model rule. Biomass energy must be treated similarly to other renewable resources and be eligible to:

- Generate ERCs for compliance with a rate-based plan;
- Receive allowances under a RE set-aside as part of a mass-based plan; and
- Reduce the number of allowances required for facilities co-firing biomass under a mass-based plan.

In particular, the biomass burned at the Rothschild Biomass Cogeneration Plant in Wisconsin must fully qualify as renewable under the CPP. This 50 megawatt (MW) facility began operation in 2013 and was built to provide clean generation for compliance with Wisconsin's Renewable Portfolio Standard. Because the facility began operating after the 2012 baseline, and after the date EPA established for RE to qualify for use towards compliance with the CPP, generation from the Rothschild Plan must be able to count towards compliance.

### **5.2 EPA should allow biomass to qualify for compliance under a federal plan by (a) developing a list of qualified biomass that is pre-approved for use towards compliance, and (b) allowing states under a federal plan to approve additional types of biomass as qualified RE sources via a partial state plan submittal. The list of pre-approved feedstocks should also apply under the model rule.**

EPA should develop a list of pre-approved biomass that could be used for compliance with both a federal plan and under a model rule. This list should include waste-derived feedstocks (particularly biogas) and industrial byproducts (including black liquor), as well as biomass from sustainably managed forests. In particular, woody biomass harvested according to Wisconsin's Forestland Woody Biomass Harvesting Guidelines<sup>8</sup> should be included on EPA's list of pre-approved biomass. These guidelines are followed when biomass timber is harvested from Wisconsin state forests and other state lands, county forests, and private forests enrolled in the state's managed forest law

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<sup>7</sup> See comments 29-31 of Wisconsin's Comments on EPA's Proposed Clean Power Plan, Part 1: General Comments.

<sup>8</sup> The biomass harvesting guidelines are designed to address different sustainability issues including forest regeneration, water quality and wildlife habitat. Wisconsin state forests and other state lands, county forests, and forests enrolled in the state's managed forest law program receive third-party certification of sustainable forestry management under nationally and internationally accepted standards.

program.<sup>9</sup> Wisconsin recommends that the following types of biomass be included on the pre-approved list:

- Biomass harvested using sustainable forestry practices established by states or the federal government, such as the Wisconsin guidelines discussed above.
- Biomass harvested as part of a fire hazard reduction or pre-commercial thinning activity, slash or tree residue, biomass collected during clean-up from natural storms or disasters, and biomass obtained from the demolition of buildings and removal of invasive trees by municipalities.
- Industrial and commercial process biomass waste, municipal solid waste, landfill gas, anaerobic digester gas, and wastewater treatment plant gases, among others.

EPA should also allow states to include other types of biomass as emissions reduction measures under a federal plan. States should be able to develop a partial state plan submittal that includes determinations that certain types of biomass qualify for use towards compliance, calculations quantifying the CO<sub>2</sub> emissions that are carbon neutral for each biomass type, and appropriate EM&V procedures. This submission would be similar to the eligible biomass determinations states could make under state plans. The partial state plan would be submitted to EPA for approval using a process similar to the one EPA proposed for replacing EPA's allowance allocations under a federal plan.

### **5.3 EPA must give states clear guidance on how biomass emissions should be quantified under a federal plan and model rule.**

Biomass energy should count as carbon neutral for compliance with the CPP. However, since EPA has indicated that this is not the default assumption and that the agency will require plans to address the valuation of biogenic emissions, EPA must provide clear guidance as to how states or facilities may best perform these complex calculations no later than when the model rule is finalized.

The information EPA has released to date, both as part of its *Framework for Assessing Biogenic CO<sub>2</sub> Emissions from Stationary Sources* and through the Science Advisory Board review of the framework's drafts, is insufficient. The framework discusses a wide variety of possible approaches for quantifying biogenic emissions at a very high level, but it explicitly does not do so within the policy context of the CPP. The framework also avoids discussing what combination of calculation approaches would be approvable under the CPP. For these reasons, the framework provides very little useful guidance to states or facilities that would like to use biomass for CPP purposes.

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<sup>9</sup> See: [www.dnr.wi.gov/topic/ForestLandowners/mfl/index.html](http://www.dnr.wi.gov/topic/ForestLandowners/mfl/index.html).

