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EARTHJUSTICE

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BY FEDERAL EXPRESS AND BY E-MAIL

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Re: Petition for Partial Reconsideration of Promulgation of Air Quality Implementation Plans; State of Texas; Regional Haze and Interstate Visibility Transport Federal Implementation Plan EPA–R06–OAR–2016–0611

On August 12, 2020, the Environmental Protection Agency ("EPA") published a final rule, "Promulgation of Air Quality Implementation Plans; State of Texas; Regional Haze and Interstate Visibility Transport Federal Implementation Plan," 85 Fed. Reg. 49,170 ("Trading Rule"). As the "primary evidence" for EPA's conclusion that the Trading Rule is a valid alternative to "best available retrofit technology" ("BART") for Texas electric generating units under 40 C.F.R. § 51.308(e)(3), *id.* at 49,189/2, the Trading Rule relies on an analytic demonstration purporting to demonstrate that, despite significant increases in total allowable emissions from Texas and Georgia, visibility improvement under the Cross-State Air Pollution Rule ("CSAPR" or "Transport Rule"), including the Trading Rule, is still equal to or greater than the improvements expected under source-specific BART. On July 6, 2020—the same day EPA signed the Trading Rule—the agency also denied a petition for administrative reconsideration of that same analytic demonstration, concluding, based on a previously undisclosed "Corrected Sensitivity Analysis," that CSAPR, together with the projected emissions resulting from the Trading Rule, remains a valid BART alternative. *See* U.S. EPA, Petition for Partial Reconsideration of Interstate Transport of Fine Particulate Matter: Revision of Federal Implementation Plan Requirements for Texas, 85 Fed. Reg. 40,286, EPA Docket EPA-HQ-OAR-2016-0598 (Exhibit A); *see also* EPA Docket EPA-HQ-OAR-2016-0598-0034_content

(spreadsheet calculation tab "2020 Petition TX+GA Adjust" posted July 6, 2020) (Exhibit B). Although the Trading Rule references and explicitly relies on that analytic demonstration, EPA did not address or include the Corrected Sensitivity Analysis as part of the Trading Rule. Because that analysis is of central relevance to the Trading Rule, Petitioners now seek partial reconsideration of that Rule.[1]

As discussed below, EPA's "corrected" analysis, which was presented for the first time on July 6, 2020, makes clear that CSAPR, in conjunction with the program described in the Trading Rule, does *not* satisfy the two-pronged test under 40 C.F.R. § 51.308(e)(3) to qualify as a BART alternative. In fact, the spreadsheet underlying the agency's corrected analysis demonstrates that visibility improvement under CSAPR, including the Trading Rule, is *not* equal to or greater than visibility improvement under source-specific BART averaged over all 140 Class I areas or the 60 eastern Class I areas covered by the Trading Rule (see Section II. below). That corrected analysis is "of central relevance to the outcome of the" Trading Rule. 42 U.S.C. § 7607(d)(7)(B). Indeed, it is the "primary evidence" for EPA's conclusion that the Trading Rule is a lawful and valid BART alternative under the Regional Haze Rule. 85 Fed. Reg. at 49,189/2. Contrary to EPA's assertions, that "corrected" analysis reveals that the Trading Rule does not achieve greater reasonable progress than source-specific BART, and is therefore is arbitrary, capricious, and contrary to the Clean Air Act and Regional Haze Rule. *Id.* § 7607(d)(9)(A). Moreover, because EPA disclosed the updated analysis for the first time on July 6, 2020, the grounds for the objections raised in this petition "arose after the period for public comment," which ended on January 13, 2020 for EPA's Supplemental Notice of Proposed Rulemaking (84 Fed. Reg. 61,850 (Nov. 14, 2019)).[2] *Id.* § 7607(d)(7)(B). Accordingly, the Administrator must "convene a proceeding for reconsideration" of portions of the rule, and "provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed." *Id.* § 7607(d)(7)(B).[3]

II. BACKGROUND

In 2011, EPA promulgated the Transport Rule (i.e., CSAPR), which required 28 states in the eastern U.S., including Texas, to curb power plant emissions of sulfur dioxide ("SO_2") and nitrogen oxides ("NO_x") that cross state lines and significantly contribute to violations of ozone and fine-particle standards in other states. 76 Fed. Reg. 48,208 (Aug. 8, 2011). Promulgated under the Clean Air Act's "good neighbor" provision, 42 U.S.C. § 7410(a)(2)(D)(I), the Transport Rule allowed sources to trade emission allowances with other sources in the same or different states, although it constrained emission shifting somewhat by setting emission ceilings or budgets for each state. *Id.* at 48,348. For each state regulated by the Transport Rule, EPA

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[1] This Petition is filed pursuant to section 307(d)(7)(B) of the Clean Air Act, 42 U.S.C. § 7607(d)(7)(B), and, to the extent it may be applicable, section 4(d) of the Administrative Procedure Act ("APA"), 5 U.S.C. § 553(e).

[2] The comment period for EPA's earlier proposed rule, 83 Fed. Reg. 43,586 (Aug. 27, 2018), closed on Oct. 26, 2018.

