



August 14, 2017

Submitted via e-mail to: treecep@adeq.state.ar.us

Tricia Treece
Office of Air Quality
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118

**Re: Revisions to the Arkansas State Implementation Plan, Regional Haze SIP
Revision for 2008-2018 Planning Period**

Earthjustice, National Parks Conservation Association, and Sierra Club (collectively, the “Conservation Organizations”) respectfully submit these comments on the revisions to the Arkansas State Implementation Plan (“SIP”) for regional haze. The State’s proposal to dismiss nitrogen oxides as being marginal to visibility impairment, coupled with its reliance on the Cross State Air Pollution Rule (“CSAPR”), are unlawful attempts to roll back the nitrogen oxides (“NO_x”) reduction requirements in the Federal Implementation Plan. Eliminating the requirement that Independence reduce NO_x emissions to make reasonable progress is unlawful and unapprovable for several reasons.

First and foremost, the State does not even pretend to analyze the four factors which the Clean Air Act requires states to consider when determining reasonable progress. Second, the State has violated its statutory and regulatory obligation to consider whether measures are needed to make reasonable progress at out-of-state Class I areas (*i.e.*, Missouri’s Class I areas). Third, eliminating the NO_x requirements for Independence weakens the FIP and thereby violates the Clean Air Act’s anti-backsliding provision, which prohibits a SIP revision from increasing air pollution. Fourth, the State’s failure to conduct a four-factor reasonable progress analysis, based on an outright dismissal of NO_x emissions as making a “small” contribution to impairment, have no merit and no basis in the law. Finally, the State’s reliance on CSAPR to make progress towards natural visibility conditions is untethered to law or fact.

For NO_x BART, the State’s failure to evaluate or conduct a five-factor BART analysis for White Bluff, Flint Creek, and other power plants is unlawful for several reasons. While we continue to maintain that the original “Better than BART” was invalid when issued, that is now beside the point. Given the substantial changes to CSAPR, including the D.C. Circuit’s invalidation of numerous states’ emission budgets, the factual underpinning of the original “Better than BART” rule no longer exists, and therefore reliance on the “Better than BART” rule is unlawful. Reliance on CSAPR as a substitute for source-specific BART in Arkansas is unlawful for the additional reason that the Regional Haze Rule requires BART to be based upon

the “best system of continuous emission control technology available,” 40 C.F.R. § 51.308(e)(1)(ii)(A) (emphasis added), and under CSAPR, NO_x emissions from Arkansas EGUs are covered only during the ozone season—less than half the year.

I. THE STATE’S REASONABLE PROGRESS ANALYSIS IS UNLAWFUL AND IS NOT APPROVABLE.

A. The State Failed to Consider Any of the Four Statutory Factors for Reasonable Progress.

After noting that “the RHR requires states to consider four factors: (1) cost of compliance, (2) the time necessary for compliance, (3) the energy and non-air quality environmental impacts of compliance, and (4) the remaining useful life of potentially affected sources,” SIP at 8-9, the State proceeds to ignore all four of these reasonable progress factors for point sources. The Clean Air Act provides that “in determining reasonable progress there *shall* be taken into consideration the costs of compliance, the time necessary for compliance, and the energy and nonair quality environmental impacts of compliance, and the remaining useful life of any existing source subject to such requirements.” 42 U.S.C. § 7491(g)(1). The Act contains no exception to this requirement.

The draft SIP fails to consider these four statutory factors, and therefore violates the Clean Air Act. In particular, for NO_x emissions, the SIP contains no analysis of the four factors. For emissions of other pollutants, the SIP contains only a single sentence claiming that “the cost-effectiveness for control of POA and CM species from many individual small sources is difficult to quantify.” SIP at 21-22.

The SIP’s failure to consider any of the four factors for NO_x controls is particularly egregious given that the State acknowledges that EPA has already issued a final rule containing a four-factor analysis for the Independence plant, which resulted in a requirement that Independence install and operate low- NO_x burners. *See* SIP at 22. The State has produced no evidence that EPA’s four-factor analysis was incorrect in any way, because the State does not analyze any of the four factors which EPA considered.

In short, the SIP violates the Clean Air Act’s command that “in determining reasonable progress there *shall* be taken into consideration” four factors. 42 U.S.C. § 7491(g)(1) (emphasis added). The reasonable progress determination and the long-term strategy in the SIP are therefore unlawful and unapprovable.

