Technical Support Document (TSD)

for the Transport Rule

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Analysis of Constellation Energy Group's Allocation Suggestion that Uses Title IV Allowances

U.S. Environmental Protection Agency

Office of Air and Radiation

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Background

In developing the Transport Rule proposal to replace the Clean Air Interstate Rule (CAIR), EPA carefully considered the proposed Transport Rule program's impact on existing programs. These impacts included the impact of the proposed program on banked Title IV allowances in the Acid Rain Program. One of the specific issues considered was whether the proposed program would have the undesirable effect of promoting the use of the Title IV allowance bank. The Title IV allowance bank represents early reductions by sources in the Acid Rain Program. Further, source owners and operators made and implemented early reduction decisions on the assumption that banked Title IV allowances would continue to have value in the future. However, the proposed Transport Rule program could result in significantly reduced values for Title IV allowances before the start of the proposed program (i.e., January 1, 2012), thereby resulting in SO_2 emissions increases before that date.[1] These policy considerations were weighed in light of legal, policy, and implementation concerns such as those discussed below.

In a letter dated June 25, 2009, Constellation Energy Group (Constellation) outlined a number of concerns and suggestions regarding development of the rule to replace the CAIR. In a follow-up meeting, Constellation verbally elaborated on a possible SO_2 allowance allocation methodology -- mentioned in the letter -- for the CAIR replacement program. Constellation stated that an SO_2 allocation methodology could be created to reward sources that made early SO_2 emission reductions and therefore banked

[1] In fact, because the emission reduction requirements of the proposed Transport Rule program would result in nationwide SO_2 emissions well below the 8.95 million ton cap under the Acid Rain Program, the proposed program would likely result in Title IV allowances having little or no value.

Title IV allowances. This document provides EPA's summary and analysis of Constellation's suggested approach.

Constellation's suggested approach for SO_2 allowance allocation

Constellation's suggested approach assumed that the CAIR replacement program would begin in 2015 and use trading that would rely on newly created SO_2 allowances. EPA's understanding is that, under this suggested approach, new SO_2 allowances (comprising for each state that state's budget) in the new program would be allocated to sources in the state as follows.

First, after Title IV compliance determinations for 2014 are completed, EPA would allocate new SO_2 allowances (for up to the first 5 vintage years, i.e., 2015-2019) to each source covered by the CAIR replacement program.[2] The allocations would be based on the amount of pre-2015 Title IV allowances that were in the source's allowance account as of the allowance transfer deadline for 2014 (i.e., March 1, 2015) and that remained unused after EPA deducted the amount necessary for compliance for 2014. Accumulation of banked pre-2015 Title IV allowances would be "voluntary" in that the CAIR replacement program rules would not bar the use of these allowances. EPA would select an allocation ratio for new SO_2 allowances based on banked pre-2015 Title IV allowances (i.e., 1 new SO_2 allowance for a specified amount of banked Title IV allowances). New SO_2 allowances would be the only allowances that could be used for compliance in the new program. The total amount of new SO_2 allowances allocated (including both those allocated based on banked Title IV allowances and any allocated

[2] It is unclear from Constellation's oral presentation whether a source holding banked Title IV allowances would qualify for and receive new SO_2 allowances only once for the entire period, 2015-2019, or separately for each year during that period.

using any other methodology) to sources in a state for a vintage year could not exceed that state's SO_2 budget under the new program. Sources receiving new SO_2 allowances based on their banked Title IV allowances would retain those Title IV allowances, which would remain usable for compliance with the Acid Rain Program for years after 2014.[3]

Second, to the extent any new SO_2 allowances would remain in a state's SO_2 budget for a vintage year after completion of the allocations based on banked Title IV allowances, those remaining allowances would be allocated to sources in the state using some other allocation methodology. Constellation's suggested approach did not specify any methodology for allocating the remaining allowances.