[3] Because judicial review of the rule is available by the filing of a petition for review within sixty days of the publication date—that is, by September 4, 2020—the grounds for the objections arose "within the time specified for judicial review." *Id.*

contemporaneously promulgated a federal implementation plan ("FIP") allocating that State's emission budget among its in-state electricity generating units ("EGUs"). *Id.* at 48,271, 48,28487.

To implement the Clean Air Act's separate visibility protection mandate and its implementing regulation, the Regional Haze Rule, the states (or EPA where a state fails to act) must submit implementation plans that ensure "reasonable progress" toward eliminating human-caused visibility impairment at national parks and wilderness area by 2064. 40 C.F.R. § 51.308(d)(1), (d)(3). A key element of both the Clean Air Act and the Regional Haze Rule is the requirement to install "best available retrofit technology" ("BART") at many of the nation's oldest sources. 42 U.S.C. § 7491(b)(2)(A); 40 C.F.R. § 51.308(e). Under the Regional Haze Rule, states were required to submit implementation plans addressing BART and ensuring reasonable progress toward the national visibility goal by December 2007. 40 C.F.R. § 51.308(b).

In 2012, EPA published a BART Exemption Rule (or "CSAPR Better-than-BART" Rule), 77 Fed. Reg. 33,643 (June 7, 2012), which exempted EGUs covered by EPA's Transport Rule trading program from meeting source-specific BART requirements under the Regional Haze Rule. EPA justified that 2012 BART Exemption Rule with computer modeling purporting to show that the Transport Rule satisfied both criteria of the agency's test for a valid BART alternative—namely, that when compared to EPA's "presumptive" BART emission limits, implementation of the Transport Rule (1) does not cause visibility to decline in any Class I area, and (2) there is an overall improvement in visibility, determined by comparing the average differences between BART and the alternative over all affected Class I areas. *See also* 40 C.F.R. § 51.308(e)(3).[4] As part of that modeling analysis, EPA also conducted a qualitative "Sensitivity Analysis," which purported to demonstrate that the Transport Rule remained a valid "better-than-BART" alternative despite increases in the emission budgets for Texas and Georgia.[5]

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[4] The Regional Haze Rule includes a specific so-called ''better-than-BART'' test that may be satisfied in one of two ways: (1) If the distribution of emissions under the alternative measure is not substantially different than under BART *and* the alternative measure results in greater emission reductions; or (2) if the distribution of emissions is significantly different and an air quality modeling study for the best and worst 20 percent of days shows an improvement in visibility from the alternative measure relative to BART. 40 C.F.R. § 51.308(e)(3).

Because CSAPR results in a substantially different distribution of emissions, EPA's 2012 CSAPR Better than-BART Rule relied on the second test. 77 Fed. Reg. 33,642. To demonstrate that an alternative is ''better-than-BART'' based on such an air quality modeling, EPA must demonstrate that two criteria (referred to below as ''prongs'') are met: first, visibility does not decline in any Class I area, and second, there is an overall improvement in visibility, determined by comparing the average differences in visibility conditions under BART and the alternative measure across all affected Class I areas. 40 C.F.R. § 51.308(e)(3)(i)-(ii); *see also* 81 Fed. Reg. at 78,954, 78,958 (Nov. 10, 2016).

[5] U.S. EPA, Memorandum, Sensitivity Analysis Accounting for Increases in Texas and Georgia Transport Rule State Emissions Budgets (May 29, 2012), EPA-HQ-OAR-2011-0729-0323 (Exhibit C).

In 2015, however, the D.C. Circuit held that EPA's sulfur dioxide and annual nitrogen oxide Transport Rule budgets for several states, including Texas, were invalid. *EME Homer City Generation v. EPA*, 795 F.3d 118, 138 (D.C. Cir. 2015) ("*Homer City II*"). As a result, EPA determined it would have to re-evaluate whether those states' power plants would still be subject to the Transport Rule, and accordingly, whether EGUs in those states could continue to rely on the BART Exemption Rule as an alternative to source-specific BART for EGUs.

In November 2016, EPA published a proposed rule captioned "Interstate Transport of Fine Particulate Matter: Revision of Federal Implementation Plan Requirements for Texas," which included two primary components. First, in response to the D.C. Circuit's decision in *Homer City II*, EPA proposed to withdraw the FIP provisions that required Texas and three other states' EGUs to participate in the Transport Rule trading programs for annual emissions of sulfur dioxide. 81 Fed. Reg. 78,954, 78,960 (Nov. 10, 2016).[6]

Second, despite the withdrawal of Texas from the annual sulfur dioxide and nitrogen oxide emission trading program and other changes in the Transport Rule, EPA proposed to find, based on its 2012 qualitative analysis, that the Transport Rule would continue to result in greater reasonable progress toward natural visibility under the Regional Haze program. 81 Fed. Reg. at 78,962. EPA's rationale for finding that Transport Rule remained "better than BART" for the remaining Transport Rule states despite the withdrawal of Texas's sulfur dioxide and nitrogen oxide emission budgets depended on the assumption that eligible Texas EGUs would have to be treated as subject to source-specific BART for sulfur dioxide emissions instead of being treated as subject to Transport Rule sulfur dioxide trading requirements. According to EPA, treating Texas EGUs as subject to BART for sulfur dioxide instead of Transport Rule sulfur dioxide requirements would have "reduced projected SO_2 emissions by between 127,300 tons—approximately 177,800 tons per year more than CSAPR—thereby improving projected air quality in [the CSAPR + BART everywhere else] scenario relative to projected air quality in both the Nationwide BART scenario and the base case scenario." *Id.* at 78,963. EPA further explained that, as a result of those source-specific BART reductions:

> ***it is a logical conclusion that the modeled visibility improvement in the CSAPR + BART elsewhere scenario would have been even larger relative to the other scenarios than what was modeled in the 2012 analytic demonstration as reflected in the CSAPR-Better-than-BART rule***. There is therefore no need to do any new modeling or more complicated sensitivity analysis. ***The lower SO2 emissions in Texas would clearly have led to more visibility improvement on the best and worst visibility days in the nearby Class I areas***. Since the "original" CSAPR + BART-elsewhere scenario passed both prongs of the better-than-BART test (compared to the Nationwide BART scenario and the base case scenario), a modified CSAPR + BART-elsewhere scenario without Texas in the CSAPR

[6] Because 2014 air quality modeling showed that Texas no longer contributed significantly to downwind nonattainment for the 1997 annual $PM_{2.5}$ NAAQS in any state, EPA proposed to find that it lacked authority under the "good neighbor" provision of the Clean Air Act, 42 U.S.C. § 7410(a)(2)(D)(i)(I), to require emission reductions from Texas and other states' EGUs to protect downwind air quality.

> region would without question also have passed both prongs of the better-than-BART test. In fact, if the modeling analysis had reflected the withdrawal of FIP provisions for Texas EGUs proposed in this action, the ***EPA expects that CSAPR implementation would have passed the better-than-BART test even more easily, again supporting the use of CSAPR implementation as a BART alternative*** for all states whose EGUs participate in the CSAPR trading programs.[7]

Petitioners did not oppose EPA's proposed removal of Texas from annual sulfur dioxide and nitrogen oxide emission limits under the Transport Rule, but opposed EPA's continued reliance on an outdated 2012 analysis to justify continued exemption of EGUs from source-specific BART in the 27 remaining Transport Rule states.[8]

On January 4, 2017, EPA published a separate notice of proposed rulemaking to satisfy Texas's long-overdue BART obligations under the Clean Air Act. 82 Fed. Reg. 912 (Jan. 4, 2017). That proposal found, among other things, that in light of the D.C. Circuit's decision invalidating Texas's Transport Rule emission budgets in *Homer City II*, the state's EGUs could not continue to rely on the Transport Rule to satisfy the BART requirements.[9] Instead, after conducting detailed, source-specific five-factor BART analyses, EPA proposed sulfur dioxide emission limits for eighteen coal-fired and seven gas-fired EGUs in Texas. 82 Fed. Reg. at 946-47 (Tables 33 and 34).

EPA concluded that based on the installation of new scrubbers, coal-fired EGUs in Texas could cost-effectively meet sulfur dioxide emission limits between 0.04 and 0.06 lb/mmBTU, *see id.* at 939-46—significantly lower than the 0.15 lb/mmBTU "presumptive" sulfur dioxide limit that EPA had relied on in concluding that the New BART Exemption Rule was "Better than BART."[10] Similarly, for units with existing scrubbers, EPA projected that it would be cost

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[7] 81 Fed. Reg. at 78,963-64 (citations omitted; emphasis added).

[8] *See Comments by Earthjustice et al.* (submitted Jan. 9, 2017) [EPA Docket No. EPA-HQ-OAR-2016-0598].

[9] According to EPA, the Transport Rule remains a valid substitute for nitrogen oxide BART because Texas EGUs are subject to ozone-season nitrogen oxide emission limits under the Transport Rule Update. 81 Fed. Reg. at 78,957-58.

[10] Petitioners continue to object to EPA's reliance on flawed and outdated "presumed" BART emission limits. As EPA's source-specific Texas BART proposal and its final reasonable progress FIP make clear, it is common for coal-fired EGUs to cost-effectively meet sulfur dioxide emission limits between 0.04 and 0.06 lb/mmBTU—significantly lower than the "presumptive" 0.15 lb/mmBTU limit that EPA had relied on in concluding that the Trading Rule, in conjunction with the New BART Exemption Rule, are still "better than BART." 82 Fed. Reg. 912 (Jan. 4, 2017) (source specific BART proposal); 81 Fed. Reg. 296 (Jan. 5, 2016) (final reasonable progress FIP). EPA's Trading Rule does not conclude otherwise. Given that EPA's own source-specific analyses, *id.*, show that significantly lower emission rates are technically and economically feasible, there is nothing in the record to support EPA's continued comparison of projected emissions under CSAPR or the Trading Rule against outdated, presumptive BART limitations. As discussed below, however, even applying EPA's obsolete and excessively high

effective for the units to update their scrubbers to meet sulfur dioxide emission limits between 0.11-0.12 lb/mmBTU. *See id.* EPA supported the proposed rule with technical and legal documentation of its analysis of each of the five factors used to determine "best available retrofit technology," as required in the statute, 42 U.S.C. § 7491(g)(2), and applicable regulations, 40 C.F.R. § 51.308(e)(1)(ii)(A). EPA projected that its Texas BART proposal would reduce harmful sulfur dioxide emissions by 194,000 tons per year, a "larger reduction than projected" under the Transport Rule.[11] EPA has not refuted the technical documentation supporting its conclusions that these units could achieve those emission limits and that such limits constitute BART for each subject unit.