B. The State Failed to Consider Whether Measures are Necessary to Make Reasonable Progress at Out-of-State Class I Areas in Missouri.

The State’s reasonable progress analysis unlawfully fails to consider whether measures are needed to make reasonable progress at Class I areas outside Arkansas. The State’s analysis is unlawful, regardless of whether the old or new version of the regional haze rule applies here.

The prior version of the regional haze rule required each state to make an independent determination of the measures needed to make reasonable progress at out-of-state Class I areas. *See* 79 Fed. Reg. 74,818, 74,829 (Dec. 16, 2014) (states must “consider both their own Class I areas and downwind Class I areas when they develop the technical basis underlying their four-factor analyses” for reasonable progress), finalized by 81 Fed. Reg. 296, 308 (Jan. 5, 2016) (“After carefully considering these comments, we stand by our clarified interpretation as outlined in the proposal.”). After noting the statutory goal to eliminate all human-caused visibility impairment, EPA observed that “it would be impossible to achieve this goal if upwind states did not have the same responsibility to address their visibility impairing emissions and achieve reasonable progress in downwind Class I areas as the downwind states themselves.” *Id.*

The current version of the regional haze rule clarifies, but does not alter, this obligation. In particular, the rule provides that:

If a State contains sources which are reasonably anticipated to contribute to visibility impairment in a mandatory Class I Federal area in another State for which a demonstration by the other State is required under (f)(3)(ii)(A), the State must demonstrate that there are no additional emission reduction measures for anthropogenic sources or groups of sources in the State that may reasonably be anticipated to contribute to visibility impairment in the Class I area that would be reasonable to include in its own long-term strategy. The State must provide a robust demonstration, including documenting the criteria used to determine which sources or groups of sources were evaluated and how the four factors required by paragraph (f)(2)(i) were taken into consideration in selecting the measures for inclusion in its long-term strategy.

40 C.F.R. § 51.308(d)(3)(ii)(B). As EPA noted in the 2017 revisions to the regional haze rule, states have an “independent obligation to include in their SIPs enforceable emission limits and other measures that are necessary to make reasonable progress at *all* affected Class I areas, as determined by considering the four factors.” 82 Fed. Reg. 3078, 3095 (Jan. 10, 2017) (emphasis added).

Despite the requirement to consider whether measures are needed to make reasonable progress at out-of-state Class I areas, the State’s analysis focuses exclusively on the two Class I areas within Arkansas. *See* SIP at 8-23. Yet the State acknowledges that emissions from Arkansas sources impact visibility at Class I areas in Missouri. *Id.* at 23-24 (“Missouri has two Class I areas impacted by Arkansas sources . . .”).

By failing to consider whether measures are necessary to make reasonable progress at Missouri Class I areas, the draft SIP violates the Regional Haze Rule, and is unapprovable.

C. The SIP Violates the Anti-Backsliding Requirements of the Clean Air Act.

The State’s reasonable progress determination violates the Clean Air Act’s “anti-backsliding” requirement, 42 U.S.C. § 7410(l). In the 2016 FIP, EPA determined that reasonable progress requires that Independence Units 1 and 2 meet NO_x emission limits based on the use of

low- NO_x burners and separated over-fire air controls. 81 Fed. Reg. 66,339 (Sept. 27, 2016), codified at 40 C.F.R. § 52.173(c)(24)-(26). Now, the State proposes a SIP that would replace those NO_x emission limits with nothing. Eliminating the requirement that a source meet an emission limit necessarily would result in greater air pollution and worse visibility impairment at affected Class I areas. Section 110(l) of the Clean Air Act prevents a plan revision that would weaken the existing FIP requirements in this manner.

Section 110(l) states: “[t]he Administrator shall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress . . . or any other applicable requirement of this chapter.” 42 U.S.C. § 7410(l). Section 110(l) is the Act’s “anti-backsliding” provision. *El Comité Para el Bienestar de Earlimart v. EPA*, 786 F.3d 688, 692 (9th Cir. 2015). The anti-backsliding provision prohibits plan revisions that would interfere with attainment of the National Ambient Air Quality Standards (NAAQS) or other “applicable requirements” of the Act. Section 110(l) prohibits plan revisions that would interfere with an existing requirement to make reasonable further progress, including a BART determination, as the Act’s “applicable requirement[s]” include the regional haze program’s BART requirements. *See Oklahoma v. EPA*, 723 F.3d 1201, 1204, 1207 (10th Cir. 2013).

