

Entergy Arkansas Inc.

Comments

On the Proposed Revisions to the Arkansas Regional Haze Planning Period 1 SIP

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To:

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I. Introduction

In July 2017, the Arkansas Department of Environmental Quality (“ADEQ”) released for public review draft revisions to certain disapproved portions of the 2008 Arkansas Regional Haze State Implementation Plan (“SIP”) (“Proposed Revisions”). The Proposed Revisions would address best available retrofit technology (“BART”) and reasonable progress controls to address emissions of nitrogen oxides (“NOx”) at electric generating units (“EGUs”) in Arkansas. If these revisions are finalized and approved by the U.S. Environmental Protection Agency (“EPA”), compliance with the Cross-State Air Pollution Rule (“CSAPR”) would satisfy EGUs’ NOx BART obligations for the Regional Haze Program, as well as NOx reasonable progress obligations for the first planning period. Additionally, EPA’s approval of the Proposed Revisions would result in the withdrawal of the source-specific NOx BART and reasonable progress requirements in the Arkansas Regional Haze Federal Implementation Plan (“Arkansas Regional Haze FIP”).¹ 81 Fed. Reg. 66,332 (Sept. 27, 2016).

Entergy Arkansas Inc. (“EAI” or “Entergy”) is an electric utility engaged primarily in the generation, purchase, transmission, distribution, and sale of electricity in portions of Arkansas. EAI provides electrical utility service to approximately 712,000 electric customers. EAI owns and operates three facilities directly impacted by the Proposed Revisions: the White Bluff Electric Power Plant, the Independence Steam Electric Station, and the Lake Catherine Plant. Entergy supports ADEQ’s Proposed Revisions, which would ensure achievement of the goals of the Regional Haze Program while avoiding duplicative and unnecessary regulatory burdens.

¹ Such withdrawal would resolve one of the key issues in ongoing litigation over the Arkansas Regional Haze FIP, which is being held in abeyance by the United States Court of Appeals for the Eighth Circuit until September 26, 2017. *See Arkansas v. EPA*, No. 16-4270 (8th Cir.).

II. Comments

Entergy supports ADEQ's determination that Arkansas' participation in the CSAPR ozone season NO_x trading program satisfies NO_x BART and any reasonable progress obligations for the state's EGUs. This determination is consistent with the Regional Haze Rule, is appropriate considering the minimal role that NO_x emissions play in visibility impairment in Arkansas' Class I areas, and would eliminate the unnecessary and duplicative requirements currently imposed by the Arkansas Regional Haze FIP.

A. Compliance With CSAPR Is Better Than Source-Specific NO_x BART Controls

The Regional Haze Rule plainly allows compliance with CSAPR to constitute NO_x BART for purposes of the Regional Haze Program. Under the Regional Haze Rule, a “[s]tate . . . subject to a [Transport Rule] trading program . . . need not require BART-eligible [EGUs] . . . to install, operate, and maintain BART” for the pollutant covered by the trading program. 70 Fed. Reg. 39,104, 39,161 (July 6, 2005). The Regional Haze Rule specifically authorizes compliance through the Clean Air Interstate Rule (“CAIR”) trading program, and EPA has determined that participation in CSAPR, the rule that replaced CAIR, also provides greater reasonable progress towards the national visibility goal than source-specific BART, including in Arkansas. 77 Fed. Reg. 33,642, 33,643 (June 7, 2012) (“CSAPR Better Than BART rule”) (“[T]he trading programs in the Transport Rule, also known as the Cross-State Air Pollution Rule (CSAPR), achieve greater reasonable progress towards the national goal of achieving natural visibility conditions in Class I areas than source-specific Best Available Retrofit Technology (BART) in those states covered by the Transport Rule.”).

In support of the CSAPR Better Than BART rule, EPA developed a 2014 “Nationwide BART” scenario and a 2014 “Transport Rule + BART elsewhere” scenario.² EPA’s analysis found that nationwide emissions were substantially lower under the “Transport Rule + BART elsewhere” scenario than the “Nationwide BART scenario.” *Id.* at 33,649. The analysis also found that average visibility improvement for the 20 percent worst days and 20 percent best days was greater under the “Transport Rule + BART elsewhere” scenario than the “Nationwide BART” scenario. *Id.* at 33,652. Based on this analysis, EPA’s CSAPR Better Than BART rule has been approved in lieu of source-specific BART. *See Nat’l Parks Conservation Ass’n v. McCarthy*, 816 F.3d 989, 995 (8th Cir. 2016) (upholding EPA’s approval of CSAPR as better than BART in Minnesota SIP).