On September 29, 2017, EPA issued the final New BART Exemption Rule. 82 Fed. Reg. 45,481. As proposed, EPA finalized the withdrawal of the FIP provisions requiring affected Texas EGUs to participate in Transport Rule trading programs for annual emissions of sulfur dioxide and nitrogen oxides. Also as proposed, EPA finalized its finding that the original 2012 Transport Rule "better-than-BART" analysis remained valid, and thus, there was no need to revise or revisit the Transport Rule better than BART rule. *Id.* at 45,491. That conclusion was based on EPA's assumption that the removal of Texas from the Transport Rule for sulfur dioxide would resulted in an even larger reduction in Texas sulfur dioxide emissions than modeled in the original Transport Rule scenario because Texas EGUs would be subject to source-specific sulfur dioxide BART instead of being subject to the Transport Rule. EPA projected that Texas EGUs' sulfur dioxide emissions would be at least 127,300 tons lower under BART than under the Transport Rule. As a result, EPA concluded that the removal of Texas from the Transport Rule would have "strengthened" the 2012 analytic demonstration because the only material change from the sensitivity analysis would be even greater emission reductions and accompanying visibility benefits resulting from source-specific sulfur dioxide BART for Texas sources.

In the final New BART Exemption Rule, EPA also admitted for the first time that Texas's removal from the Transport Rule could result in a potential shift of 22,300 to 53,000 tons per year of sulfur dioxide allowances to other states.[12] EPA explained that the reason for this shift in emissions was that in the original Transport Rule scenario, Texas EGUs were projected to emit at least 22,300 tons of sulfur dioxide in excess of the state budget. This would have been possible through the use of allowances purchased from EGUs in other sulfur dioxide Group 2 states: Alabama, Georgia, Kansas, Minnesota, Nebraska, and South Carolina. But because Texas is no longer part of the Transport Rule trading program, Texas EGUs would no longer purchase those allowances from the other states, and the EGUs in those other states could potentially use those allowances to increase their own sulfur dioxide emissions. Accounting for that shift in emissions, EPA estimated the overall net projected reduction in sulfur dioxide emissions by removing Texas from the Transport Rule and requiring source-specific BART would be approximately 105,000 tons per year, instead of the 127,300 tons described in the original

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presumptive BART emission limits, the agency's own analysis demonstrates that the Trading Rule and CSAPR do not result in greater reasonable progress than BART.

[11] EPA, Technical Support Document for the Texas Regional Haze BART Federal Implementation Plan at 2 (Dec. 2016) [EPA Docket No. EPA-R06-OAR-2016-0611-0004] ("BART FIP TSD").

[12] 82 Fed. Reg. at 45,493/3.

proposal. Despite the potential increase in emissions from other Transport Rule states, however, EPA concluded that any associated reduction in visibility "would be more than offset by greater visibility improvement in Class I areas near Texas" as a result of source-specific sulfur dioxide BART.[13]

Less than one month later, however, on October 17, 2017, EPA reversed course and, without providing for public comment, published a Texas BART Rule[14] that declined to adopt source-specific emission limitations for BART-eligible Texas EGUs. Although the final New BART Exemption Rule was explicitly predicated on the assumption that Texas EGUs *would be subject to* individual BART emission limits instead of the Transport Rule budgets, EPA's alternative plan discarded source-specific BART limits for Texas EGUs in favor of an entirely *new intrastate* emissions trading scheme. Contrary to its proposed and final New BART Exemption Rule, EPA's 2017 BART trading scheme for Texas did *not* include source-specific emission limits. Rather than reducing Texas EGUs' sulfur dioxide emissions to levels at least 105,000 tons lower than they would have been under CSAPR, the new intrastate trading program would have allowed Texas EGUs to emit *more* sulfur dioxide than would have been allowed under the Transport Rule budgets for Texas. Coupled with the approximately 22,300 to 53,000 tons per year of sulfur dioxide increase that results from the removal of Texas from the *inter*state trading program,[15] the 2017 Texas BART trading scheme plus the removal of Texas from CSAPR resulted in at least 149,600 tons *more* per year of sulfur dioxide than EPA estimated in the *proposed* New BART Exemption Rules—thereby raising the likelihood of decreased visibility in affected Class I areas, and a worse visibility performance overall of the Transport Rule relative to BART.[16]

In response, on November 28, 2017, Petitioners filed a petition for administrative reconsideration of the New BART Exemption Rule. That petition demonstrated it was impracticable to raise issues of central relevance to the outcome of the rule because EPA did not make information or its rationale available until after the issuance of the rule. Specifically, as shown in the 2017 Petition, EPA's New BART Exemption Rule was predicated on the assumption that Texas EGUs would be subject to source-specific BART. EPA's separate BART Rule for Texas—issued three weeks *after* the final New BART Exemption Rule—rendered that

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[13] *Id.* at 45,494/1.

[14] Promulgation of Air Quality Implementation Plans; State of Texas; Regional Haze and Interstate Visibility Transport Federal Implementation Plan, 82 Fed. Reg. 48,324 (Oct. 17, 2017) ("2017 Texas BART Rule").