Estimates of greenhouse gas emissions from biomass depend greatly on the types of assumptions and approaches used to calculate these emissions. EPA must provide clear guidance to states about what types of assumptions and approaches EPA would find acceptable when approving partial state plan submissions for states under a federal plan. In particular, EPA must indicate how they expect these calculations to handle:

- Choice of baseline, including whether calculations should use a reference point or an anticipated future baseline.
- Temporal scale, including the length of time over which emissions are considered. This also includes issues such as whether to front-load all emissions (treat all anticipated future emissions as occurring in the year the fuel is used), assign the emissions to the year in which they are anticipated to occur or annualize emissions over the assessment horizon.
- Spatial scale, including whether states or facilities should assess a particular type of fuel on a local, regional or national scale.
- Emissions leakage from factors such as indirect land use change. EPA should not require consideration of this factor, both because of the large uncertainties involved in doing so and also because of the considerable resources involved in making these assessments.

In addition, EPA should recognize that the use of biogas actually reduces greenhouse gas emissions via the capture and destruction of waste methane, a potent greenhouse gas. EPA should credit biogas for this methane destruction, as well as for displacing fossil fuels used to generate electricity.

## **6. COMMENTS ON THE RATE-BASED FEDERAL PLAN AND MODEL RULE**

### **6.1 EPA must allow EE measures, CHP and WHP generation, and other low-emissions measures to count toward compliance with a rate-based federal plan.**

*EPA proposed that EE, CHP and WHP would not be able to generate ERCs under a rate-based federal plan because it would be difficult to verify these measures at the federal level. EPA also requested comment on how they could allow these measures to be used for compliance with a federal plan.*

States must be able to use EE, CHP/WHP and other low-emissions measures for compliance under both state and federal plans. In particular, excluding EE as a compliance alternative under a rate-based federal plan, as EPA has proposed, could substantially increase compliance costs. Since EPA plans to allow low-income EE to qualify as part of the CEIP under the federal plan, there is no reason it cannot verify energy savings during the regular compliance periods using a similar approach. Verifying EE measures in states with demonstrated EE programs should be particularly straightforward. For example, Wisconsin's Focus on Energy program already meets the vast majority of the verification standards laid out in EPA's comprehensive EM&V guidance. EPA should be able

to use the data from demonstrated programs like Focus on Energy to verify EE measures under a federal plan.

EPA should also allow EE, CHP/WHP and other low-emissions measures to count towards compliance under both rate- and mass-based federal plans via partial state plans, similar to EPA's proposal for alternative allowance allocations. In states covered by these partial state plans, the additional approved low-emissions measures would generate ERCs under a rate-based plan and could earn allowances from an expanded RE set-aside under a mass-based plan. In the partial state plan submissions, states would provide the same information as required under a state plan (e.g., calculations quantifying eligible MWh for CHP measures and an EM&V plan).

**6.2 The generation of gas shift ERCs (GS-ERCs) should be quantified, as proposed, using the least stringent region's incremental generation factor for each compliance period.**

*EPA proposed to credit the displacement of coal EGU generation by NGCC units under the proposed federal plan and model rule via the generation of GS-ERCs. EPA requested comment on its proposed approach and alternatives for calculating the incremental generation factor, which is used to quantify the generation of GS-ERCs. EPA proposed to use the least stringent regional value for this factor.*

EPA should use its proposed approach for calculating the incremental generation factor. Compared to the alternatives EPA outlined, this approach would result in the generation of more GS-ERCs, provide a greater incentive for NGCC units to displace coal EGU generation, and be more equitable because it is consistent across all states. Using a single factor across states and within a single compliance period also simplifies the GS-ERC quantification process.

**6.3 The GS-ERC emission factor should be calculated based on the least stringent region's 2012 baseline average emission rate.**

*EPA requested comment on its proposed approach and alternatives for calculating the GS-ERC emission factor used to quantify the generation of GS-ERCs. EPA proposed to calculate this factor using individual unit emission rates.*

EPA should not finalize its proposal to calculate the GS-ERC emission factor using individual NGCC unit emission rates. EPA should instead finalize the alternative approach of using the least stringent region's 2012 baseline average NGCC emission rate. This would simplify the process of quantifying GS-ERCs. This approach also provides all NGCC units an equal incentive to displace coal EGU generation. As proposed, some NGCCs would receive fewer allowances than others.