In the five states subject to CSAPR only for ozone season NO_x emissions (Oklahoma, Arkansas, Louisiana, Mississippi and Florida), EPA’s “Transport Rule + BART elsewhere” scenario assumed that post-combustion NO_x controls would operate outside of the ozone season only when required to do so for a reason other than CSAPR requirements. In the “National BART” scenario, BART NO_x controls were assumed to operate year-round. *Id.* at 33,649. Nonetheless, for four of the five states (Arkansas, Louisiana, Mississippi and Oklahoma), EPA projected that any additional NO_x controls to comply with CSAPR would be combustion controls only, resulting in no seasonal difference in NO_x emission rates between the “Transport Rule + BART-elsewhere” scenario and the “Nationwide BART” scenario. *Id.* at 33,651. Accordingly, EPA determined that the five states subject only to the ozone season NO_x CSAPR

² The “Nationwide BART” scenario was constructed by applying the presumptive EGU BART limits for SO₂ and NO_x as specified in the BART guidelines. These BART limits were applied to all BART-eligible units. For units where BART limits had been identified that were lower than the presumptive limit, the lower emission limit was modeled. For the “Transport Rule + BART-elsewhere” scenario, EPA applied the SO₂ and NO_x reductions attributed to CSAPR to the sources within the transport region and the presumptive BART limits to all BART-eligible EGUs outside of the transport region. 77 Fed. Reg. at 33,648-49.

program could rely on EPA's determination that CSAPR makes greater reasonable progress than source-specific BART for NO_x. *Id.* at 33,652. Arkansas, as one of the states subject to the CSAPR trading program for ozone season NO_x therefore has express authority to forego source-specific BART for NO_x emissions pursuant to the Regional Haze Rule.

EPA's analysis that the ozone season CSAPR program is better than source-specific NO_x BART is bolstered by its 2016 CSAPR Update Rule, which reduced overall ozone season NO_x budgets for states subject to the CSAPR ozone season program. 81 Fed. Reg. 74,504 (Oct. 26, 2016). In Arkansas, the 2016 CSAPR Update rule reduced the ozone season NO_x budget for Arkansas from 15,110 tons in 2015 to 12,048 tons in 2017, with a further reduction to 9,210 tons of NO_x in 2018 and beyond. *Id.* at 74,508, Tbl. I.B-1. The 2017 and 2018 Arkansas ozone season NO_x emission budgets under the CSAPR Update Rule therefore achieve greater reductions in NO_x emissions than would have been achieved under the original CSAPR.

These NO_x emission reductions plainly translate to reduced visibility impacts, as the statewide profile of emissions will remain the same as under the original CSAPR Rule (*i.e.*, additional reductions in NO_x emissions are not expected to result in increased emissions of other pollutants) and the general locations of modeled emissions sources will not change. That, together with the reduction in NO_x emissions of nearly 6,000 tons, means that the results from any updated modeling – to show that the CSAPR Update Rule is “better than” BART – would be substantially similar to EPA's previous modeling. Because EPA already determined, based on that modeling, that reductions under CSAPR would achieve greater visibility improvement than reductions achieved through source-specific NO_x BART controls, reductions under the CSAPR Update Rule will exceed reductions that would be achieved through implementation of the source-specific NO_x BART controls required by the Arkansas Regional Haze FIP. *See Nat'l*

Parks Conservation Ass’n, 816 F.3d at 995 (“EPA is acting within its sphere of expertise and has a rational basis to conclude that the Transport Rule is better than BART” when comparing, in part, total Minnesota EGU emissions under BART to total Minnesota EGU emissions under CSAPR budgets).

B. Reasonable Progress Controls Are Not Necessary For The First Planning Period And Compliance With CSAPR Is More Than Sufficient

Controls for reasonable progress are not necessary for the first planning period. The Clean Air Act requires that regional haze implementation plans contain measures “*necessary* to make reasonable progress toward meeting the national goal” of no manmade visibility impairment. 42 U.S.C. § 7491(b)(2) (emphasis added). In its regulations implementing the Regional Haze Program, EPA established that, in setting a reasonable progress goal, “the State must consider the uniform rate of improvement in visibility and the emission reduction measures needed to achieve it *for the period covered by the implementation plan.*” 40 C.F.R. § 51.308(d)(1)(i)(B) (emphasis added). EPA has further explained that states “should take into account the fact that the long-term goal of no manmade impairment encompasses several planning periods. It is reasonable for [the state] to defer reductions to later planning periods in order to maintain a consistent glidepath toward the long-term goal.”³ Mandating emissions controls during the planning period that are not necessary to make reasonable progress contradicts this statutory and regulatory scheme.

As EAI explained in its comments on the proposed Arkansas Regional Haze FIP, reasonable progress controls during the first planning period clearly are not necessary for

³ U.S. EPA, Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program, at 1-4 (June 1, 2007) (“Reasonable Progress Guidance”) available at https://www3.epa.gov/ttn/naaqs/aqmguidance/collection/cp2/20070601_wehrum_reasonable_progress_goals_reghaze.pdf.