[15] 82 Fed. Reg. at 45,493/3.

[16] In the proposed New BART Exemption Rule, EPA anticipated (based on outdated, presumptive BART emission limits) that source-specific BART for Texas EGUs would result in a reduction of at least 127,300 tons per year. 81 Fed Reg. at 78,963. As a result of the Texas BART trading scheme, however, that reduction has vanished. Meanwhile, the exclusion of Texas from the Transport Rule trading scheme will result in at least 22,300 excess tons of pollution from states like Alabama and Georgia. Relative to the proposed New BART Exemption Rule, the total additional and unaccounted for emission increase is at least 149,600 tons per year.

assumption invalid. As a result, Petitioners argued that EPA was required to convene a reconsideration proceeding.

On December 15, 2017, Petitioners filed a separate Petition for Reconsideration of the 2017 Texas BART Rule, arguing that (1) the EPA adopted the Rule without following notice and comment requirements; (2) EPA provided no rational basis for abandoning its January 2017 source-specific BART proposal in favor of an entirely new trading scheme; (3) the 2017 Texas BART Rule failed to satisfy the requirement that a BART alternative achieve greater reasonable progress than the installation and operation of BART; (4) EPA's finding that the trading scheme satisfied Texas' section 110(a)(2)(D)(i)(II) visibility transport plan requirements was unlawful, arbitrary, and capricious; (5) EPA cannot lawfully adopt a trading scheme because it is too late to do so; (6) the Rule includes provisions that would unlawfully suspend the intrastate trading scheme by the mere submission of a state implementation plan; (7) the Rule's treatment of retired electric generating units is arbitrary and capricious; (8) the supplemental allowance pool provision is arbitrary; and (9) EPA failed to recognize that the Rule was based on a determination of nationwide scope and effect.

In response to the Petition for Reconsideration of December 15, 2017, EPA proposed to affirm the 2017 Texas BART Rule without change, but offering a new opportunity for comment. 83 Fed. Reg. 43,587 (Aug. 27, 2018). Petitioners filed detailed comments on this rule demonstrating, among other things, that the program was not a lawful substitute for BART.[17] Among other arguments, Petitioners submitted detailed legal comments and analyses demonstrating that, in light of EPA's abandonment of source-specific BART for Texas EGUs, the agency's proposed reliance on the 2017 New BART Exemption Rule to support its Texas trading scheme was arbitrary and unlawful.[18]

On November 19, 2019, EPA issued a Supplemental Notice of Proposed Rulemaking proposing technical revisions to the 2017 Texas BART trading program. 84 Fed. Reg. 61,850. Petitioners again filed comments, demonstrating that EPA had not cured defects in the Texas SO_2 trading program.

On June 29, 2020, the same day EPA signed its final Trading Rule for Texas, EPA denied the 2017 petition for reconsideration regarding the New BART Exemption Rule by letters enclosing "The EPA's Basis for Denying the Sierra Club and the National Parks Conservation Association's Petition for Reconsideration." In the 2020 Basis for Denial (at 7), EPA concedes that it was not practicable for Petitioners to raise objections regarding the Texas intrastate trading program during the public comment period. Nonetheless, EPA concluded that Petitioners' objections are not of "central relevance" to the final rule because even when CSAPR is analyzed in combination with the Texas trading program rather than source-specific BART in Texas, EPA's conclusion that CSAPR continues to meet the two-pronged test of 40 C.F.R. § 51.308(e)(3) remains valid. *Id.* at 7-8. EPA also found that Petitioners' remaining objections regarding emission shifting, use of modeling performed for the 2012 analysis, and use of

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[17] Comments of Earthjustice et al., EPA-R06-OAR-2016-0611-0127.
[18] *Id.* at 35-40.

presumptive BART limits failed to meet either or both parts of the two-part test for mandatory reconsideration. *Id.* at 16-20.

On July 6, 2020, EPA published a notice of its action denying the November 28, 2017 petition. 85 Fed. Reg. 40,286. Also on July 6, 2020, EPA added a new document to the docket at EPA-HQ-OAR-2016-0598-0034 entitled "Cross-State Air Pollution Rule Better than BART (BART) Sensitivity Calculations" (Exhibit B), related to Section IV.B.4. of the 2020 Basis for Denial. That "Corrected Sensitivity Analysis," published for the first time in response to the November 2017 petition for reconsideration, purports to demonstrate that, despite significant increases in total allowable emissions from Texas and Georgia, visibility improvement under the Transport Rule is still equal to or greater than the improvements expected under source-specific "best available retrofit technology," and therefore the Transport Rule emission trading program remains a valid BART alternative under 40 C.F.R. § 51.308(e)(3).

The Trading Rule references and explicitly relies on the New BART Exemption Rule's analytic demonstration to support its conclusion that the Texas trading scheme is a valid BART alternative under the Regional Haze Rule, 40 C.F.R. § 51.308(e), EPA also repeatedly refers to the denial of the petition for reconsideration of the BART Exemption Rule, but failed to address or include those documents or the underlying "Corrected Sensitivity Analysis" as part of the Trading Rule docket. Instead, the agency asserts those issues are outside the scope of the rulemaking.

