



August 22, 2019

**Submitted via overnight mail**

Nancy Vehr  
Administrator, DEQ/AQD  
200 W. 17<sup>th</sup> St., Cheyenne, WY 82002

Re: A0008217, Proposed Modification to the Jim Bridger Power Plant regional haze permit

Dear Ms. Vehr,

On behalf of our millions of members across the country, and our thousands of members in Wyoming, the Powder River Basin Resource Council, National Parks Conservation Association, and the Sierra Club thank you for the opportunity to submit comments on the proposed revisions to the Wyoming regional haze SIP revisions and Jim Bridger Power Plant air permits. Our organizations and our members have been very active in working to improve air quality in Wyoming, and particularly in reducing haze in our region's remarkable national parks and wilderness areas, including Grand Teton National Park and Bridger Wilderness Area, as required by the Clean Air Act and associated regional haze regulations. For over a decade, we have commented on state and federal permits and implementation plans associated with regional haze rule compliance at the Jim Bridger Power Plant. Based on technical review and expert opinion, including the opinion of DEQ and EPA staff, we have long supported strong and effective controls for nitrogen oxide pollution at the plant.

These comments address proposed amendments to the State of Wyoming State Implementation Plan (SIP) for Regional Haze and the associated modifications to the air quality permit issued to PacifiCorp for its Jim Bridger coal-fired electric generating station located in Sweetwater County, WY. For the reasons discussed below, the undersigned organizations urge Wyoming not to finalize the proposed amendments, and instead require PacifiCorp to comply with currently effective emission limits under the existing SIP.

Wyoming proposes to "reassess" nitrogen oxide (NOx) emissions limitations imposed on Bridger Units 1 & 2 under the SIP necessary to achieve "reasonable progress" toward eliminating human-caused visibility impairment, as required by the regional haze rule, 40 C.F.R. §§ 51.308, 51.309. Under the current SIP, Bridger Units 1 and 2 must achieve a NOx emission rates of 0.07 lb/MMBtu (30-day rolling average), consistent with the installation and operation of Selective Catalytic Reduction or SCR technology, no later than 2022 and 2021, respectively. 40 C.F.R. § 52.2636. Under the proposed reassessment, these unit-specific NOx emissions rates would be replaced with monthly mass-based (i.e., pounds per hour and tons per year) limits for

sulfur dioxide (SO<sub>2</sub>) and NO<sub>x</sub> emissions that would apply to Bridger on a plant-wide basis (i.e., Units 1-4).

There are serious flaws with the proposed Bridger reassessment, which undermine the claimed visibility benefits of the proposal. For the reasons discussed in these comments, Wyoming's conclusions based on the CALPUFF modeling that the Bridger reassessment achieves greater visibility benefits compared to the SIP is flawed, technically deficient, and as such invalid. Therefore, DEQ must maintain the current regional haze plan and deny the permit application and continue enforcing the current permits, which require installation of selective catalytic reduction (SCR) pollution controls at units 1 and 2 of the Jim Bridger Power Plant as a necessary means to achieve reasonable progress toward DEQ's obligations to reduce haze-causing pollution in our national parks and wilderness areas.

### **1. DEQ – and EPA – have long required SCR at the Jim Bridger Power Plant**

PacifiCorp's permit application must be denied because it is an illegal about-face of long-standing agency determinations requiring SCRs at units 1 and 2 of the Jim Bridger Power Plant. DEQ first received Jim Bridger Best Available Retrofit Technology (BART)/regional haze applications in January 2007. After an agency review period that lasted two and a half years, DEQ sought public comment on its proposed decision in June 2009. After the public comment period, DEQ requested additional information from PacifiCorp. DEQ staff also met directly with the company about the NO<sub>x</sub> controls, informing PacifiCorp that LNB/OFA/SCR was DEQ's BART determination for all four units at the Jim Bridger Power Plant. PacifiCorp and DEQ then agreed to move SCR to reasonable progress/long-term strategy, allowing additional time for compliance and installation of the SCRs in a staggered way at the Jim Bridger Power Plant (see the affidavit of Chad Schlichtemier submitted to the Wyoming Environmental Quality Council for a summary of this information).<sup>1</sup> However, DEQ maintained that SCR was required, especially in considering permitting decisions at other power plants in the region, which almost uniformly were settling on a 0.07 lb/MMBtu for NO<sub>x</sub> controls as BART.