When determining whether a plan revision interferes with NAAQS attainment, EPA has interpreted section 110(l) as preventing plan revisions that would increase overall air pollution or worsen air quality. For example, the Eleventh Circuit has upheld EPA’s section 110(l) interpretation as prohibiting plan revisions that would increase emissions or worsen air quality. *Ala. Env’tl. Council v. EPA*, 711 F.3d 1277, 1293 (11th Cir. 2013) (EPA interpreted section 110(l) to “permit approval of the SIP revision ‘unless the agency finds it will make air quality worse’” (quoting 73 Fed. Reg. 60,957, 60,960 (Oct. 15, 2008))). In *Kentucky Resources Council, Inc. v. EPA*, 467 F.3d 986 (6th Cir. 2006), EPA interpreted section 110(l) as allowing the agency to approve a plan revision that weakened some existing control measures while strengthening others, but only “[a]s long as *actual emissions in the air are not increased.*” *Id.* at 995 (quoting 70 Fed. Reg. 28,429, 28,430 (May 18, 2005)) (emphasis added). The court upheld EPA’s interpretation, which “allow[ed] the agency to approve a [state implementation plan] SIP revision *unless the agency finds it will make the air quality worse.*” *Kentucky Resources Council, Inc. v. EPA*, 467 F.3d at 995 (emphasis added). The Seventh Circuit has also upheld EPA’s interpretation. *Indiana v. EPA*, 796 F.3d 803, 812 (7th Cir. 2015) (noting that EPA allows “emissions-increasing SIP revisions” if a state “identif[ies] substitute emissions reductions such that net emissions are not increasing.”). Moreover, in a short discussion regarding a challenge to the Nevada regional haze plan, the Ninth Circuit suggested that a haze plan that “weakens or removes any pollution controls” would violate section 110(l). *WildEarth Guardians v. EPA*, 759 F.3d 1064, 1074 (9th Cir. 2014).

The existing reasonable progress determination in the FIP requires Independence Units 1 and 2 to meet emission limits based on the use of low-NO_x burners and separated over-fire air. 81 Fed. Reg. 66,339 (Sept. 27, 2016), codified at 40 C.F.R. § 52.173(c)(24)-(26). These pollution reductions must occur by April 27, 2018. 40 C.F.R. § 52.173(c)(25). EPA has

proposed to extend the compliance deadline for this requirement, but has not proposed to alter the emission limits themselves. *See* 82 Fed. Reg. 32,284 (July 13, 2017). Even if the deadline extension is finalized, the final FIP for Arkansas requires Independence Units 1 and 2 to reduce NO_x emissions. The draft SIP would eliminate the FIP requirements for Independence without imposing any other requirement that would achieve equal or greater reductions in NO_x emissions from Independence.

In sum, the draft SIP revision eliminates the FIP's requirement that Independence Units 1 and 2 reduce NO_x emissions, but the SIP does not require equal or greater emissions reductions from Independence, or any other source. This would increase air pollution and worsen air quality, in violation of the anti-backsliding provision of 42 U.S.C. § 7410(l).

D. The State's Judgements About the Amount of Visibility Improvement That is "Small" Are Arbitrary and Untethered from the Law and the Facts.

The State's reasonable progress analysis amounts to the assertion that because sulfates, not NO_x, are the primary contributor to visibility impairment in Arkansas Class I areas, there is no point in doing a 4-factor analysis for any pollutants besides sulfates. This reasoning has no basis in the law.

To begin, the State fails to consider two key provisions of the statute and regulations. First, the very definition of regional haze is visibility impairment produced from many sources, each of which makes a different size contribution to the overall problem. *E.g.*, 64 Fed. Reg. 35,714, 35,715 (July 1, 1999) ("Regional haze is visibility impairment that is produced by a multitude of sources and activities . . ."). Second, the statute requires that states eventually eliminate all human-caused haze pollution. 42 U.S.C. § 7491(a)(1). Not reduce, *eliminate*.