Arkansas sources.⁴ Interagency Monitoring of Protected Visual Environments (“IMPROVE”) monitoring data show that the haze index has been consistently below the glidepath in Arkansas’ Class I areas – Caney Creek and Upper Buffalo – and EAI’s analysis demonstrates that it is projected to remain so through the end of the second planning period. *See* EAI AR FIP Comments at 21-22, Figures 1 and 2. Accordingly, reasonable progress controls on Arkansas sources during the first planning period are not necessary to make reasonable progress.

Even if controls were required for reasonable progress during the first planning period, *NOx controls* on Arkansas EGUs are not necessary, as they will provide minimal visibility improvement in Arkansas’ Class I areas. As EPA’s own analysis indicates, the contribution of Arkansas point sources’ nitrate emissions to visibility impairment in Arkansas’ Class I areas is insignificant. According to EPA’s analysis, nitrate from all point sources included in the regional modeling is projected to account for only 3% of the total light extinction at the Caney Creek and Upper Buffalo Class I areas, with nitrate from Arkansas point sources being responsible for only 0.29% of the total light extinction at Caney Creek and 0.25% at Upper Buffalo. 80 Fed. Reg. 18,990. As a result, it is clear that NOx controls on Arkansas EGUs during the first planning period are not necessary to make reasonable progress towards natural visibility conditions.

Nonetheless, to the extent ADEQ determines that reductions in nitrates are needed in the first planning period, compliance with CSAPR will achieve greater reasonable progress than source-specific NOx emissions limitations and, accordingly, should be more than sufficient to

⁴ *See* Entergy Arkansas Inc. Comments on the Proposed Regional Haze and Interstate Visibility Transport Federal Implementation Plan for Arkansas, at 17-23 (Aug. 7, 2015) (Docket ID No. EPA-R06-OAR-2015-0189-0166) (“EAI AR FIP Comments”).

demonstrate reasonable progress for NO_x for the first planning period.⁵ First, emissions reductions to comply with CSAPR will occur during the *first* planning period, which comports with the requirements of the applicable Regional Haze regulations. *See* 40 C.F.R. § 51.308(d)(1)(i)(B).⁶ In contrast, most of the NO_x reductions contemplated by the Arkansas Regional Haze FIP are unlikely to occur until the second planning period, and are thus not *necessary* to make reasonable progress during the planning period at issue here.⁷ Second, the 2018 CSAPR trading program ozone season allocation for Arkansas EGUs totals 3,708 tons less than the total emissions from these sources in 2016. Proposed Revisions at 23. In comparison, if implemented, the NO_x controls required by the Arkansas Regional Haze FIP would achieve only a 3,318 ton reduction in NO_x emissions from 2016 Arkansas EGU annual emissions. *Id.* Because participation in CSAPR will achieve greater NO_x emissions reductions than EPA determined would be necessary to achieve reasonable progress (by nearly 400 tons), reliance on CSAPR clearly achieves greater progress towards visibility improvement than the source-specific emissions limitations in the Arkansas Regional Haze FIP.

⁵ Entergy supports ADEQ's reliance on the 1999 Regional Haze Rule, rather than the Regional Haze Revision Rule, in its reasonable progress analysis. As EPA made clear in the preamble of the Revision Rule, that rule applies only "to the requirements that states . . . have to meet for the *second and subsequent implementation periods*." 82 Fed. Reg. 3,078, 3,080 (Jan. 10, 2017) (emphasis added). The Revision Rule "do[es] not affect the development and review of state plans for the first implementation period." *Id.* Because the Proposed Revisions address the first planning period, ADEQ correctly performed its reasonable progress analysis pursuant to the 1999 Regional Haze Rule.

⁶ The recent revisions to the Regional Haze Rule, which attempt to divorce reasonable progress controls from the planning period at issue, are being appealed and, in any event, do not apply to the first planning period. *See supra* note 5.

⁷ EPA has proposed to extend the compliance deadline for NO_x compliance for five EGUs until January 27, 2020, well into the second planning period, to account for real-world constraints on the timing of installation of NO_x controls. 82 Fed. Reg. 32,284 (July 13, 2017).

III. Conclusion

The Proposed Revisions, if finalized, would provide compliance flexibility and reduce the significant regulatory burden on the electricity sector, while still ensuring that visibility is as good as or better than it would be if source-specific NOx emission limits were required. Forcing sources that already must comply with the ozone-season NOx trading program under CSAPR to also meet source-specific BART and reasonable progress controls is duplicative and ultimately unnecessary to achieve visibility improvements. Entergy urges ADEQ to finalize the Proposed Revisions, as the revisions will ensure that visibility is protected as required by the Regional Haze Program, while providing EGUs with compliance flexibility and avoiding unnecessary and expensive regulatory requirements.

Entergy appreciates the opportunity to comment on the Proposed Revisions. Entergy supports ADEQ's determination that CSAPR satisfies the NOx BART and reasonable progress obligations for Arkansas EGUs. As a result, Entergy supports ADEQ's proposal and urges ADEQ to finalize it as written.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "K McQueen", with a long horizontal flourish extending to the right.

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Entergy Services, Inc.