**6.4 EPA should allow states to use existing tracking systems such as the Midwest Renewable Energy Tracking System (M-RETS) to meet EM&V requirements for RE, as well as other resources that qualify for ERCs, under a federal plan and a model rule.**

*EPA proposed that ERC providers must submit EM&V plans for approval and submit periodic EM&V reports. EPA also proposed that RE used for compliance with the CPP must be verified by a third-party.*

RE providers already use systems such as M-RETS to track credits for state Renewable Portfolio Standards. The M-RETS operating procedures include detailed EM&V requirements that must be met in order for the system's subscribers to receive credit (renewable energy certificates, or RECs) for RE generation.

EPA should allow ERC providers to use these existing systems' EM&V plans to meet CPP EM&V requirements. Specifically, EPA should offer pre-approval for ERC tracking system EM&V plans, and allow resources that register with a pre-approved ERC tracking system to receive certification for ERC issuance. Stakeholder processes are established to update EM&V rules when needed, and these stakeholders would be able to expand existing rules to meet EPA-specific ERC tracking requirements. Requiring separate EM&V plans would be redundant and could lead to confusion and conflict if the EM&V plan used for CPP compliance is not worded exactly like other tracking system's existing EM&V rules. EPA should also allow these tracking systems to be used for other resources such as EE.

EPA should not require EM&V reports from ERC-qualified RE and others resources that can be physically metered. Periodic reports are unnecessary because entities participating in tracking systems must continually abide by the system's EM&V rules.

As discussed in more detail in comments on the CEIP, existing RE tracking systems could serve as the required third-party verifiers for RE under both a federal plan and a model rule.<sup>10</sup> These tracking systems are already administered by third-parties that could likely qualify for EPA's third-party verifier status. Such tracking systems could verify RE used to generate ERCs under a rate-based plan and also verify RE that earns allowances from an RE set-aside under a mass-based plan (as discussed in comment 9.5).

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<sup>10</sup> See comment II.F. in Wisconsin's Comments on EPA's Clean Energy Incentive Program (CEIP), Docket ID No. EPA-HQ-OAR-2015-0734, December 15, 2015.

### **6.5 EPA should clarify several issues in its “Draft EM&V Guidance for Demand-Side EE” on topics relevant to implementation under a federal plan or model rule.**

*In a separate action, EPA has requested comment on draft guidance on EM&V for EE used for compliance with the CPP.*

Wisconsin has over 15 years of successful, large-scale experience with EE through its statewide Focus on Energy program. Most of the EE-related provisions in the federal plan and in EPA's Draft EM&V Guidance document are consistent with Focus on Energy's existing practices. However, EPA should provide further clarification in two areas to ensure EE savings are accurately, consistently, and cost-effectively measured:

- EPA should clarify whether energy savings from EE programs, including Focus on Energy, should be reported on a gross (total) basis or a net (program-attributable) basis. Unless EPA makes it clear that all states will be held to the same standards going forward, requiring Wisconsin to report its net savings could penalize the state relative to other states that currently have less strict and sophisticated standards for calculating net savings.
- More guidance is needed on the level of detail at which savings must be evaluated. This guidance should follow Focus on Energy's practices of applying such standards at a portfolio level. Applying standards at a program or measure level would require significantly more spending on evaluation by project operators to achieve relatively small increases in precision.

These concerns could be addressed through refinements to the draft EM&V guidance and do not require any changes to the EM&V requirements in the federal plan.

## **7. COMMENTS ON THE MASS-BASED FEDERAL PLAN AND MODEL RULE**

*EPA proposed a methodology for distributing base allowances under a mass-based program. Before allocating allowances, EPA subtracts allowances for the CEIP, output-based, and RE set-asides from the main base allowance pool. The base allowances remaining in the main pool are distributed to affected EGUs based on their individual share of total generation in the state during the baseline years (2010-2012). While the size of the total pool of allowances will decrease over time (because CPP emission limits decrease) the relative share allocated to each EGU will be fixed.*

The comments below apply to both the federal plan and model rules.