Considering these two facts together, the statutory goal mandates that states consider all pollutants, including those which the State describes as a "small" contribution to the problem. All human-caused impairment must be eliminated at some point, 42 U.S.C. § 7491(a)(1). The statute requires consideration of all visibility impairing emissions and provides no off ramp for states to ignore pollutants—indeed the requirements to inventory visibility impairing emissions from all sources and conduct a four-factor analysis are the bedrock of reasonable progress requirements and lend necessary structure for a state's decision making progress. Acting as if these analytical obligations do not exist does not amount to reasoned decision making. Given that regional haze program is designed to address haze resulting from emissions from numerous sources, spread across multiple states, each state must assess measures for reducing impairment at both in-state as well as out-of-state Class I areas.

In addition, it makes sense to consider potential controls on sources of all visibility-causing pollutants, because the availability and cost-effectiveness of controls may differ across categories of sources. In the absence of any investigation, the State has no way of knowing whether SO₂ controls will be more or less cost-effective than NO_x controls. Even if sulfates contribute more to visibility impairment, it is theoretically possible that when all factors are considered, NO_x controls are justified, for specific sources.

In sum, the statute requires the State to consider four factors in determining reasonable progress. 42 U.S.C. § 7491(g)(1). The statute does not allow the State to avoid a four-factor analysis for pollutants that the State deems “small” contributors to visibility impairment.

E. The State Cannot Rely on CSAPR To Avoid Reasonable Progress Controls.

The State attempts to justify the elimination of reasonable progress controls on Independence by claiming that the CSAPR allocations for NO_x will result in greater reductions in NO_x emissions than the FIP would. *See* SIP at 23. The State’s rationale has no basis in law or in fact.

To begin, there is no statutory or regulatory provision which allows states to rely on CSAPR in lieu of conducting a four-factor analysis of reasonable progress. While EPA has issued a rule that purports to allow states to rely on CSAPR in lieu of imposing source-specific controls on BART source, EPA has not issued a comparable rule for reasonable progress. *See* 40 C.F.R. § 51.308.

Moreover, the State’s comparison of NO_x reductions under CSAPR versus the FIP is flawed. The State compares CSAPR allocations to binding reductions which must occur under the FIP, based on legally enforceable emissions limits. This compares apples to oranges. As the name suggest, CSAPR allocations are not emissions limits, they are *initial* entitlements to emit certain amounts of pollution. Sources can emit more than their initial allocations, because CSAPR allows both intra- and inter-state trading of allowances. Thus, it is highly misleading to treat CSAPR allocations as binding emission limits which can be compared directly to the emission limits and reductions under the Arkansas haze FIP.

ADEQ further claims that it “anticipates that some EGUs will choose to install combustion controls to comply with CSAPR that would reduce emissions year-round, not just in the ozone season.” SIP at 23. ADEQ provides no evidence for this assumption. More importantly, ADEQ wrongly conflates installation of controls with operation of controls. Even if it were true that some EGUs will install controls to comply with CSAPR, ADEQ provides no reason to assume that EGUs will operate those controls when they are not legally required to do so. On the other hand, there is ample evidence that utilities adjust their operation of pollution controls in response to price signals; for example, a recent paper showed that utilities run SCRs less, and therefore emit more NO_x pollution, when the price of NO_x allowances is low. *See* Thomas F. McNevin, Recent Increases in Nitrogen Oxide (NO_x) Emissions from Coal-Fired Electric Generating Units Equipped with Selective Catalytic Reduction (Nov. 13, 2015), *available at* <http://www.tandfonline.com/doi/full/10.1080/10962247.2015.1112317>, attached as Exhibit A.

Here, CSAPR requires NO_x reductions in Arkansas only during the ozone season, not year-round. ADEQ has advanced no basis for assuming that Arkansas EGUs will spend additional money to run NO_x controls when they are not required to do so, *i.e.*, outside of the CSAPR ozone season. Thus, there is no record basis for assuming that CSAPR will reduce NO_x emissions in Arkansas outside of the ozone season, which is the only period during the year when CSAPR applies to NO_x emissions in Arkansas.