Constellation stated that its suggested approach would provide an incentive to preserve Title IV allowance banks before the start of the CAIR replacement program. According to Constellation, sources would preserve the Title IV allowance banks by burning lower sulfur coal, operating existing scrubbers to maximize SO_2 removal, increasing dispatch of low-emitting units, and investing in new scrubbers. With the commencement of the new program and the imposition of more stringent emission reduction requirements than under the Acid Rain Program for 2015 and thereafter, emissions by sources covered by the new program would be limited by the amount of new SO_2 allowances that they held, and the covered sources would not be able to use their banked Title IV allowances to exceed that emissions limit.

Assumptions for analysis

Constellation assumed that the CAIR replacement program would begin on January 1, 2015. EPA's analysis evaluating Constellation's suggested approach takes

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[3] However, the Title IV allowances would likely have little or no value once the CAIR replacement program began. See n.1.

into account that the proposed Transport Rule program would impose SO_2 emission reduction requirements beginning on January 1, 2012.

Analysis

Because of the following concerns about the legality, efficacy, and implementation of Constellation's suggested approach, EPA did not include the suggested approach in the proposed Transport Rule remedy or in the detailed, alternative remedies discussed in the preamble of the proposed Transport Rule.

Legal concerns

EPA believes that there would be significant legal risk in using Constellation's suggested approach for allocating new SO_2 allowances in the proposed Transport Rule program. Specifically, EPA believes that, if this approach were adopted in a final rule, there is a significant risk that, on appeal, the Court would conclude that the approach was inconsistent with North Carolina v. EPA, 531 F.3d 896, 921-22 (D.C. Cir. 2008), where the Court held, among other things, that EPA lacked authority to modify or eliminate, through the CAIR program, the authorization to emit provided by a Title IV allowance for the purpose of harmonizing Titles I and IV.

First, Constellation's suggested approach would effectively reward continued holding, and impose a heavy burden on current use, of Title IV allowances. Holding -- rather than using -- Title IV allowances would be the best way for a source owner or operator to ensure access to free, new SO_2 allowances for up to the first 5 years of the proposed Transport Rule program (i.e., 2012-2016). In fact, in light of the reasonable possibility that the allocation of new SO_2 allowances based on banked Title IV allowances would exhaust the SO_2 budget for one or more States and prevent the

allocation of any new SO_2 allowances in those States using any other allocation methodology, holding (i.e., not using) Title IV allowances could be the only way for sources in those States to get free, new SO_2 allowances for the year involved. In summary, under the suggested approach, a source's use of Title IV allowance bank could have the result of significantly reducing, or in some cases eliminating entirely, the source's ability to obtain free, new SO_2 allowances for the first 5 years of the proposed Transport Rule program. Consequently, because Constellation's suggested approach could significantly burden the use of banked Title IV allowances, it could be seen as interfering with the use of banked Title IV allowances and therefore in effect modifying the Title IV allowances' authorizations to emit. EPA recognizes that under Constellation's suggested approach, sources would not be required to hold Title IV allowances, but instead would receive a benefit for allowances voluntarily held. However, because of the importance to sources of obtaining free, new SO_2 allowances, EPA does not believe the voluntary nature of this provision would provide a sufficient basis for distinguishing the suggested approach from SO_2 allowance allocation provisions reversed in North Carolina.

Second, there is a significant risk that the Court would view the sole purpose of Constellation's suggested approach as being the preservation of the emission reductions achieved by the Title IV program, rather than the implementation of the statutory mandate of section 110(a)(2)(D)(i)(I) of the Clean Air Act. There would not necessarily be any correlation between (1) the amount of banked Title IV allowances a source would hold after March 1, 2012, for which the source would receive free, new SO_2 allowances and (2) either that source's SO_2 emissions in 2010 and 2011 or the degree to which total

emissions in 2010 and 2011 from the state where the source is located would contribute to nonattainment or interfere with maintenance in any downwind state. This is because sources could hold banked Title IV allowances for many reasons, including reasons having little or no connection with the sources' emissions or total emissions in the sources' state. For example, a source could hold banked Title IV allowances but be located in a state whose SO_2 budget would likely be oversubscribed by other sources in the state that hold banked Title IV allowances. In order to maximize the total amount of free, new SO_2 allowances that the owner of that source would receive, the owner could easily transfer, before March 1, 2012, banked Title IV allowances from that source to one of owner's other sources in another state whose State SO_2 budget would not likely be oversubscribed. In short, a source's banked Title IV allowance holdings after March 1, 2012 would not necessarily reflect emission reductions by the holding source or even by the sources in the state where the holding source is located. It is therefore doubtful that the Court would find that the allocation of new SO_2 allowances based on banked Title IV allowances was related to, much less necessary for, implementation of Title I requirements.