As discussed below, however, EPA's "corrected" analysis, which was presented for the first time on July 6, 2020, is "of central relevance to the outcome of the" Trading Rule. 42 U.S.C. § 7607(d)(7)(B). According to EPA, it is the "primary evidence" for EPA's conclusion that the Trading Rule is a lawful and valid BART alternative under the Regional Haze Rule. 85 Fed. Reg. at 49,189/2. And contrary to EPA's assertions, that "corrected" analysis reveals that the Trading Rule does *not* achieve greater reasonable progress than source-specific BART. 42 U.S.C. § 7607(d)(9)(A).

II. EPA MUST RECONSIDER THE TRADING RULE AND THE 2020 DENIAL.

Because EPA presented its "corrected" and "updated" sensitivity calculations for the first time on July 6, 2020 and because that new analysis is of central relevance to the outcome of the Trading Rule, Petitioners hereby petition for reconsideration of the Trading Rule under the Clean Air Act, 42 U.S.C. § 7607(d)(7)(B). Petitioners object to EPA's disclosure of information regarding visibility impacts under alternative regulatory scenarios for the first time after the deadline for comments on the proposal to affirm the 2017 Texas BART Rule on October 26, 2018, and after the close of comments on the Supplemental Notice of Proposed Rulemaking on January 13, 2020.[19]

A. Petitioners' objection is of "central relevance" to the validity of the Trading Rule.

[19] To the extent it may be applicable, Petitioners also seek reconsideration under section 4(d) of the Administrative Procedure Act ("APA"), 5 U.S.C. § 553(e).

As noted above, EPA relies on the New BART Exemption Rule and its underlying analytic demonstration as the "primary evidence" for the agency's conclusion that the Trading Rule is a lawful and valid BART alternative under the Regional Haze Rule. 85 Fed. Reg. at 49,189/2. Based on EPA's own revised calculations, presented for the first time on July 6, 2020, that conclusion is invalid. A BART alternative is permissible only if both of the following two criteria are met: (i) visibility does not decline in any Class I area, and (ii) there is an *overall improvement* in visibility, determined by comparing the average differences between BART and the alternative over all affected Class I areas. 40 C.F.R. § 51.308(e)(3) (emphasis added).

Here, EPA's own "corrected" analysis makes clear that CSAPR in conjunction with the Trading Rule for Texas does *not* satisfy the two-pronged test under 40 C.F.R. § 51.308(e)(3) to qualify as a BART alternative. In fact, the spreadsheet underlying the agency's corrected analysis demonstrates that visibility improvement under CSAPR, including the Trading Rule, is *not* equal to or greater than visibility improvement under source-specific BART averaged over all 140 Class I areas, or the sixty eastern Class I areas covered by CSAPR.[20]

In Section IV.B.4 of the 2020 Basis for Denial, captioned "Corrected Sensitivity Analysis Showing CSAPR Better Than BART," EPA sets out an "updated" sensitivity analysis in response to the 2017 Petition for Reconsideration. Specifically, EPA re-evaluates the two-pronged test under 40 C.F.R. § 51.308(e)(3) to determine whether CSAPR, including the Trading Rule, still qualifies as a BART alternative with the incorporation of the revised, increased Texas and Georgia SO_2 emission budgets. EPA summarizes the results of its revised sensitivity analysis in Table 3 of its Denial Letter, which is presented below:

Figure 1: Reproduced from Table 3 of EPA's Denial of Petitioner's Request for Reconsideration

Average Visibility Change	CSAPR+BART - 2014 base 20% best days	Nationwide BART - 2014 base 20% best days	CSAPR+BART – 2014 base 20% worst days	Nationwide BART – 2014 base 20% worst days
140 class I areas	-0.1	-0.1	-0.5	-0.5
60 eastern class I areas	-0.2	-0.2	-1.2	-1.0

[20] As explained in the Nov. 28, 2017 reconsideration petition (at 11-12), the New BART Exemption Rule also fails to meet the Regional Haze Rule's BART exemption requirements for the nine Class I areas EPA previously "identified as the affected areas." *See* CSAPR-BART Sensitivity Memo, EPA-HQ-OAR-2016-0598-0004 at 3; *see also* 2017 Petition for Reconsideration, EPA-HQ-OAR-2016-0598-0035 at 12-13.

EPA concludes:

> using the petitioners' own assumption for emissions in Texas under the Texas intrastate trading program, the average visibility improvement in the CSAPR scenario is still equal to or greater than the visibility improvement in the BART scenario on both the 20 percent best days and the 20 percent worst days (averaged over the 60 eastern class I areas and the 140 nationwide class I areas). Thus, the sensitivity analysis supports EPA's conclusion that CSAPR participation remains a valid BART alternative.