II. ARKANSAS'S PROPOSED RELIANCE ON CSAPR AS A BART ALTERNATIVE IS UNLAWFUL.

In its revised SIP, ADEQ proposes to rely on ozone-season NO_x reductions under the updated Cross State Air Pollution Rule (“CSAPR”) in lieu of the source-specific BART emission limits that EPA finalized as part of its 2016 regional haze FIP. Relying on a “back-of-the-envelope” calculation of “anticipate[d]” emission reductions, ADEQ asserts that EPA’s updated “2018 Arkansas ozone season NO_x emission budgets under the CSAPR update achieve a greater reduction in NO_x emissions than do implementation of NO_x BART controls included the AR RH FIP.”¹ Without any further analysis, ADEQ suggests that compliance with the 2018 CSAPR ozone season allocations for Arkansas EGUs satisfies the BART requirements of the Regional Haze Rule. Arkansas’s proposal to rely on ozone-season NO_x reductions under the CSAPR as an alternative to source-specific BART is unlawful for several reasons, as explained below.

A. ADEQ’s Proposal to Rely on CSAPR in Lieu of BART is Contrary to the Clean Air Act and the Regional Haze Rule.

Arkansas’s proposal is unlawful because it exempts sources from installing BART controls without going through the exemption process Congress prescribed. The visibility protection provisions of the Clean Air Act include a “requirement” that certain sources “install, and operate” BART controls. 42 U.S.C. § 7491(b)(2)(A). Congress specified the standard by which sources could be exempted from the BART requirements, which requires that the Administrator finalize a rule, after notice and opportunity for comments, that a major source is not “reasonably [] anticipated to cause or contribute to a significant impairment of visibility” in any Class I area. *Id.* § 7491(c)(1). Moreover, the appropriate federal land managers must concur with any exemption. *Id.* § 7491(c)(3).

Here, ADEQ has failed to demonstrate that the Arkansas EGUs subject to BART meet the standards for an exemption. Although EPA promulgated a final rule concluding that the 2011 Transport Rule satisfied BART for certain EGUs, the agency has not yet addressed whether the 2016 CSAPR update continues to provide for greater reasonable progress than BART or exempt any source from BART. Indeed, EPA has expressly recognized that it cannot rely on CSAPR in lieu of BART “unless and until” the agency finalizes its still-pending rulemaking that “CSAPR continues to provide for greater reasonable progress than BART.”² Moreover, neither EPA nor the state obtained the concurrence of any federal land managers before exempting any Arkansas source from BART. In fact, there is no indication that the state has even consulted with the federal land managers or any other state affected by Arkansas emissions, as required under the Regional Haze Rule.³ Consequently, Arkansas must require source-specific BART for each power plant subject to BART.

¹ ADEQ, July 2017 SIP revision at 8.

² 82 Fed. Reg. 32,297 (July 13, 2017) (proposed partial approval of Louisiana Regional Haze SIP).

³ 40 C.F.R. §§51.308(d) and (i)(2).

B. ADEQ’s Proposal to Rely on EPA’s 2016 CSAPR Emission Budgets is Contrary to Law and Based on an Arbitrary Analysis.

Even if Arkansas could use a BART alternative without going through the statutory exemption process, the state’s proposed reliance on EPA’s 2016 CSAPR update rule in lieu of BART is arbitrary and contrary to law for at least five reasons. First, ADEQ has failed to demonstrate that the 2016 CSAPR emission allocations will ensure greater reasonable progress toward natural visibility than BART. The Regional Haze rule allows states to use an alternative emission program in lieu of source-specific BART *only* if the alternative makes “greater reasonable progress” than would BART. 40 C.F.R. § 51.308(e)(2). To demonstrate greater reasonable progress, the state or EPA must satisfy several regulatory elements and show, based on a detailed analysis of projected emissions, that the alternative program does not cause visibility to decline in any Class I area and results in an overall improvement in visibility relative to BART at *all* affected Class I areas. *Id.* § 51.308(e)(3)(i)-(ii). As noted above, neither EPA nor Arkansas have conducted any such analysis. In fact, EPA has expressly recognized that, in light of substantial changes in CSAPR allocations and compliance deadlines, it cannot rely on CSAPR in lieu of BART “unless and until” the agency finalizes its still-pending rulemaking that “CSAPR continues to provide for greater reasonable progress than BART.” 82 Fed. Reg. 32,297 (July 13, 2017). Because Arkansas has failed to demonstrate that the 2016 CSAPR emission allocations will ensure greater visibility improvement than source-specific BART, as required by the Regional Haze Rule itself, the state cannot rely on those emissions reductions in lieu of BART for NO_x emission.