EPA is also concerned that the above-described legal risk would potentially put in jeopardy the first several years of the proposed Transport Rule program in exchange for relatively limited potential environmental benefit. Constellation's suggested approach would potentially provide environmental benefit during the relatively short period remaining before the start of the proposed Transport Rule Program (i.e., mid-2010 (the time frame for issuance of the proposed rule) or mid-2011 (the projected time frame for issuance of a final rule) through the end of 2011) when sources could increase SO_2

emissions by using banked Title IV allowances. However, if adopted by EPA, the suggested approach would create significant legal risk for the proposed program for the entire period for which allocations of new SO_2 allowances would be made using that approach, i.e., for up to 5 years (2012 through 2016).

Policy and Implementation Concerns

EPA believes that the effectiveness of the Constellation proposal in discouraging use of the Title IV allowance bank is uncertain and questionable. Under the suggested approach, the owners and operators of a covered source would presumably compare the reasonably predictable savings from using higher sulfur coal or turning down or off existing controls during mid-2010 or mid-2011 through the end of 2011 to the more speculative benefit of receiving free, new SO_2 allowances for certain years during the period, 2012 through 2016.

The likelihood of receiving free, new SO_2 allowances, and the amount that might be received, would likely vary from state to state, depending on several factors. These factors would include: the size of the State SO_2 budget and so the amount of new SO_2 allowances available for allocation; the number and ownership of sources qualifying for new SO_2 allowances, based on Title IV allowance holdings, in the state; and the levels of those sources' Title IV allowance banks after March 1, 2012. For example, as discussed above, a state's SO_2 budget could be too small, as compared with the total amount of new SO_2 allowances for which sources in the state would otherwise qualify. In that case, one or more sources with banked Title IV allowances in the state could receive fewer new SO_2 allowances for a vintage year than the amounts for which those sources qualified. Source owners and operators would know the sizes of the State SO_2 budgets when a final

Transport Rule was issued (e.g., projected to be mid-2011). However, the owners and operators could only speculate about how many new SO_2 allowances might actually be received because the number and ownership of the sources eligible for new SO_2 allowances and the sizes of their Title IV allowance banks would not be known until after March 1, 2012, long after decisions on banking Title IV allowances during mid-2010 or mid-2011 through the end of 2011 would have to be implemented. With, in addition, the above-discussed legal risk that adoption of Constellation's suggested approach in a final rule could be reversed on appeal, it is likely that owners and operators would significantly discount the total value of the new SO_2 allowances that they might be awarded based on banked Title IV allowances. EPA therefore believes that it is unlikely that a significant number of owners and operators would decide to take actions during mid-2010 or mid-2011 through the end of 2011 to maintain or reduce emission levels in order to qualify for free, new SO_2 allowances.

Finally, EPA is concerned that Constellation's suggested approach would significantly disrupt the market for the new SO_2 allowances because this approach would result in delay of the allocation of all new SO_2 allowances for the first year of the proposed Transport Rule program. New SO_2 allowances could not be allocated for any vintage year (e.g., 2012) based on holdings of banked Title IV allowances until after the completion of Title IV compliance determinations for 2011, i.e., until around mid-2012. The same timing would apply to any new SO_2 allowances remaining to be allocated by another methodology, which could only be implemented after EPA knew whether, and, if so, how many, new SO_2 allowances were remaining. This would create a high level of uncertainty in the market for the new SO_2 allowance by reducing the time for compliance

planning and allowance trading for 2012 and would likely raise allowance prices and the compliance cost of the proposed Transport Rule program. EPA typically tries to allocate allowances before the first year for which the allowances can be used for compliance.