### **7.1 EPA should distribute allowances from the main base allowance pool only to affected EGUs.**

*EPA requested comment on whether base allowances should be distributed only to affected EGUs or if a) allocations should also be distributed to RE, load serving entities, or other entities, and if b) allowances should be distributed by some other method, such as by open auctions.*

Base allowances should be distributed only to affected EGUs under the federal plan and model rules, since affected EGUs are the entities responsible for compliance. Providing allowances to other entities would create uncertainty and increase compliance costs, since the affected EGUs would have to purchase the allowances. If the state decides that other measures, such as additional EE and RE implemented by load serving entities or other entities, would result in lower costs in the long-term, then the state can implement those actions through separate requirements outside of the CPP. Implementing any of the alternative approaches suggested by EPA are options states could adopt as part of a partial state plan.

**7.2 The base allocation method should avoid over-allocating allowances to any type of affected EGU.**

Wisconsin evaluated EPA's proposed methodology for distributing base allowances to the affected fossil fuel EGUs. Allocations based on percent generation, as EPA proposed, appear to result in NGCCs receiving more allowances than they would need to offset their emissions, both at historic levels and, to some extent, at increased operating levels. EPA should not establish a default base allocation method which could significantly over-allocate allowances to NGCCs. Doing so makes the overall CPP rule more stringent and expensive for other types of EGUs while increasing overall compliance costs.

Over-allocation is not an issue for coal EGUs. The emission requirement for coal EGUs is stringent enough that it would be difficult for any individual coal EGU to receive more allowances than the amount that would offset emissions during the baseline years.

**7.3 The base allowance allocation methodology should use the average of the two highest years of generation (or other base data applicable under the method) for each EGU for 2010 through 2014.**

*EPA proposed to allocate allowances for each affected EGU based on its average generation data for the years 2010 through 2012.*

EPA should expand the baseline years of data used in the base allocation methods to include 2010 through 2014. Extending the baseline to 2014 would incorporate the most current data representing EGU and utility system operations. This is particularly important to capture more representative operation of newer power plants in Wisconsin, including Weston Unit 4 and the Elm Road Generating Station and the retirement of the Kewaunee nuclear plant.<sup>11</sup> It is also important to extend

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<sup>11</sup> Wisconsin has commented numerous times on the CPP rule that data from 2010 through 2012 significantly under represents the actual operation of the Elm Road Generating Station. See *Request for Reconsideration of EPA's Final Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units (Clean Power Plan)*, comment 5.2, Docket ID No. EPA-HQ-OAR-2013-0602, submitted December 22, 2015.

the baseline period back through 2010 in order to provide credit for actions taken since that time, including EGU retirements. This initial baseline period would apply to distribution of allowances for all compliance periods unless updated as a whole, as discussed in comment 7.5.

To most accurately capture each unit's operation, the base data (whether generation, emissions, heat input, etc.) should be the average of the two highest years during the baseline period. The individual unit data would then be added together to get the state or source category totals, and the relative information then used to allocate allowances to each individual EGU. This approach is similar to the CAIR and Cross-State Air Pollution Rule (CSAPR) methodologies.

**7.4 The baseline generation data used for distributing allowances should reflect gross generation and should credit useful thermal output from CHP units.**

If allocations are made based on generation, gross generation (rather than net generation) should be used to determine each unit's proportion of the state's total generation or total coal EGU generation. Using net generation data penalizes EGUs that utilize extensive pollution control equipment, which is the case of most EGUs in Wisconsin.

EPA should also credit useful thermal energy recovered from CHP systems towards the amount of electric generation used in distributing allowances. In many cases, the affected CHP sources must dispatch in order to meet dedicated thermal load demand. This operation cannot be simply curtailed to meet a limited allocation of allowances. For this reason, the distribution of allowances should account for the full required use of the unit (both electric generation and useful thermal energy).