Second, even if Arkansas had provided a technical demonstration that compliance with EPA’s updated CSAPR allowances achieved greater visibility benefits than source-specific BART, the state’s reliance on emissions reductions achieved in 2018, and beyond, is unlawful. Under the Regional Haze Rule, any alternative to source-specific BART controls must include a “requirement that *all* necessary emission reductions take place during the period of the first long-term strategy for regional haze.” 40 C.F.R. § 51.308(e)(2)(iii) (emphasis added). Thus, for the purposes of Arkansas’s SIP revision, all of the necessary reductions must be achieved by July 2018—the end of the first planning period. *Id.* § 51.308(b), (f) (first implementation plan due December 2007; first “comprehensive periodic revision” due July 31, 2018, and every ten years thereafter). Arkansas’s reliance on emission reductions that will not be realized until late 2018, and beyond, is contrary to the plain language of the regulation.

Third, based on Arkansas’s revised 2016 emission baseline, Arkansas EGUs are already required to comply with EPA’s updated CSAPR allocations, and thus the state’s proposal to rely on CSAPR is unlawful. Before a state may adopt a BART alternative, the Regional Haze Rule requires a “demonstration that the emission reductions resulting from the emissions trading program or other alternative measure will be surplus to those reductions resulting from measures adopted to meet requirements of the CAA as of the baseline date of the SIP.” 40 C.F.R. § 51.308(e)(2)(iv). As discussed below, Arkansas’s proposed SIP revision is based on an arbitrary and unlawfully revised 2016 emissions baseline that distorts the actual emission reductions achieved under CSAPR. But even if it were a proper baseline, Arkansas’s proposal would violate the plain language of the Regional Haze Rule because Arkansas sources are already

required to comply with the updated CSAPR allocations, and therefore compliance with CSAPR is not “surplus” to reductions required to meet other provisions of the Clean Air Act.

Fourth, even if Arkansas’s proposal was not contrary to the plain requirements of the Regional Haze Rule, ADEQ’s focus on NO_x emission reductions is contrary to EPA’s longstanding methodology for determining whether an emission trading program achieves greater reasonable progress than BART. EPA has always maintained the proper test for determining whether CSAPR (or any other trading program) achieves greater progress than BART is based on an examination of the *aggregate visibility* improvement from BART compared to the aggregate visibility improvements from CSAPR, across all affected Class I areas in CSAPR states.

Indeed, EPA has rejected the notion that it is appropriate to compare CSAPR to BART on a state-by-state basis. Instead, the “Transport Rule seeks to achieve greater, overall reasonable progress towards improving visibility than source-specific BART.” *National Parks Conservation Ass’n v. McCarthy*, 816 F.3d 989, 995 (8th Cir. 2016). Yet, Arkansas justifies its reliance on CSAPR solely on a comparison of CSAPR to BART in only Arkansas. Contrary to EPA’s established methodology, Arkansas does not even attempt to show that the visibility benefits associated with CSAPR are better than BART when averaged across all Class I areas in CSAPR states. Instead, the state merely added, and then compared, the emission reductions within Arkansas from CSAPR and BART. Under EPA’s view of the law, which has been upheld by the Eighth Circuit, the State is using the wrong legal test.

Finally, even if it were appropriate for Arkansas to simply add up the emission reductions within the state from CSAPR or BART, the state’s emissions calculation is based on Arkansas’s adoption of an arbitrary 2016 emission baseline year that provides a distorted snapshot of emission reductions that will be realized under EPA’s FIP versus CSAPR. As a result, the calculation fails to provide an “apples-to-apples” comparison of emission reductions under CSAPR versus source-specific BART. In particular, EPA’s BART guidelines generally require the state to determine BART based on the maximum 24-hour emission rate from 2001-2003, or a “realistic depiction of anticipated annual emissions for the source,” unless the state has adopted “enforceable limitations” that will provide different operating parameters. 40 C.F.R. Part 51 App’x Y § (IV)(D)(4)(d). As the BART guidelines explain, the selection of baseline emissions is important because different operating times (e.g., baseload versus a standby generator) will yield “very different” or “significantly higher level of baseline emissions” which alter the analysis. *Id.*