The DEQ's adopted permit requirements were subsequently approved by EPA on January 30, 2014. In making its decision, EPA determined that SCR could be required as BART but relied on the DEQ's long-term strategy requirements for SCR to approve the state plan. EPA stated:

Ultimately however, while we believe that these costs and visibility improvements could potentially justify LNB/SOFA + SCR as BART, because this is a close call and because the State has chosen to require SCR as a reasonable progress control, we believe deference to the State is appropriate in this instance. We are therefore finalizing our approval of the State's determination to require SCR at Jim Bridger Units 1–4, with an emission limit of 0.07 lb/MMBtu (30-day rolling average), as part of its long-term strategy. We are also finalizing our approval of the compliance dates of December 31, 2022, December 31, 2021, December 31, 2015, and December 31, 2016 for Units 1- 4 respectively.

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<sup>1</sup> This affidavit is available on the Environmental Quality Council's website at <https://eqc.wyo.gov/Public/ViewPublicDocument.aspx?DocumentId=5310>

What this history shows is that for a decade now SCR has been required at the Jim Bridger Power Plant and PacifiCorp has had ample time to incorporate compliance into its plans. In fact, the plan was adopted with flexibility for the timing of PacifiCorp's compliance in mind. However, instead of moving forward with compliance, PacifiCorp now is proposing to completely rollback the requirements at the 11<sup>th</sup> hour.

In the agency analysis, DEQ did not provide a justification for its change in agency position. While DEQ provided a very brief summary of previous permitting, it did not compare that analysis to its current analysis. The agency completely failed to explain the justification for backsliding on an agency decision to improve air quality that has been in place for a decade.

## **2. DEQ's Inadequate Review of the Current Proposal**

As discussed above, DEQ – and EPA's – review of the original BART permits for the Jim Bridger Power Plant took several years. Permits submitted in 2007 were finally approved by EPA seven years later in January 2014. In contrast, this permit application has been rushed through in a matter of months, with very minimal review by DEQ and an insufficient comment period afforded to the public.<sup>2</sup>

DEQ's permit analysis mainly summarized PacifiCorp's submitted information. The agency did not conduct *any* rounds of technical review for the permit application (see messages from DEQ included in the attached response to Powder River Basin Resource Council's public records request). This means DEQ did not ask for supplemental information, additional visibility modeling data and analysis, or supporting information for PacifiCorp's proposal beyond what was included in the initial permit application. We find this somewhat remarkable given the agency's long-standing support for SCR requirements at the Jim Bridger Power Plant. Instead of doing a rigorous independent analysis, DEQ appears to have taken the company's information at face value.

## **3. The Bridger Reassessment Fails to Assess or Assure Reasonable Progress**

To restore Class I areas to their natural air quality conditions, implementation plans must contain "emissions limits, schedules of compliance and other measures as may be necessary to make reasonable progress toward the national goal." 42 U.S.C. § 7491(b)(2). The statute and the rule implementing the Clean Air Act's haze provisions, the Regional Haze Rule, include several interlocking measures designed to make "reasonable progress" towards achieving the natural visibility goal. Among other things, each state must develop "goals (expressed in deciviews)<sup>3</sup> that provide for reasonable progress towards achieving natural visibility conditions," 40 C.F.R. § 40 C.F.R. § 51.308(d)(1); 42 U.S.C. § 7491(b)(2) and require emission reductions "as may be

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<sup>2</sup> Via a letter dated July 25, 2019, Powder River Basin Resource Council asked the DEQ to extend the comment period. Our request was denied.

<sup>3</sup> A deciview is a measurement of visibility impairment. A deciview is a haze index derived from calculated light extinction, such that uniform changes in haziness correspond to uniform incremental changes in perception across the entire range of conditions, from pristine to highly impaired. 40 C.F.R. § 51.301.

necessary to make reasonable progress toward the national goal” at all Class I areas affected by the state’s emissions. 42 U.S.C. § 7491(b)(2); § 51.308(d)(1)(i)(A), (d)(3).

In developing these reasonable progress goals and corresponding emission reductions, each state must consider four factors: “the costs of compliance, the time necessary for compliance, 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); *see also* 40 C.F.R. § 51.308(d)(1)(i)(A). In evaluating these four statutory factors, states must consider all air pollution sources that contribute to haze in Class I areas. *See* 40 C.F.R. § 51.308(d)(3)(iv).

For each Class I area within its borders, a state must determine the uniform rate of progress (“URP”), which is the amount of progress that, if kept constant each year, would ensure that natural visibility conditions are achieved in 2064. 40 C.F.R. § 51.308(d)(1)(i)(B). If a state selects a reasonable progress goal that achieves a slower rate of progress than the URP, the state must demonstrate, based on the four reasonable progress factors, “that the rate of progress for the implementation plan to attain natural conditions by 2064 is not reasonable; and that the progress goal adopted by the State is reasonable.” *Id.* § 51.308(d)(1)(ii).