**7.5 EPA should provide an opportunity for updating the allocation distribution methodology as a second default option under a federal plan and model rule.**

*EPA proposed that 2010 through 2012 baseline data be used to determine the allocation of allowances under the federal plan and model rules for all compliance periods through 2030 and after.*

EPA should allow for an update of the baseline data used for distributing allowances under both the federal plan and model rules similar to the updates allowed under CAA transport rules. In the state's NO<sub>x</sub> CAIR State Implementation Plan, Wisconsin updates the baseline information every five years and uses that updated baseline to distribute allowances for a fixed five-year period in the future. The baseline data is from a five-year period which ends four years prior to the beginning of the allocation period. For example, the allowances for 2030 through 2034 would be calculated using baseline data from 2021 through 2025. This approach provides allowances to the EGUs that are actually meeting the electricity demand (which minimizes overall cost) while still allowing long lead times for planning and also rewarding actions such as EGU retirements.

In a similar manner, EPA should provide an option for states to update the baseline and allocation of allowances prior to any of the compliance periods. The state could simply indicate to EPA the years



to be used as the baseline period. EPA should also consider making this method a default option. At a minimum, EPA should make it clear that states can request an update to the baseline data and allowances prior to each compliance period.

**7.6 Allowances from retired fossil fuel EGUs should remain with the EGU operators. At a minimum, allowances should remain with retired EGUs for a longer period and, when surrendered, should be redistributed to the remaining affected EGUs.**

*EPA proposes that operators of retired fossil fuel EGUs lose allowances at the end of the compliance period following two years of non-operation. EPA proposes to redistribute allowances from retired EGUs to the RE set-aside.*

One of the primary incentivized compliance options under a mass-based program is to retire older, less efficient EGUs. Allowing operators to retain allowances for only two years would not encourage this. Instead, it would likely encourage some level of continued minimal operation for EGUs that would otherwise be retired. Such a rapid loss of allowances from retired units is also problematic in that it does not provide operators the allowances needed to cover emissions associated with switching the load to other, more efficient units in their fleet. Because of this, operators of retired EGUs should retain their allowances unless the state chooses an update to the baseline years or chooses an updating allocation system as discussed in comment 7.5.

At a minimum, EGU operators should retain allowances from EGUs retired prior to 2018 through the interim compliance periods. After this time, operators should retain retired EGU allowances for at least nine years. This approach is consistent with the timeframe for planning and installing new NGCC capacity. It is also consistent with Wisconsin's experience under the state's NO<sub>x</sub> CAIR program. As described in comment 7.5, EGUs retain allowances for nine years or longer after retirement as part of the allocation updating system. This approach allowed EGU operators to use the retired EGU allowances for increased operation at other EGUs until other cleaner and more efficient generation sources could come online.

If operators are required to relinquish retired EGU allowances, the allowances should be redistributed to the other remaining affected EGUs instead of being transferred to the RE set-aside. In finalizing the CPP, EPA determined the mass equivalent that is representative of BSER for existing power plants. Redistributing allowances to RE projects would add cost and stringency (if allowances are withheld by RE project recipients from affected EGUs), which is beyond BSER. In addition, it is not appropriate to incentivize new generation by reallocating retired EGU allowances to any type of new generation, including RE. This action of dictating how affected EGUs compliance with the CPP is not authorized by section 111(d). Therefore, EPA should eliminate the requirement that retired EGU allowances be transferred to the RE set-aside pool.

**7.7 Set-aside allowances that remain unused should be redistributed to affected EGUs under the federal plan and model rules.**

If EPA retains the set-asides, any allowances which are not allocated must return to the main allowance pool for redistribution to the affected EGUs. EPA proposes this approach for CEIP and output set-aside allowances. However, EPA should amend the RE-set aside distribution method, as discussed in comment 9.3, and return all unused allowances to the affected EGUs.

**7.8 EPA should allow states to choose from multiple default allocation methods for both NGCCs and coal EGUs under the federal plan and model rules.**

States should be able to select base allowance allocation methodologies from several different default options under the federal plan or model rules. As noted in this section, there are a number of choices the states could make, including updating allocations and the length of time retired EGUs retain allowances. EPA should specifically allow states to choose from these options under the federal plan. Under the model rules, these choices should be clearly-defined default options that the state could implement with presumptive approval.