Here, EPA’s FIP controls were generally based on 2001-2003 emissions baselines for each plant, except White Bluff, which was based on a 2009-2011 baseline. In contrast, Arkansas’s proposed SIP revision relies on a 2016 annual emission baseline for each plant, and compares those emissions to the emissions that EPA projected using an earlier baseline. This results in a distorted analysis because it fails to account for the fact that each of the major sources subject to NO_x BART under the EPA FIP operated for fewer hours (and in some cases, significantly fewer hours) than those sources operated during the years EPA evaluated. Using EPA data, for example, each of the White Bluff units operated for approximately 25% fewer

hours in 2016 than they did during EPA's baseline years. Flint Creek operated for approximately 33% fewer hours in 2016 than it averaged during 2001-2003. The Independence units operated for 10% fewer hours in 2016 than it did during the baseline. The reductions in operating time across these units distorts Arkansas's calculation because it makes it appear as if EPA's FIP results in fewer emission reductions than the sources would achieve if they were required to continuously operate NO_x controls. The result is a "back-of-the-envelope" calculation that does not reflect an apples-to-apples comparison, and is largely meaningless.

C. ADEQ Cannot Rely on EPA's 2012 CSAPR Better than BART Finding to Relieve Arkansas Sources of the Obligation to Install BART.

For similar reasons, Arkansas cannot rely on EPA's 2012 CSAPR Better than BART Rule to show that CSAPR makes more reasonable progress than BART. As we explained in detail in our 2011 and 2012 comments on EPA's Better than BART Rule, EPA erred in the Better than BART Rule by comparing allocations that are more stringent than now required under CSAPR, as well as by using presumptive BART limits that are less stringent than required under the statute. *See* Letter from Abigail Dillen, Earthjustice to EPA at 13-16, EPA Docket ID EPA-HQ-OAR-2011-0729-0246 (Feb. 28, 2011), Attached as Exhibit B. These assumptions tilted the scales in favor of CSAPR. It would be arbitrary and capricious for EPA to rely on such an inaccurate, faulty comparison to conclude that CSAPR will achieve greater reasonable progress than will BART. Even under EPA's skewed comparison, CSAPR achieves barely more visibility improvement than BART at the Breton and Caney Creek National Wilderness Areas. If EPA had modeled accurate BART limits and up-to-date CSAPR allocations, then EPA would likely find that CSAPR would lead to less visibility improvement than BART.

Additionally, Arkansas cannot lawfully rely on the 2012 "Better than BART" rule because the rule is based on a version of CSAPR that no longer exists. Any conclusion that EPA made in the 2012 Better than BART rule regarding whether CSAPR achieves greater reasonable progress than BART is no longer valid. Since 2012, EPA has significantly changed the allocations and the compliance deadlines for CSAPR. Of particular relevance here, after 2012, EPA increased the total ozone season CSAPR allocations for every covered EGU in Arkansas. 77 Fed. Reg. 34830, 34835 (June 12, 2012). EPA also extended the compliance deadlines by three years, such that the phase 1 emissions budgets take effect in 2015-2016 and the phase 2 emissions budgets take effect in 2017 and beyond. 79 Fed. Reg. 71663, 74853.

In addition to EPA's increased emissions budgets and extended compliance timeline, the D.C. Circuit's decision in *EME Homer City Generation v. EPA*, 795 F.3d 118, 130-32 (D.C. Cir. 2015), which invalidated the SO₂ or NO_x emission budgets for fourteen states, has fundamentally undermined the rationale underlying EPA's Better than BART rule. Specifically, the Court invalidated the 2014 SO₂ emission budgets for Alabama, Georgia, South Carolina, and Texas, and the 2014 NO_x emission budgets for Florida, Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Texas, Virginia, and West Virginia. *Id.* at 124. As explained in our initial brief in the still-pending challenge to the CSAPR Better than BART rule, the effect of *Homer City* is to pull the rug out from under EPA's BART exemption rule. EPA's finding that CSAPR would produce better visibility improvement than BART was premised on the existence of all the state-specific emission budgets adopted in the Transport

Rule. Because the D.C. Circuit has now invalidated many of those budgets, the BART exemption rule is left without the factual basis on which it relied.