After considering the four reasonable progress factors, each haze plan must include emission limits, schedules of compliance, and “all measures necessary” to make reasonable progress towards achieving natural visibility conditions. 40 C.F.R. § 51.308(d)(3)(ii). EPA “commonly refer[s] to the evaluation of these four statutory factors as the “four-factor analysis” or “reasonable progress analysis.” 81 Fed. Reg. 66,332, 66,360 (Sept. 27, 2016).

The reasonable progress analysis is a critical component of a haze plan. Given that regional haze pollution is, by definition, caused by numerous sources the only way to achieve the statutory goal of eliminating haze pollution caused by humans, 42 U.S.C. § 7491(a)(1), is by ensuring that each haze plan contains a proper reasonable progress analysis and measures necessary to reduce haze pollution.

Reasonableness under § 51.308(d)(1)(ii) is to be demonstrated based on the analysis required under 40 CFR 51.308(f)(2)(i) including documentation on how the four reasonable progress were considered, amongst other things. As EPA stated,

The purpose of this demonstration is to show that a state conducted its analysis in a reasonable manner and that there are no additional measures that would be reasonable to implement in a particular planning period. A state may refer to its own experience, past EPA actions, the preamble to this rule as proposed and this final rule preamble, and existing guidance documents for direction on what constitutes a reasoned determination.

82 Fed. Reg. 3078, 3099 (Jan 10, 2017). The requirement is particularly salient here as the reasonable progress goals for the Class I areas at issue provide for a slower rate of visibility improvement than the uniform rate of progress. Therefore, the state is compelled to make a “robust demonstration” that there are no additional emission reduction measures for human

caused pollution sources or groups of sources that should now be included in the state's long-term strategy in light of the Bridger reassessment. 40 CFR 51.308(f)(3)(ii)(A).

The Bridger emission reductions required in Wyoming's January 2014 regional haze plan were relied upon by Wyoming, EPA and other states to demonstrate and make reasonable progress at affected Class I areas, most of which extend far beyond attaining natural visibility conditions at the uniformed rate of progress. The State of Wyoming now proposes to allow increased emission at Bridger units 1 and 2, far different that the reductions required in the January 2014 regional haze plan.<sup>4</sup> The increased emissions from Bridger effectively withdraws reductions from the pool of emissions EPA approved in the Wyoming haze plan as necessary to make reasonable progress. Moreover, by separate action, the State is pulling long relied upon Bridger emissions from the 309 program. While a state may modify emission reduction requirements such modifications come with consequences of affecting several Clean Air Act programs, here both the 308 and 309 regional haze programs. Such consequences have not been assessed. Nothing close to a "robust demonstration" has been made and clearly no additional measures have been adopted to compensate for the gap between the proposed increase in Bridger emissions and those relied upon to demonstrate reasonable progress in 2014. There has been no analysis to identify additional measures to take in light of this significant proposed emissions change. Should Wyoming and/or EPA move forwards with the proposed Bridger permit, the underlying regional haze plan including the reasonable progress analysis and visibility goals for affected Class I areas so too must be reassessed and compliance with the Clean Air Act and Regional Haze Rule be demonstrated.

**4. The draft permit does not contain enforceable capacity or coal consumption limits.**

Although the proposed plant-wide limits are intended to reduce the capacity factor at which Bridger Units 1-4 could operate, the draft permit contains no enforceable limits on the Bridger capacity factor or coal consumption that are necessary to make such limits practically enforceable. As such, the proposed emission reduction benefits claimed in the RP reassessment are artificial, e.g., reduction in Bridger plant capacity and coal consumption without corresponding enforceable limits on capacity and/or coal consumption. The proposed RP reassessment is simply a paper study that will not produce the implied visibility benefits in the real-world. The proposed RP reassessment would eliminate future use of selective catalytic reduction (SCR) for NOx emissions control at Bridger Units 1 and 2, and as such would serve to eliminate the visibility benefits that would otherwise occur from these emission controls. As explained below, the RP reassessment provides no real and actual reduction in Bridger SO<sub>2</sub> emissions that would offset the increased Bridger Units 1 and 2 NOx emissions in real-world terms. The draft permit must be revised to include enforceable limits on both unit-specific capacity as well as coal consumption.

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<sup>4</sup> See paragraph 4 below.

