

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### **MEMORANDUM**

To: Docket EPA-HQ-OAR-2015-0199

From: U.S. Environmental Protection Agency, Office of Air and Radiation

Date: August 2015

Subject: Alternative Compliance Option Technical Support Document (TSD)

# Alternative Compliance Pathway for Units that Agree to Retire Before a Certain Date

The agency discussed in section III.C of the preamble the potential for certain affected EGUs that are willing to commit to retiring by December 31, 2029 to take an alternative compliance pathway. This technical support document (TSD) provides additional information on which the public is encouraged to comment, sharing the agency's preliminary views on how such a pathway could be designed in either a mass-based or rate-based federal plan. The approaches in this TSD are intended to provide a voluntary pathway by which an affected EGU that commits to retiring would be removed from the trading program (either mass-based or rate-based trading) and instead would comply with a unit-specific emission limitation. We note that it is important in order to maintain consistency with the guidelines that the overall stringency of the federal plan will not be reduced, and we encourage stakeholders to consider this in developing their comments on this topic.

### 1. Alternative Compliance in the Mass-based Approach

The EPA believes there is a potential for an alternative compliance pathway in the proposed mass-based federal plan for an affected EGU that chooses to retire on or before December 31, 2029. Such a unit would need to accept an enforceable unit-level CO<sub>2</sub> emission limit as well as an enforceable commitment to retire by a date-certain prior to the end of the interim performance period, but would be exempt from the requirement to hold allowances to cover its emissions for the entirety of the Interim Period (2022 through 2029). Such a unit would not be allocated any allowances. The unit would be required to comply with the federal plan's monitoring and reporting requirements (see section V.H in the federal plan for the proposed monitoring and reporting requirements).

In order to maintain the stringency of the plan and so as not to unduly restrict the compliance options available to units that remain in the trading program, the EPA would determine the unit-level emission limit for an EGU that chooses this pathway as an amount of emissions equal to the sum of the allowances that the unit would otherwise have been allocated for the Interim Period. The EPA would sum the allocations that the unit would have been allocated under the general allocation approach, which is based on historical generation data, for each compliance period in the Interim Period. This calculation would not include any allowances from the proposed set-asides. (And if such set-asides were to be under-subscribed such that remaining allowances are returned to the general allocation method for distribution to affected EGUs, a unit under this pathway would not be included in the redistribution.) The proposed historical generation-based allocation approach and allowance set-asides are detailed in section V.D in the federal plan.

The EPA would not allocate any allowances to a unit that chooses this pathway. Rather, the agency would subtract an amount from the mass goals (i.e., from the total mass budget) of the state where the retiring EGU is located, for each compliance period in the Interim Period, which would sum to the unit's emission limit. The retiring EGU would have the flexibility to distribute its emissions over time in any manner it chooses so long as its total emissions up until the point of retirement do not exceed its limit (i.e., its total emissions must not exceed an amount of emissions equal to the sum of the allowances it would otherwise have been allocated over the Interim Period). Allowances that would otherwise have been allocated to such a unit would not be recorded in any account in the allowance tracking system, would not be created, and would not enter the market.

Although this approach would determine a unit-level CO<sub>2</sub> emission limit based on the amount of allowances an EGU would otherwise have been allocated, the allocation of allowances in the mass-based federal plan does not constitute the determination of unit-level emission limits. In the narrow case of this voluntary, alternative compliance pathway, a unit would choose to comply by limiting its emissions to a unit-level cap and committing to retire by a date certain prior to the end of the Interim Period, and would not comply by holding allowances equal to its emissions. All other affected EGUs would comply with the federal plan by holding allowances equal to emissions during each compliance period, and would not be subject to a specific, numeric unit-level emission limit.

<sup>1</sup> Section V.G in the federal plan details the proposed Allowance Tracking and Compliance System.

This option may be particularly advantageous for marginal or older units that are no longer operating at their historical levels or which may choose to retire relatively early in the compliance periods. The affected EGU would gain the benefit of reduced administrative burdens as well as the potential ability to emit more CO<sub>2</sub> earlier in the program. The EPA believes that this approach – of basing a unit-level emission limit for a retiring unit on the amount of allowances the EGU would otherwise have been allocated in the general allocation approach – would provide flexibility to units that may want to choose an alternative pathway, while maintaining the overall stringency of the state goals, and without creating an additional burden for the affected EGUs that do not choose to take this alternative compliance pathway. The EPA requests comment on whether this approach in fact would meet each of these objectives.

