## BEFORE THE ENVIRONMENTAL APPEALS BOARD UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C.

) In re: ) Desert Rock Energy Company, LLC ) PSD Permit No. AZP 04-01

PSD Appeal Nos. 08-03, 08-04, 08-05 & 08-06

## EPA REGION 9'S RESPONSE TO PETITIONS FOR REVIEW, SUPPLEMENTAL BRIEFS, AND AMICUS BRIEF

## TABLE OF CONTENTS

Introduction1
Background 2
Standard and Scope of Review
Argument7
I. Petitioners Have Failed to Demonstrate Error In the BACT Analysis Supporting the final DREF PSD Permit and Region 9's Response to Comments
A. Region 9 Has Discretion Not to List Options in Step 1 of the BACT Analysis That Fundamentally Redefine The Proposed Source and Petitioners Have Not Demonstrated Error In the Exercise of That Discretion In This Case
<ol> <li>Region 9's Failure to Consider IGCC in Step 1 of the BACT Analysis Was Not Clearly Erroneous</li></ol>
<ol> <li>Region 9's Decision Not To List Concentrated Solar Power At Step 1 of the BACT Analysis Was Not Clearly Erroneous</li></ol>
<ul> <li>B. Petitioners Have Not Demonstrated Clear Error in Region 9's Final NOx or SO<sub>2</sub></li> <li>BACT Limits</li></ul>
<ol> <li>Region 9 Properly Determined the BACT Limit for NOx</li></ol>
<ul> <li>0.0385 lbs/MMbtu Is Not Clearly Erroneous</li></ul>

<ul> <li>c. Petitioners Do Not Demonstrate Error In The Region's Formulation of the Optimization Plan.</li> <li>39</li> </ul>
<ul> <li>3. The Petitioners have Not Demonstrated Clear Error on EPA's Part in Establishing the Final SO<sub>2</sub> BACT Limits</li></ul>
C. The Permit Assures Compliance with BACT Emission Limits During Periods of Startup and Shutdown
<ol> <li>The Technical Justification for Condition IX.N.3 is Documented in the Permit Record</li></ol>
D. Region 9's Collateral Environmental Impacts Analysis in the BACT Determination Was Not Clearly Erroneous
II. Region 9 Provided Reasoned Responses to Comments Advocating Construction of Concentrating Solar Power and Other Alternatives
III.The Air Quality Analysis In The Record Supports Region 9's Determination That the Source Will Not Cause or Contribute to a Violation of the NAAQS or PSD Increments
A. Region 9 Did Not Err In Assessing DREF'S Impact On Ozone Air Quality 59
<ol> <li>Region 9's Reliance on Certain Ozone Impact Analysis Techniques Does Not Constitute Clear Error</li></ol>
<ol> <li>EPA Reliance on Specific Application of Ozone Modeling to DREF Does Not Constitute Clear Error</li></ol>
<ol> <li>EPA Conclusion of No Significant DREF Ozone Impact Does Not Constitute Clear Error</li></ol>
<ol> <li>Region 9 Determined That DREF Will Not Cause or Contribute to a Violation of the Current Ozone NAAQS</li></ol>

<ul> <li>B. The DREF PSD Permit Satisfies CAA Section 165(a) For PM<sub>2.5</sub> By Using PM<sub>10</sub></li> <li>As a Surrogate, and Comments Have Not Demonstrated That Region 9</li> <li>Committed Clear Error</li></ul>
C. Region 9's Determinations Regarding the SO <sub>2</sub> Increment Analysis and Modeling Were Correct and Fully Supported
<ol> <li>Region 9's SO2 Increment Analysis Is Correct and Fully Supported by the Administrative Record and Response to Comments</li></ol>
<ol> <li>Region 9 Determinations Regarding Minor Source Baseline Dates Were Correct and Fully Supported by the Administrative Record and Response to Comments</li></ol>
<ol> <li>The Region's Decisions Regarding Other SO<sub>2</sub> Modeling Issues Are Correct and Fully Supported by the Administrative Record and the Response to Comments</li></ol>
4. Region 9's NO <sub>2</sub> Increments Analysis Was Sufficient
IV.Region 9 Did Not Commit Clear Error Regarding Potential Impacts to Visibility in Class I Areas from DREF
A. The Region Fully Responded to FLMs Comments Regarding a Potential Adverse Impact Finding
B. Region 9's Decision Not To Conduct Cumulative Modeling In This Case Was Not Error
C. Region 9 Disclosed the Mitigation Agreement During the Public Comment Period 87
D. Region 9 Did Not Commit Error By Incorporating the SO <sub>2</sub> Provisions of the Mitigation Agreement Into the Final PSD Permit
E. Region 9 Did Not Rely on the Regional Haze Modeling In Issuing the DREF PSD Permit
V. Region 9 Did Not Commit Clear Error In Responding to Comments on the Additional Impacts Analysis
VI.Nothing Requires that Region 9 Establish Hazardous Air Pollutant Limits In PSD Permits or Before A PSD Permit May be Issued
A. Petitioners Arguments Regarding Compliance With Hazardous Air Pollutant Requirements Are Not Properly Before the Board