2020 Basis for Denial at 16.

As support for its denial of the November 28, 2017 reconsideration petition, on July 6, 2020, EPA also published an "updated" and previously undisclosed spreadsheet that contains EPA's visibility calculations, which contains the following summary:[21]

Figure 2: Summary Results from EPA's Spreadsheet Sensitivity Analysis

	CSAPR+BART - 2014 base 20% best	CSAPR+BART - 2014 base 20% worst	CSAPR+BART - 2014 base 20% best with adjustments to GA and TX; 2020 PfR	CSAPR+BART - 2014 base 20% worst with adjustments to GA and TX; 2020 PfR	Nationwide BART - 2014 base 20% best	Nationwide BART - 2014 base 20% worst
Avg visibility change for 140 Class I areas	**-0.1**	**-0.7**	**-0.1**	**-0.5**	**-0.1**	**-0.5**
Avg visibility change for 60 Class I areas	**-0.3**	**-1.6**	**-0.2**	**-1.2**	**-0.2**	**-1.0**

Petitioners did not alter EPA's calculations or methodology, but simply copied EPA's summary results and pasted it below EPA's figures, while reformatting the numbers to display two decimal places. These expanded results are below:[22]

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[21] EPA-HQ-OAR-2016-0598-0034_content. See the tab entitled, "2020 Petition TX + GA Adjust," cells N142 – S143.

[22] See the file, "EPA-HQ-OAR-2016-0598-0034_content_1." (Exhibit D). See the tab entitled, "2020 Petition TX + GA Adjust," cells N147 – S149.

Figure 3. Expanded Summary Results from EPA's Spreadsheet Sensitivity Analysis

	CSAPR+BART - 2014 base 20% best	CSAPR+BART - 2014 base 20% worst	CSAPR+BART - 2014 base 20% best with adjustments to GA and TX; 2020 PfR	CSAPR+BART - 2014 base 20% worst with adjustments to GA and TX; 2020 PfR	Nationwide BART - 2014 base 20% best	Nationwide BART - 2014 base 20% worst
Avg visibility change for 140 Class I areas	**-0.13**	**-0.68**	**-0.10**	**-0.52**	**-0.11**	**-0.47**
Avg visibility change for 60 Class I areas	**-0.29**	**-1.55**	**-0.21**	**-1.16**	**-0.24**	**-1.02**

As can be seen from the expanded results, for the 140 Class I Areas, the 0.10 deciview visibility benefit from "CSAPR+BART - 2014 base 20% best with adjustments to GA and TX" is actually *less than* the 0.11 deciview improvement from "Nationwide BART - 2014 base 20% best." Similarly, for the 60 Class I Areas, the 0.21 deciview visibility benefit from "CSAPR+BART - 2014 base 20% best with adjustments to GA and TX" is actually *less than* the 0.24 deciview improvement from "Nationwide BART - 2014 base 20% best." Thus, EPA's so-called corrected sensitivity analysis actually disproves its point: the average visibility improvement in the CSAPR scenario, including the Trading Rule, is *not* still equal to or greater than the visibility improvement in the BART scenario on the 20 percent best days (averaged over the 60 eastern class I areas and the 140 nationwide class I areas).

Retaining two decimal places in assessing EPA's visibility results is consistent with EPA's own approach in its December 2011 BART Alternative TSD.[23] For instance, on page 40 of the TSD, EPA presents its summary of the average visibility results using a similar format as above:

Figure 4. EPA's Table 3-6 from its December 2011 BART Alternative TSD.

[23] Technical Support Document for Demonstration of the Transport Rule as a BART Alternative, U.S. Environmental Protection Agency Office of Air Quality Planning and Standards Research Triangle Park, NC 27711 December 2011, Docket No. EPA-HQ-OAR-2011-0729-0114 (Exhibit E).

	Transport Rule – 2014 Base Case 20% Best Days	Transport Rule – 2014 Base Case 20% Worst Days	Nationwide BART – 2014 Base Case 20% Best Days	Nationwide BART – 2014 Base Case 20% Worst Days
Eastern Class I Areas Average (60 Areas)	**-0.3**	**-1.6**	**-0.2**	**-1.0**
All Class I Areas Average (140 Areas)	**-0.1**	**-0.7**	**-0.1**	**-0.5**

In referencing the above table, EPA notes in Footnote 30, "Before rounding to the tenths digit, 'Transport Rule +BART-elsewhere' has a visibility improvement of 0.13 deciview compared to 0.11 deciview for 'nationwide BART.'"[24] Thus, in its own TSD, EPA used visibility results rounded to two decimal places for the same purpose and in the same way as Petitioners do above. In addition, we note that EPA has commonly presented visibility data to at least two decimals. For instance, in its 2017 Texas FIP proposal, EPA presents its visibility modeling using two and often three decimals places.[25]

In sum, EPA's purportedly "corrected" sensitivity analysis—disclosed for the first time on July 6, 2020, nearly two years after the comment deadline for the Trading Rule—is of "central relevance" to the validity of the Trading Rule. As discussed, EPA relies on that analytic demonstration as the "primary evidence" for the agency's conclusion that the Trading Rule is a lawful and valid BART alternative under the Regional Haze Rule. 85 Fed. Reg. at 49,189/2. Based on EPA's own revised calculations, however, that conclusion is invalid. Because the corrected sensitivity analysis is central to the validity of the Trading Rule, reconsideration is warranted.

B. It was impracticable to raise the issues in this petition in prior comments.

It was impracticable—indeed, impossible—for Petitioners to raise the issues in this Reconsideration Petition in prior comments because EPA presented its "corrected" sensitivity calculations for the first time on July 6, 2020, when it posted the revised spreadsheet to the docket for the New BART Exemption (Exhibit B). EPA must provide a reasonable opportunity

[24] *Id.* at n.30.