**7.9 EPA should eliminate the CEIP, output-based, and RE set-asides.**

*EPA proposed a CEIP set-aside under the federal and model rules to incentivize early RE and low-income EE measures. EPA also includes RE and output-based set-asides under the federal plan and model rules to minimize leakage.*

In addition to issues related to the CEIP and leakage raised in comments 4.1 and 3, the proposed size of the three related set-asides combined is problematic and will likely increase compliance costs. The large size of the set-asides would also make the CPP requirements more stringent than BSER by controlling and potentially reducing EGU access to allowances, as discussed in comment 3.1. Therefore, the set-asides should be eliminated from the federal plan and model rule.

The set-asides for Wisconsin, shown in Table 1 below, would represent 12.1 percent of the total mass allowances in the first compliance period (2022-2024) and 9.2 percent starting in the final compliance period (2030-2031). Relative to other federal programs, the combined size of these set-asides is unprecedented. In contrast, EPA provided only a two percent set-aside for new units under CSAPR.

*Table 1. Proposed set-asides for Wisconsin.*

Compliance Period	NGCC set-aside (%)	RE set-aside (%)	CEIP (%)	Total (%)
2022-24	0.0	5.0	7.1	12.1
2025-27	3.9	5.0	0.0	8.9
2028-29	4.1	5.0	0.0	9.1
2030-31	4.2	5.0	0.0	9.2

EPA admits that the individual set-asides could cause uncertainty by shifting a large number of allowances away from the affected EGUs. If recipients hold or bank set-aside allowances for significant periods of time, the affected EGU requirement would become significantly more stringent. A potential result of EPA's proposed approach is that the utilities would likely avoid this uncertainty by implementing other, non-set-aside-related compliance measures at a higher cost. Since the utilities would no longer need the set-aside allowances, these allowances would no longer have value and would not incentivize the desired actions. If EGU operators do obtain allowances, it is at a higher cost than direct allocations as the affected EGUs will have to purchase the allowances from set-aside recipients. There is no certainty that this upfront cost will yield additional carbon-free generation and reduce long-term costs in complying with the rule.

EPA appears to have only evaluated the value of RE set-aside allowances. If EPA maintains these set-asides, it should perform additional analyses to show that the set-asides in each state would lower the total compliance cost and benefit the affected EGUs. These analyses should be provided for public comment.

## **8. COMMENTS ON THE OUTPUT-BASED SET-ASIDE FOR NGCC UNITS**

As discussed in comments 3 and 7.9, EPA should not regulate leakage by establishing an output-based set-aside under the federal plan and model rules. If EPA continues to address leakage under the federal plan and model rule, the following points should be considered.

### **8.1 The existing NGCC output-based set-aside should not be a required element, and each state should be able to choose how to address leakage if it is found to be an issue.**

*The output-based set-aside is required under the proposed federal plan and model rule mass-based programs to address leakage. The allowances cannot be used by the NGCCs but can be sold or transferred to coal EGUs. The intent of the output-based set-aside is to incentivize operation of existing NGCC units in order to avoid generation leakage to new NGCCs and to displace existing coal EGU generation.*

EPA has created a complex system for trying to incentivize existing NGCC operation. The output-based set-aside provides allowances to operators of NGCCs, but these allowances cannot be used directly by the NGCC operators for compliance and instead must be sold to coal EGUs. This approach would redistribute allowances in a way that will increase compliance costs, stringency, and uncertainty for coal EGUs (see comments 3.1, and 7.9). Therefore, the NGCC output-based set-aside should not be required under the federal plan or model rules.

If EPA successfully defends the legality of the leakage provision in the federal plan and model rules, EPA should work directly with each state to determine whether leakage is an issue and how leakage should be addressed. The federal plan and model rules should provide a mechanism for this approach. This would allow each state to directly show that there are state policies or regulations in place, such as described in comment 3.2, that address leakage. Under this mechanism, EPA could also provide several default options (in addition to the output-based set-aside approach) that a state could choose if leakage is found to be an issue in that state.

An example of one such an alternative option would be to allow a method for distributing allowances that provides NGCCs sufficient allowances to cover emissions on an ongoing basis and up to a level determined necessary to address leakage. This approach would allow existing NGCCs to operate without a compliance burden and on the same cost-effectiveness basis relative to new NGCCs as they would without the CPP, which addresses leakage.