In short, to the extent Arkansas seeks to rely on EPA's 2012 Better than BART determination, it is proposing to rely on a Rule that no longer exist. To rely on CSAPR as an alternative to BART, Arkansas must demonstrate that the version of CSAPR that is now in effect, and will be in effect at the time of the final rule, makes greater reasonable progress than BART. Having failed to make that demonstration, Arkansas has not met its burden to show that CSAPR will achieve greater reasonable progress than source-specific BART. *See* 40 C.F.R. § 51.308(e)(2), (3). More troubling, Arkansas's reliance on the CSAPR Better than BART rule fails to account for, or even mention, the very real possibility that CSAPR or the Better than BART rule will not exist in *any form* when the rule is finalized.

D. CSAPR Cannot Serve as a BART Alternative for Arkansas Sources Because the Rule Applies Only to Ozone-Season NO_x Emissions.

Finally, Arkansas's reliance on CSAPR as an alternative to BART is unlawful because the emissions reductions achieved by CSAPR in Arkansas are limited to five months of the year—the ozone season. Under the Regional Haze Rule, BART represents a year-round limit on emissions. *See* 40 C.F.R. § 51.301 (BART is the “best system of *continuous* emission reduction for each pollutant which is emitted by an existing stationary facility.”). Given that CSAPR does not limit *annual* NO_x emissions from Arkansas sources, but instead only applies to Arkansas sources for five months out of the year, CSAPR cannot satisfy the Regional Haze Rule's requirement that sources meet the “best system of continuous emission reduction” for NO_x. In fact, as noted in EPA's Technical Support Document for the proposed disapproval of Arkansas's 2008 SIP, the adverse impacts of Arkansas NO_x emissions on visibility “tend to be a large component of visibility impairment during the winter months”—*i.e.*, outside of the ozone season.⁴ Thus, NO_x emissions reductions that are effective only during the ozone season will not address the visibility impact due to wintertime ammonium nitrate at Breton Island or other Class I areas in neighboring states.

Even within the five-month ozone season, CSAPR allows for temporal variability such that a facility could emit at high levels within a shorter time period, creating higher than anticipated visibility impacts. Because of the high degree of variability and flexibility, power plants may exercise options that would lead to little or no emission reductions. For example, a facility in Arkansas might purchase emission credits from a source beyond the air shed of the Class I area the Arkansas source impairs. Because CSAPR requirements only pertain to the Arkansas source for a fraction of the year, that source may be even more incentivized to purchase emission credits from elsewhere than a source in a fully covered CSAPR state. Thus, without knowing which Arkansas EGUs will reduce pollutants by what amounts under CSAPR, or when they will do so, and because these emissions reductions are applicable for less than half the year, Arkansas simply cannot know the impact of CSAPR upon Breton and other affected Class I areas.

⁴ *See* Ex. C, at A-35, A-41 through A-43, EPA, Technical Support Document Appendix A, Review of Modeling and Emission Inventory Development for the Regional Implementation Plan for the State of Arkansas, EPA Docket No. EPA-R06-OAR-2008-0727-0013.

For these reasons, reliance on CSAPR to satisfy the NO_x BART requirements is unlawful, and Arkansas should include source-specific NO_x BART determinations in the final SIP.

CONCLUSION

Thank you for considering these comments. Please do not hesitate to contact us with any questions.

Sincerely,

Glen Hooks
Sierra Club, Arkansas Chapter
1308 West 2nd Street
Little Rock, AR 72201
(501) 301-8280
glen.hooks@sierraclub.org

Al Armendariz
Sierra Club
1202 San Antonio
Austin, Texas 78701
(512) 477-1729
al.armendariz@sierraclub.org

Joshua Smith
Tony Mendoza
Sierra Club
2101 Webster Street, Suite 1300
Oakland, CA 94612
(415) 977-5560
(415) 977-5589
joshua.smith@sierraclub.org
tony.mendoza@sierraclub.org

Matthew Gerhart
3639 N. Clayton St.
Denver, CO 80205
(510) 847-7721
megerhart@gmail.com

Charles McPhedran
Earthjustice
1617 JKF Blvd., Suite 1130
Philadelphia, PA 19103
(215) 717-4520
cmcphedran@earthjustice.org

Stephanie Kodish
National Parks Conservation
Association
706 Walnut Street, Suite 200
Knoxville, TN 37902
(856) 329-2424 ext. 28
skodish@npca.org

Nathan Miller
National Parks Conservation
Association
738 N. Fifth Ave., Suite 222
Tucson, AZ 85705
(773) 230-5823
nmiller@npca.org