**5. The Bridger Reassessment allows significant increases of NOx and SO2 emissions.**

In real world terms, the Bridger reassessment proposal allows a significant and substantial increase in emissions at Bridger compared to both the emissions under the SIP and current (2018) levels. This proposed emissions increase would effectively roll back historical reductions of visibility precursor emissions in Wyoming. The proposed monthly NOx and SO<sub>2</sub> limits in the RP reassessment alternative equate to an overall capacity factor at Bridger of 76.3%. However, Bridger already operates at an annual capacity factor of around 55% based on 2018 EPA Air Markets Program Data (AMPD). Also, based on the same EPA AMPD data, Bridger's 2018 annual emissions were 8,156 tpy for SO<sub>2</sub> and 6,667 tpy for NOx. Under the RP reassessment proposal, the proposal limits approved in the revised Bridger permit would actually allow for an increase in current (2018) emission at Bridger. The SO<sub>2</sub> emissions at the proposed 2,100 lb/hr emissions limit would equate to 9,198 ton/yr (more than 1,000 tpy above current 2018 emissions) and the allowable NOx emissions under the RP reassessment proposal would equate to 9,775 tpy, or an increase of more than 3,000 tpy above the 2018 Bridger NOx emission levels. The RP reassessment not only rolls back the NOx emissions controls contained in the current Wyoming regional haze SIP, but would actually allow NOx emissions at Bridger to increase by almost 50% above current (2018) levels. Setting emissions limits above the current 2018 emission levels at Bridger does not protect or improve visibility, as is claimed under the RP reassessment proposal.

**6. The CALPUFF and SIP modeling are irreconcilable.**

The CALPUFF visibility modeling for the Bridger reassessment is irreconcilable with the SIP modeling, invalidating any comparison between the two. Specifically, PacifiCorp modeled the visibility impacts of the Bridger reassessment using monthly emission limits, which contradicted standard modeling practice and applicable visibility modeling guidance provided by the Federal Land Managers' Workgroup (FLAG). FLAG requires use of the maximum allowable 24-hour emissions when assessing visibility impacts. FLAG is the standard modeling practice utilized nationwide. Consistent with FLAG, the evaluation of most Bridger emission control scenarios (baseline, reasonable progress scenario, and the SNCR scenario) were each based on the maximum 24-hour emission rate. However, the Bridger reassessment scenario was modeled using monthly average emissions and not the maximum 24-hour emissions, which necessarily are greater. As such, the Bridger reassessment failed to provide for a fair and equitable comparison of visibility impacts among the different emission control alternatives. Each CALPUFF modeling scenario needs reflect Bridger NOx and SO<sub>2</sub> emission inputs that represent the maximum allowable 24-hour emissions, so that the CALPUFF modeling is consistent both with FLAG guidance and standard modeling practice for visibility assessments and with the modeling performed for the SIP. The CALPUFF modeling results are biased such that the RP reassessment scenario was unfairly favored in the modeling analysis. The modeling for the Bridger reassessment scenario must be revised using maximum allowable 24-hour emission inputs for NOx and SO<sub>2</sub>.

## **7. DEQ illegally takes credit for SO2 reductions under BART and 309.**

By separate letter of this same date, the Conservation Organizations note that DEQ is illegally taking credit for SO2 reductions at the Jim Bridger plant under both the reasonable progress/long term strategy program and the Section 309 Western SO2 Backstop Trading Program. Wyoming may not rely on SO2 emission reductions for this Bridger RP Reassessment because it mandated to credit any such SO2 emission reductions from non-BART sources in the Western SO2 Backstop Trading Program (309 Program).

## **8. Wintertime visits may not be devalued.**

The PacifiCorp CALPUFF modeling report makes the claim that nitrate contribution to visibility impairment is larger in winter when visitation to Class I areas is less. It is totally inappropriate to devalue the visitor experience based on time of year, just because an individual Class I area may experience fewer wintertime visitors. Wintertime visitors are just as entitled as others to an opportunity to experience the natural wonders of the Class I area, which includes an experience free of haze and other man-made impairments to visibility. In particular, visitors may be at a given Class I areas specifically during the winter months in part to experience the relative solitude of their wilderness experience made possible by fewer visitors. Devaluing wintertime visitation as has been done by PacifiCorp is inappropriate and simply represents bad public policy. There is simply no legal basis for this approach. Indeed, it is counter to the principles the visibility protection rules are designed to protect. Wyoming DEQ should not consider such claims in its evaluation of the RP reassessment proposal.

## **9. The RP Reassessment is a Relaxation of the Existing SIP, Which Cannot Be Allowed Without A Demonstration that the Increased Emissions Would Not Adversely Impact the National Ambient Air Quality Standards (NAAQS).**

DEQ's RP reassessment will clearly allow increased emissions of NOx above what is allowed to occur under the existing Wyoming SIP regional haze measures. PacifiCorp admits as such in its February 2019 permit application.<sup>5</sup> The existing Wyoming SIP requires that Jim Bridger Units 1 and 2 meet a 0.07 lb/MMBtu NOx limit reflective of installation of selective catalytic reduction (SCR) by December 31, 2021 for Unit 2 and by December 31, 2022 for Unit 1.<sup>6</sup> Such limits are and have been part of the Wyoming SIP since 2014.<sup>7</sup> Under the terms of the proposed RP reassessment, Units 1 and 2 would no longer be subject to the 0.07 lb/MMBtu NOx limits. While WDEQ has proposed monthly block-average pound per hour limits on NOx for Units 1-4 and a plantwide limit on SO<sub>2</sub>+NOx, neither of these limits would require NOx emissions from the Jim Bridger plant be as low as what the existing SIP would allow.