Such an alternative approach could greatly simplify the mass-based program, increase certainty, and likely reduce the cost of compliance. This is because base allowances could be used directly by NGCCs for compliance, whereas the output based set-aside allowances have to be sold to coal EGUs. This approach would also increase certainty for coal EGUs because allowances would be directly aligned with actual distribution of generation that results from dispatch needs and system cost-effectiveness (i.e., coal EGUs would not lose allowances to the set-aside while still being called on for generation). Another benefit is that, under this approach, base allowances would likely be distributed from the main allowance pool to NGCCs first, with the balance of base allowances distributed to coal EGUs. This split allocation approach would allow allowances to be distributed to coal EGUs in a different way (e.g., based on percent generation, emissions or heat input) that better ensures equity among that pool of affected EGUs.

EPA could allow states to choose this type of allocation methodology under either a federal plan or model rule as an alternative to adopting the leakage provisions. In doing so, EPA could allow states to choose the baseline periods for allocating NGCC allowances and the basis for distributing coal EGU allowances. When splitting the allocation method in this way, EPA could also allow states to choose specific details under each approach, such as the allocation basis for coal EGUs.

**8.2 If retaining the output-based set-aside, EPA should work with each state to determine the appropriate size of the set-aside for that state.**

*EPA proposed that NGCCs can obtain output-based set-aside allowances when operating above a 50 percent capacity factor. EPA uses the new NGCC emission rate limit of 1,030 lbs/MWh and an assumed expansion from 50 to 60 percent capacity factor to establish the size of the set-aside for each state (10 percent capacity factor x state NGCC capacity x 1,030). NGCCs can obtain allowances at this rate (1,030 lbs/MWh x actual MWh > 50 percent).*

If EPA retains the set-aside, it needs to reduce the size of the set-aside to address the potential negative impacts. Comment 7.9 discusses the uncertainty and potential costs that could result from the combined impact of EPA's proposed set-asides. Because the extent of leakage will vary, EPA should work with each state to determine the appropriate size of the set-aside (if any). It is clear that EPA has not specifically determined the benefits or costs that would result from the set-aside and whether and by how much it would actually incentivize expansion of existing NGCC generation.

**9. COMMENTS ON THE RE SET-ASIDE UNDER THE FEDERAL PLAN AND MODEL RULE**

As discussed in comments 3 and 7.9, EPA should not regulate leakage by establishing an RE set-aside under the federal plan and model rules. If EPA continues to address leakage under the federal plan and model rule, this component should be modified in the following ways.

**9.1 EPA should extend the RE set-aside to include generation from CHP/WHP and avoided generation from EE under a federal plan and model rule.**

*EPA is taking comment on whether to extend the RE set-aside to include EE and CHP projects.*

EE, CHP, WHP and other low- or zero-emitting measures can reduce emissions to the same extent as RE and should be incentivized as part of a set-aside. EPA should require the same kinds of EM&V measures under this set-aside as they do for measures that generate ERCs under a rate-based plan. EPA must permit allowances under this set-aside to be allocated to the utilities rather than to a specific EGU. This is especially important for EE in Wisconsin because the state's utility-funded EE program, Focus on Energy, credits avoided generation based on the customers' utility. It would not be appropriate to credit these allocations to an individual EGU.

**9.2 EPA should allow RE to qualify for the RE set-aside in whichever state owns/contracts for the generation under the federal plan and model rule.**

*EPA proposed to allocate allowances from a state's RE set-aside only to RE projects located within that state, but requested comments on allowing RE capacity in other states to qualify.*

Not all states have the same potential to develop wind and solar resources. For this reason, Wisconsin utilities have a history of building wind farms in neighboring states where wind resources are greater. In 2012, Wisconsin utilities directly owned 378 MW of wind capacity in Iowa and Minnesota and contracted for significant additional generation. This practice is likely to continue because it is more cost-effective to develop wind in states with higher wind potential than in Wisconsin.