The owner or operator of an affected EGU that chooses this alternative compliance pathway would be required to notify the agency and adopt the enforceable retirement commitment and enforceable CO<sub>2</sub> emission limit prior to the start of the first compliance period. We anticipate this would likely be handled through a modification of its title V operating permit to add such enforceable terms. If the agency were to finalize such an alternative compliance pathway, the EPA believes it would be reasonable to require an initial showing of interest in this option by March 1, 2020, and to have enforceable commitments in place on the affected EGU by March 1, 2021, which is before the proposed date of June 1, 2021 to record allocations in EGU accounts for the first compliance period. This timing would avoid the complexity of "taking back" allowances that had been recorded and might already have been sold or traded away from the EGU taking the alternative pathway.

The EPA recognizes there are considerations that would need to be addressed in the event that a state in which an alternative pathway EGU is located replaces the mass-based federal plan with an approved state plan (or replaces the federal plan allocation approach with an approved state-determined approach) during the Interim Period. The EPA believes that at a minimum, the goals of such a state would need to be reduced for any remaining compliance periods in the Interim Period to reflect the amount of emissions that were "removed" from the state's mass goal to implement the alternative compliance pathway for the retiring EGU(s).

The agency requests comment on whether such an exemption should be available for all affected EGUs, or limited to certain small units (e.g., steam units with less than 100 MW nameplate

capacity), or not available at all.<sup>2</sup> One reason for such a limitation is that this approach would remove allowances from the trading system, and thus could affect allowance-market liquidity and/or prices. Limiting availability to smaller units would reduce the potential that units taking this pathway could impact the functioning of the allowance market. We note that we anticipate this approach, if finalized, would be available to states as well in the mass-based model trading rule.

The EPA also requests comment on an alternative to this approach where the owner or operator of an affected EGU that chooses this alternative pathway could choose to increase its unit-level emission limit by purchasing allowances and surrendering the allowances to the agency.

### 2. Alternative Compliance in the Rate-based Approach

This section of the TSD discusses the potential for an alternative compliance pathway in the proposed rate-based federal plan for certain affected EGUs that choose to retire on or before December 31, 2029. As with the discussion of an alternative compliance pathway in the mass-based approach, it is necessary for consistency with the guidelines that the overall stringency of the federal plan be maintained. Further, such retiring EGUs would be required to take an enforceable commitment to retire, and would be required to meet a mass standard.

For retiring EGUs that wish to use this alternative compliance demonstration that are subject to a rate-based standard, the EPA is proposing to remove the EGU from the trading program and institute a mass-based standard. This standard is unit-specific and is proposed to be the 2012 generation for the unit multiplied by the corresponding rate-based standard for the unit in the compliance period. This will give a mass value for the year and would be multiplied by the number of years in the compliance period to give the standard for that compliance period. Under a rate based approach there is not an explicit limit on EGU utilization, but the need to purchase ERCs serves to limit utilization for units that inherently emit at a rate greater than the standard. The EPA is proposing to choose a mass based standard for alternative compliance for rate-based compliance jurisdictions to limit the utilization (and mass) of units while also allowing flexibility. The EPA solicits comment on this approach and whether a different historical baseline should be used for generation.

<sup>&</sup>lt;sup>2</sup> The emission standards proposed in the federal plan are achievable, and while the agency recognizes there may be some advantages to particular units in having an alternative compliance pathway, this in no way detracts from the agency's view that the federal plan as proposed could be implemented successfully for all affected EGUs.

The agency requests comment on whether such an alternative compliance pathway should be available for all affected EGUs, or limited to certain small units (e.g., steam units with less than 100 MW nameplate capacity), or not available at all.<sup>3</sup> One reason for such a limitation is that this approach could potentially reduce the number of ERCs from the trading system, and thus could affect ERC-market liquidity and/or prices. Limiting availability to smaller units would reduce the potential that units taking this pathway could impact the functioning of the ERC market. We note that we anticipate this approach, if finalized, would be available to states as well in the rate-based model trading rule.

<sup>&</sup>lt;sup>3</sup> See footnote 1 supra.