Specifically, the allowable NOx emissions under the existing SIP, assuming a NOx limit of 0.07 lb/MMBtu and hourly heat input capacities of each unit of 6,000 MMBtu/hour<sup>8</sup>, are

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<sup>5</sup> See February 5, 2019 PacifiCorp Permit Application at pdf page 8, under 3<sup>rd</sup> column of Table 2 (noting the "Higher NOx emissions" of its proposed Reasonable Progress Reassessment with Operational Limits").

<sup>6</sup> As discussed in 40 C.F.R. 52.2636, Table 1.

<sup>7</sup> See 79 Fed. Reg. 5032-5222 (Jan. 30, 2014); see also 40 C.F.R. §§52.2620(e) and 52.2636(c), Table 1.

<sup>8</sup> As assumed by EPA in its proposed regional haze rulemaking, see 78 Fed. Reg. 34,738 at 34,753 (June 10, 2013).

7,358 tons per year for Units 1-4 in total. The proposed lb/hour NOx limits would allow an increase above this level of NOx emissions required under the existing SIP. As discussed below, the average monthly block pound per hour limits would apply to each unit's emissions under the terms of the proposed permit and thus would allow NOx emissions as high as 39,117 tons per year.<sup>9</sup> Even if DEQ claims that the average monthly block pound per hour NOx limits were intended to apply to all four Jim Bridger units combined and modifies the draft permit conditions accordingly, those limits would allow NOx to increase to 9,779 tpy.<sup>10</sup> The proposed 12-month total SO<sub>2</sub>+NOx emissions limit of 17,500 tpy would not likely limit NOx to much less than 9,779 tons per year, because the plant currently (as of 2018) emits about 8,000 tpy of SO<sub>2</sub><sup>11</sup>, leaving 9,500 tpy for NOx under the cap. Further, PacifiCorp has indicated that it will greatly reduce SO<sub>2</sub> emissions at the Jim Bridger plant by restricting scrubber bypass and improving scrubber operation.<sup>12</sup> Thus, this SIP relaxation will allow NOx emissions to increase above the existing SIP limits by at least 2,421 tpy and will also allow NOx emissions to increase on a short term average basis above the existing SIP requirements due to Units 1 and 2 not being required to install SCR systems that would reduce NOx emissions by about 70%.<sup>13</sup>

The proposed change to the Wyoming SIP violates the requirements of Clean Air Act Section 110(l), 42 U.S.C. § 7410(l). This requirement of the federal Clean Air Act provides in pertinent part that:

The Administrator shall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 7501 of this title), or any other applicable requirement of this chapter.

The increased NOx emissions that would be allowed from the Jim Bridger plant above the level of the EPA-approved SIP could impact several National Ambient Air Quality Standards (NAAQS) including the 1-hour average and the annual NO<sub>2</sub> NAAQS, the 8-hour average ozone NAAQS, the 24-hour average and annual PM<sub>10</sub> NAAQS, and the 24-hour average and annual PM<sub>2.5</sub> NAAQS.

According to the Seventh Circuit:

EPA has interpreted Section 110(l) to allow states to demonstrate that a SIP revision will not “interfere” with attainment in one of two ways: a state may either

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<sup>9</sup> This was calculated by multiplying the proposed average monthly block lb/hr limits by the potential operating hours for each month, summing all 12 months of allowable NOx emissions, and then multiplying by 4 units because the proposed permit terms indicate that such limits apply to each unit.

<sup>10</sup> This was calculated by multiplying the proposed average monthly block lb/hr limits, assuming the limits would apply to Jim Bridger Units 1-4 combined, by the potential operating hours for each month, and then summing all 12 months of allowable NOx emissions.

<sup>11</sup> Based on emissions data submitted to EPA's Air Markets Program Database.