EPA should treat interstate RE under a mass-based plan in a manner similar to its treatment under a rate-based plan by allowing the owner of the interstate RE to receive the RE set-aside allowance. Limiting eligible RE to in-state generation as proposed would allow the owner of out-of-state RE to generate ERCs for RE under its home state's rate-based plan but restrict its ability to earn allowances in its home state for the same RE under a mass-based plan.

Allowing out-of-state RE to generate allowances in the state for which it was built or purchased would provide additional incentive to fully develop renewable resources in high-potential areas where RE is more cost-effective. This approach would allow new RE in a high-potential state to generate set-aside allowances in other (likely lower-potential) states, rather than requiring it to compete with very large amounts of RE for a limited number of allowances in the high-resource state's set-aside. This means, for example, that a Wisconsin utility would be allocated allowances under Wisconsin's set-aside for wind power generated in Iowa or Minnesota that was dedicated to use in Wisconsin. In response, the total number of RE projects competing for Iowa or Minnesota's limited set-aside would decrease, increasing the number of allowances allocated to a given amount of RE and increasing the incentive for additional RE in these high-potential states. For these reasons, EPA should allow projects to earn allowances from the RE set-aside in the state that owns or contracts for that generation.

### **9.3 EPA should allocate allowances from the RE set-aside at a set rate under the federal plan and model rule, rather than pro rata within each state.**

*EPA proposed that allowances would be allocated proportionally (pro rata) to the total amount of eligible RE in the state under a federal plan and the mass-based model rule.*

Allocating on a *pro rata* basis discourages full development of resources in high-potential states. With *pro rata* distribution, allowances in low-potential states would be distributed among fewer RE projects than in high-potential states, increasing the value of a MWh of RE relative to its value in a high-potential state. EPA designed this approach to help develop resources in low-potential states, but doing so could significantly increase compliance costs for little or no environmental benefit.

Instead, EPA should allocate allowances at a set rate to incentivize deployment of RE more equitably among states. This approach to allocations would ensure that the value of each MWh of RE is similar across states, avoiding creation of a disincentive for RE development in the states where it achieves the greatest emissions reductions at the lowest cost. Allocation at a set rate, combined with allocation for out-of-state RE (described in comment 9.2), should help incentivize full development of the most cost-effective renewable resources. If the set-aside is over-subscribed (i.e., there are not enough

allowances in the set-aside to cover all eligible MWh of generation), EPA should adjust all allocations downward until the set-aside is exhausted in order to ensure that all eligible resources receive allowances. In addition, it is essential that any unused allocations from the RE set-aside be returned to affected EGUs to avoid increased stringency due to allowances being unavailable for compliance. EPA should propose for public comment a revised RE set-aside approach that would allocate allowances using a set rate.

**9.4 Allowance allocations from the RE set-aside under a federal plan and model rule should be based on actual generation data when it is available. When such data is not yet available, allocations should be based on projections from capacity.**

*EPA proposed to base allocations to the RE set-aside on projections of generation from installed capacity. If actual generation falls short of projections, the difference would be subtracted from the RE provider's allocations for the next year*

EPA should allocate allowances under the RE set-aside to newly installed capacity that does not yet have a record of generation. However, under the proposed approach, facilities could be penalized for generation shortfalls resulting from factors that facility owners have no ability to predict or control. For example, under such an approach, all hydropower facilities in a region could be penalized if a severe drought results in significantly lower amounts of hydroelectric generation than projected.

Because most eligible RE capacity will have a record of historical generation that can be relied upon for allocations, allocations should be based on historical generation data when available. For new capacity, EPA should project based on capacity for the first year or two of operation. Once a full calendar year of historical generation data is available, allocations should be based on this historical data. Since allocations under this system would be based primarily on demonstrated historical generation, EPA should not adjust any future allocations based on shortfalls in generation compared with projections.

**9.5 EPA should allow states to use existing tracking systems such as M-RETS to meet EM&V requirements for RE as part of an RE set-aside under a federal plan and a model rule.**

*EPA proposed that RE projections be approved by a third-party verifier.*

Existing tracking systems for RE could serve as the required third-party verifiers for RE under both a federal plan and a model rule, as discussed in comment 6.4 for rate-based plans. Such tracking systems can verify RE that earns allowances from an RE set-aside under a mass-based plan, in addition to verifying RE used to generate ERCs under a rate-based plan.