[25] *See, e.g.*, 82 Fed. Reg. at 912, 921, 931-34, 940.

for public examination, evaluation and comment on its actions and any underlying, supporting information, assumptions or conclusions. More specifically, the Clean Air Act requires a "detailed explanation" of "(A) the factual data on which the proposed rule is based; (B) the methodology used in obtaining the data and in analyzing the data; and (C) major legal interpretations and policy considerations underlying the proposed rule," 42 U.S.C. § 7607(d)(3), and, after issuance of the proposed rule, that EPA affirmatively update the rulemaking docket as new information becomes available. 42 U.S.C. § 7607(d)(4)(B)(i); *see also Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 518-19 (D.C. Cir. 1983) (Clean Air Act requires a "detailed explanation of its reasoning at the 'proposed rule' stage as well [as in the final rule].").

These notice requirements are designed "(1) to ensure that agency regulations are tested via exposure to diverse public comment, (2) to ensure fairness to affected parties, and (3) to give affected parties an opportunity to develop evidence in the record to support their objections to the rule and thereby enhance the quality of judicial review." *Int'l Union Mine v. Mine Safety & Health Admin.*, 407 F.3d 1250, 1259-60 (D.C. Cir. 2005). "It is not consonant with the purpose of a rule-making proceeding to promulgate rules on the basis of inadequate data, or on data that, [to a] critical degree, is known only to the agency." *Am. Radio Relay League, Inc. v. FCC*, 524 F.3d 227, 237 (D.C. Cir. 2008) (quoting *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 393 (D.C. Cir. 1973) (alteration in original)).

EPA has taken many actions—including the Texas BART Rule, the New BART Exemption Rule, the 2020 Denial, the final Trading Rule, and others described above—that have at their heart a comparison of visibility improvement under a Nationwide BART scenario and CSAPR plus BART elsewhere scenario. Here, EPA disclosed new visibility calculations regarding such comparisons *after* issuing the Texas BART Rule, the new proposed Texas BART Rule, and the Supplemental Notice of Proposed Rulemaking—and on the same day it signed the final Trading Rule. As a result, neither the Petitioners nor the public had an opportunity to evaluate the "corrected" analysis and provide comment. This data addresses an issue of central relevance in both actions—namely whether CSAPR, including the Trading Rule, plus nationwide, presumptive BART results in an "overall improvement in visibility" compared to source-specific BART "over all affected Class I areas. 40 C.F.R. § 51.308(e)(3).[26] EPA's own

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[26] To support its conclusion that the Transport Rule resulted in greater reasonable progress than source-specific BART, EPA relied on air quality modeling for the best and worst 20 percent of days to show that CSAPR resulted in an improvement in visibility from the alternative measure relative to BART. 40 C.F.R. § 51.308(e)(3); 77 Fed. Reg. at 33,648. To demonstrate that an alternative is ''better-than-BART'' based on air quality modeling, EPA must demonstrate that both (1) visibility does not decline in any Class I area and (2) there is an overall improvement in visibility, determined by comparing the average differences in visibility conditions under BART and the alternative measure across all affected Class I areas. 40 C.F.R. § 51.308(e)(3)(i)-(ii). EPA relied on that same modeling, together with subsequent sensitivity analyses, to support its conclusion that CSAPR remains a valid BART alternative despite the withdrawal of Texas from trading program. 81 Fed. Reg. 78,954; *see also* EPA Docket No. EPA-HQ-OAR-2011-0729-0323 (sensitivity analysis). Thus, EPA's calculations comparing the average differences

updated calculations demonstrate that it does not. In fact, the "corrected" calculations, made available to the public for the first time on July 6, 2020, show the opposite—i.e., that source specific BART would result in greater visibility improvements over all 140 Class I areas, the 60 eastern Class I areas covered by CSAPR, and the nine Class I areas EPA identified in 2012 as the areas affected by Texas emissions. As a consequence, EPA's BART Exemption Rule fails to meet the unambiguous requirements of the Regional Haze Rule. EPA's continued reliance on CSAPR including the Trading Rule as an alternative to source specific BART is therefore arbitrary, capricious, and contrary to law.

EPA did not disclose its "corrected" analysis until July 6, 2020, nearly two years after taking comment on its proposal to affirm the Texas BART trading scheme. As a result, it was not possible for Petitioners or the public to evaluate that analysis and submit evidence or argument demonstrating that, based on EPA's own methodology, the Trading Rule fails the agency's two-pronged test under 40 C.F.R. § 51.308(e)(3) for a valid BART alternative. Thus, EPA must grant this petition for reconsideration of the Trading Rule, and must afford an opportunity for the public to comment on its newly presented data.

Sincerely,

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between visibility improvement under BART and CSAPR go to the heart of the agency's finding that CSAPR remains a valid BART alternative.

CERTIFICATE OF SERVICE

I hereby certify that on October 13, 2020, I filed the Petition for Partial Reconsideration of Promulgation of Air Quality Implementation Plans; State of Texas; Regional Haze and Interstate Visibility Transport Federal Implementation Plan via email and Federal Express, with:

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William Jefferson Clinton Building – Mail Code 1101A
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Further, I certify that on October 13, 2020, I served a courtesy copy of the foregoing, via email, to:

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October 13, 2020

/s/ Charles McPhedran
Charles McPhedran

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