<sup>12</sup> February 5, 2019 PacifiCorp Permit Application, Attachment 1 Jim Bridger Power Plant Reasonable Progress Reassessment Cost and Emissions Analysis at 18-19

<sup>13</sup> See 78 Fed. Reg. 34,754 (June 10, 2013). The SCR removal efficiency to reduce NOx to the 0.07 lb/MMBtu limit of the existing SIP from the 0.26 lb/MMBtu NOx rate achieved with low NOx burners and separated overfire air (controls that have already been installed at Jim Bridger Units 1 and 2) is 73%.

submit an air quality analysis, or a state may identify “substitute equivalent emissions reductions to compensate for any change to a SIP approved program, as long as actual emissions in the air are not increased.” 78 Fed. Reg. 68,378, 68,382 (Nov. 14, 2013). The second option allows a state seeking approval of a SIP revision to provide EPA with (1) an estimate of how much excess pollution will result from the revision and (2) a list of contemporaneous pollution-control measures—such as factory closures—along with estimates of the extent to which each of these measures is expected to decrease pollution. If the pollution reductions listed in (2) are equal to or greater than the pollution increase described in (1), EPA will conclude that the SIP revision does not “interfere with” NAAQS attainment. *See id.* (defining “equivalent emissions reductions”). The purpose behind this interpretation, according to EPA, is to allow states to pick and choose the manner in which they seek to achieve attainment, as long as they can show that net emissions are decreasing. In order to be considered in this calculus, however, substitute emissions reductions must be permanent, enforceable, and quantifiable. *Id.* They must also be “contemporaneous” with the proposed SIP revision. *Id.* Finally, they must be “surplus,” meaning that they have not been “otherwise relied on to meet air quality attainment requirements in air quality programs related to” the SIP. EPA, Roadmap for Incorporating Energy Efficiency/Renewable Energy Policies and Programs into State and Tribal Implementation Plans (2012), available at <http://www.epa.gov/airquality/eere/pdfs/appendixC.pdf>. In other words, a given emissions reduction can only be credited once; that ensures that the same factory closure, for example, cannot be used over and over again by the state as a compensatory offset for multiple emissions increases.

*Indiana v. E.P.A.*, 796 F.3d 803, 806 (7th Cir. 2015). *See also Kentucky Res. Council, Inc. v. E.P.A.*, 467 F.3d 986, 995 (6th Cir. 2006) (EPA interprets Section 110(l) such that “there is no interference when a control measure is removed from the regulatory portion of the SIP before an attainment demonstration on the 8-hour [ozone] NAAQS so long as there is also a way to accomplish new and contemporaneous emissions reductions to offset the loss of the control measure.”).

In this case, Wyoming has not demonstrated that the proposed SIP relaxation will provide the same level of NO<sub>x</sub> emission reductions as the provision being replaced. In fact, as demonstrated above, the proposed SIP revision will clearly allow NO<sub>x</sub> emissions to increase. Without a demonstration that contemporaneous control measures will offset the emission increases that will result from the revision, the proposed SIP relaxation cannot be approved under Section 110(l).

Ozone pollution is a big problem in western Wyoming, as well as in northeastern Utah. The Upper Green River Basin, which includes parts of Sweetwater and Sublette Counties, is currently designated as a marginal nonattainment area for the 2008 8-hour ozone NAAQS of 0.075 parts per million (ppm).<sup>14</sup> Although the counties are currently

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<sup>14</sup> 40 CFR 81.351.

designated as in attainment of the 2015 8-hour ozone NAAQS of 0.070 ppm,<sup>15</sup> as of this summer, the area is violating the 2015 8-hour ozone NAAQS of 0.070 ppm.<sup>16</sup> Indeed, through June of this year alone, there were ten days of violations of the 8-hour average 0.070 ppm ozone NAAQS in the Upper Green River Basin area.<sup>17</sup> The Jim Bridger power plant appears to be about 40 miles (~64 kilometers) from the border of the nonattainment area.

Not only is the Upper Green River Basin in Wyoming experiencing violations of the 2015 8-hour average ozone NAAQS, but the Uintah Basin in Utah is also experiencing problems with the 2015 8-hour ozone NAAQS. Parts of the Uintah Basin were designated as a marginal ozone nonattainment area by EPA for the 2015 ozone NAAQS.<sup>18</sup> In 2019 so far, one monitor in Uintah County has experienced 15 exceedances of the 0.070 ppm ozone NAAQS, with values as high as 0.11 ppm.<sup>19</sup> The Jim Bridger plant appears to be roughly 70-80 miles from the Uintah Basin ozone nonattainment area. DEQ must evaluate how the 2,500 tons per year of NOx that will be allowed with this SIP relaxation will impact ozone levels in these areas and ensure that it won't interfere with attainment of the NAAQS, especially given that ozone concentrations are worsening. It must be noted that WDEQ has an obligation that its SIP protect air quality in its state as well as in neighboring states, pursuant to 42 U.S.C. § 7410(a)(2)(D)(i)(I) (Section 110(a)(2)(D)(i)(I) of the Clean Air Act).

DEQ acknowledges the requirements of Section 110(l) in its proposed SIP revision and states that EPA can only approve a SIP revision that removes or modifies control measures in the SIP “only after the State has demonstrated that such removal or modification will not interfere (‘noninterference’) with attainment of the National Ambient Air Quality Standards...or any other applicable requirement of the [Clean Air Act].”<sup>20</sup> DEQ goes on to state that because all areas in Wyoming are attaining the NAAQS for NOx and PM, this proposed SIP revision will not interfere with attainment or maintenance of the NAAQS. That is an inadequate “demonstration” for this SIP relaxation. Moreover, DEQ has completely ignored the ozone NAAQS, which is being exceeded in the region around the Jim Bridger power plant (in Wyoming and in northern Utah) and for which ozone concentrations are worsening in 2019. WDEQ cannot adopt this SIP revision without properly addressing the requirements of Section 110(l) of the Clean Air Act, particularly for the 8-hour average ozone NAAQS but also for the NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> NAAQS.

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<sup>15</sup> *Id.*

<sup>16</sup> See DEQ Confirms Ozone Pollution Violated Federal Standards, Casper Star Tribune, June 23, 2019, available at [https://trib.com/news/state-and-regional/deq-confirms-ozone-pollution-violated-federal-standards/article\\_2ce005f2-d1d9-5f53-8566-ead1eb2b8488.html](https://trib.com/news/state-and-regional/deq-confirms-ozone-pollution-violated-federal-standards/article_2ce005f2-d1d9-5f53-8566-ead1eb2b8488.html).

<sup>17</sup> *Id.*

<sup>18</sup> See <https://deq.utah.gov/communication/news/ozone-marginal-nonattainment-areas-utah>.

<sup>19</sup> According to monitor values data on EPA's AirData website at <https://www.epa.gov/outdoor-air-quality-data>.

<sup>20</sup> Proposed Revisions to Wyoming's Regional Haze State Implementation Plan at pdf page 14.

**10. The Proposed New Source Review Permit Unlawfully Allows the Jim Bridger Plant to Modify Its Operations and Exceed the Plantwide Applicability Limits**

According to the public notice for the new source review permit that has been concurrently proposed for public comment with the regional haze reassessment, WDEQ is proposing to “approve a request by PacifiCorp to modify operations at the Jim Bridger Plant...”<sup>21</sup> Specifically, DEQ is proposing to add monthly block pound per hour limits for NOx and for SO2 Jim Bridger Units 1-4, as well as a 12-month rolling cap on SO2 plus NOx emissions on a plantwide combined basis, to limit operations at the Jim Bridger Plant.

Specifically, the new emission limits DEQ is proposing to incorporate into a new source review permit for the Jim Bridger Plant are as follows:

**Average Monthly-Block Pound Per Hour NOx and SO2 Limits Proposed for Jim Bridger Units 1-4<sup>22</sup>**

	<b>NOx</b>	<b>SO2</b>
January	2,050	2,100
February	2,050	2,100
March	2,050	2,100
April	2,050	2,100
May	2,200	2,100
June	2,500	2,100
July	2,500	2,100
August	2,500	2,100
September	2,500	2,100
October	2,300	2,100
November	2,030	2,100
December	2,050	2,100

DEQ has also proposed a “plantwide combined limit” for NOx plus SO2 of 17,500 tpy on a 12-month rolling basis.<sup>23</sup> This limit clearly applies on a plantwide basis for the sum total of SO2 plus NOx emissions for all four Jim Bridger units per 12-month period.

However, according to the terms of the draft permit, the monthly pound per hour limits apply to each Jim Bridger unit. Specifically, Condition 7, unlike Condition 9, does not refer to these limits as “plantwide” limits. Instead, the draft permit states “Units 1-4 shall be limited to the following average monthly-block pound per hour NOx and SO2 emission limits. Compliance with the limits shall be determined using a continuous emissions monitoring system...”<sup>24</sup> Further, the compliance equipment in Condition 8 of the draft permit does not in any way indicate that the 1-hour average emission rate or that the monthly average emission rate for each Jim Bridger unit are somehow combined to assess compliance with the monthly block

<sup>21</sup> July 20, 2019 WDEQ Public Notice and Public Hearing, available at <https://content.govdelivery.com/accounts/WYDEQ/bulletins/2523a8a>.

<sup>22</sup> Permit Application Analysis at 30 (Condition 7)

<sup>23</sup> *Id.* at 31 (Condition 9).

<sup>24</sup> *Id.* at 30 (Condition 7)

pound per hour limits in Condition 7 of the draft permit. Indeed, the formula in Condition 8 discusses the 1-hour average emission rate (and not the 1-hour “plantwide average” emission rate) and the number of “unit operating hours monitored during a boiler operating day”<sup>25</sup> (which clearly indicates that the monthly block average rate is determined on a unit by unit basis). It also does not appear that the formula accounts for emissions over a month, and instead accounts for average hourly emissions at one unit over one boiler operating day.

Given that the draft permit does not limit hours of operation, these new limits actually allow for an emission increase above the levels of the existing plantwide applicability limits (PALs) for SO<sub>2</sub> and NO<sub>x</sub> that were established under the prevention of significant deterioration (PSD) permitting program. Plantwide applicability limits are an alternative applicability approach to the PSD permitting program for reviewing whether physical changes or changes in the method of operation would be considered a major modification which would be subject to best available control technology (BACT) and other PSD permitting requirements. DEQ has established 10-year PALs for the Jim Bridger plant, which it renewed for another 10 years in 2017. The current NO<sub>x</sub> and SO<sub>2</sub> PALs for the Jim Bridger plant are 12,427 tons per year and 13,980 tpy, respectively.<sup>26</sup> The emission limits intended to limit operations at the Jim Bridger plant actually allow for emission increases above the PALs. Specifically, the average monthly block pound per hour limits applicable under the terms of the draft permit to each Jim Bridger permit would allow each unit to emit 9,779 tpy of NO<sub>x</sub>, or 39,118 tpy of NO<sub>x</sub> on a plantwide basis, and 10,268 tpy of SO<sub>2</sub> or 41,073 tpy on a plantwide basis.<sup>27</sup> These limits greatly exceed the NO<sub>x</sub> and SO<sub>2</sub> PALs. The currently proposed “plantwide combined limit” for NO<sub>x</sub> plus SO<sub>2</sub> of 17,500 tpy on a 12-month rolling basis<sup>28</sup> would limit annual plantwide emissions below the levels allowed by the average monthly block lb/hr limits. However, the plantwide combined limit for NO<sub>x</sub> plus SO<sub>2</sub> still could allow for emissions of either NO<sub>x</sub> or SO<sub>2</sub> to exceed the levels of the PALs. The proposed limit on SO<sub>2</sub> plus NO<sub>x</sub> cannot be considered to limit any one pollutant to a level any less than 17,500 tpy.<sup>29</sup> Plus, if the new proposed limits for the changed operations being permitted in this new source review permit would allow NO<sub>x</sub> to increase just 1 ton per year above the NO<sub>x</sub> PAL of 12,427 tpy, then it must be permitted as a “PAL Major Modification.”<sup>30</sup> Thus, this proposed permit does not comply with the PAL permit because it would allow a physical or operational change to increase emissions above the PAL levels.<sup>31</sup>

PacifiCorp claimed in its March 21, 2019 submittal to DEQ that this current change would not trigger PSD permitting because “the proposed emission limits included in the RP reassessment application, including the total annual SO<sub>2</sub> and NO<sub>x</sub> emission limit of 17,500 tons per year provide potential annual emissions that are less than the current PAL limits. Thus, the current NO<sub>x</sub> and SO<sub>2</sub> PAL permit limits allow approval of the RP Reassessment without a PSD

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<sup>25</sup> *Id.* (Condition 8).

<sup>26</sup> Air Quality Permit P0021286, issued July 31, 2017, at 2 (Condition 5.i.2 and 5.ii.1.).

<sup>27</sup> These annual totals were calculated by determining the number of potential operating hours per month and multiplying the average monthly block lb/hr average emission limits by the potential operating hours per month.

<sup>28</sup> *Id.* at 31 (Condition 9).

<sup>29</sup> PacifiCorp could readily reduce SO<sub>2</sub> emissions by eliminating scrubber bypass, improving scrubber efficiency and/or burning or blending with lower sulfur coal or natural gas to provide the ability for the plant to increase NO<sub>x</sub> emissions above the level of the PAL.

<sup>30</sup> WAQSR Ch. 6, Sec. 4(xv)(B).

<sup>31</sup> WAQSR Ch. 6, Sec. 4(xv)(A)(II).

permit.”<sup>32</sup> However, as demonstrated above, under the terms of the proposed permit, the proposed limits do not ensure that total annual SO<sub>2</sub> and NO<sub>x</sub> emissions will be less than the PAL limits, and in fact will allow increased emissions above the PAL levels. Therefore, the proposed permit fails to ensure compliance with applicable PSD permitting requirements because it would allow physical or operational changes that would be allowed to increase emissions at the Jim Bridger plant above the NO<sub>x</sub> or SO<sub>2</sub> PALs.

Thank you for considering these comments and we look forward to DEQ’s response.

Sincerely,

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<sup>32</sup> March 21, 2019 letter from PacifiCorp to WDEQ at pdf page 4.