B. Neither the PSD nor the Hazardous Air Pollutant Regulations Require That A Permitting Authority Complete A Case-by-Case MACT Determination Before Issuing a PSD Permit
C. The Clean Air Act Does Not Require that a Permitting Authority Complete the 112(g) Analysis Before Issuing a PSD Permit
D. Region 9 Provided a Sound Reason for Not Integrating The PSD and Hazardous Air Pollutant Review In This Case And A Reasonable Solution If Any Consistency Issues Arise
E. NGO Petitioners Failed to Substantiate Their Allegations That the Case-by-Case MACT Analysis Will Alter the Proposed Facility In A Manner That Undermines the PSD Permit Analysis
VII.Region 9 Ensured That Its Action And The Construction of the Project Complies With Other Federal Requirements
A. Region 9's Permitting Action Is Consistent With Endangered Species Act Requirements
<ol> <li>EPA's Reliance on BIA as Lead Agency for ESA Section 7 Consultation is Appropriate</li></ol>
<ol> <li>EPA's Reliance on BIA's Initiation of Consultation is in Accordance with ESA Section 7(d)</li></ol>
<ol> <li>Region 9's Issuance of the Permit Prior to Completion of ESA Consultation – With a Condition Prohibiting Construction and Providing for Appropriate Modifications – Was Consistent With ESA Requirements and EAB Precedent 117</li> <li>a. Section 7(d) and FWS Implementing Guidance Allow EPA's Approach of Proceeding with Non-Irreversible/Irretrievable Activities</li></ol>
B. Region 9's Decision to Issue the Final PSD Permit Before Completion of an Environmental Impact Statement Was Not Clearly Erroneous
C. Region 9 Complied With Its General Obligations Under the Environmental Justice Executive Order

D. Region 9 Responded to Comments on Specific Issues	Regarding Environmental
Justice 133	

Conclusion137
---------------

#### **INTRODUCTION**

The Board should deny review because Petitioners have failed to demonstrate clear error in Region 9's decision to grant a Prevention of Significant Deterioration ("PSD") permit to the Desert Rock Energy Company ("DREC") and the basis for that decision reflected in the record and Region 9's Response to Comments. Four Petitioners and one *amicus curiae* (hereinafter collectively "Petitioners") in this matter have raised an array of issues, many of which overlap.<sup>1</sup> On each of these issues, Petitioners fail to demonstrate that the controlling provisions of the applicable statutes and regulations compel the outcome that Petitioners prefer or that the record supports each of their factual contentions. Indeed, many of the Petitioners' arguments in this case are based solely on policy preferences and speculation, and not substantiated by any clear legal mandate or documentary support in the record or elsewhere. In other instances, Petitioners misrepresent the nature of the Region's responses to the public comments and attack positions that were not relied upon by Region 9 to support the action challenged here.

This Response Brief addresses each of the issues raised by Petitioners except one. With respect to Petitioners' arguments that Region 9 should have conducted an analysis of Best Available Control Technology ("BACT") for carbon dioxide (" $CO_2$ "), Region 9 now requests that the Board sever this issue from the others on appeal. In accordance with section 124.19(d) of the regulations, Region 9 has withdrawn the portion of its

<sup>&</sup>lt;sup>1</sup> When we refer to Petitioners individually in this Response we will identify them as follows. For the Petition filed by the various non-governmental organizations, we will refer to the "NGO Petitioners". For New Mexico, we will refer to "New Mexico" or "NM Petitioner." For the Center for Biological Diversity, we will refer to "CBD Petitioner." For Leslie Glustrom, we will refer to "Glustrom Petitioner" or "Ms. Glustrom."

permitting record that addresses this issue in light of this Board's decision in *In Re: Deseret Power Electric Cooperative*, PSD Appeal No. 07-03 (EAB Nov. 13, 2008), 13 E.A.D. \_\_\_\_. However, given the breadth and complexity of all the issues in this matter, Region 9 requests that the Board continue to consider and move toward resolution of the issues not affected by the *Deseret* opinion based on the filed briefs, including this Response Brief. As to all issues addressed in this Response, the Board should deny review.

#### BACKGROUND

This case involves an appeal of a PSD permit issued by EPA Region 9 to DREC to construct the Desert Rock Energy Facility ("DREF") within the boundaries of the Navajo Nation, near Farmington, New Mexico. The DREF will consist of two new 750 megawatt ("MW") super-critical, pulverized coal ("PC") boilers, designed to generate a total of approximately 1500 MW of electricity. The DREF will combust coal exclusively from the Navajo Mine, which is immediately adjacent to the power plant site. The Navajo Mine has been producing sub-bituminous coal for several decades to supply other electricity generating units in the area.

Region 9 is the permitting authority in this action because the DREF will be located on Indian lands within the exterior boundaries of the Navajo Indian Reservation in northwest New Mexico. A Memorandum of Agreement between Region 9 and Region 6 established that Region 9 would have jurisdiction for permitting all sources located on the Navajo Nation.

Given the lengthy statements of facts in the Petitions, this response will not repeat a full chronology of events resulting in the final DREF PSD Permit, except as follows.

Region 9 first received the DREF PSD Permit application in February 2004 and it was later supplemented in May 2004.<sup>2</sup> AR 6 through 6.2 and 12.<sup>3</sup> During the next two years, Region 9 and the appropriate Federal Land Managers ("FLMs") requested DREC to submit substantial additional modeling of the potential impacts to Class I areas with respect to visibility and increment consumption. See, e.g., AR 15, 18, 26, and 42. Based on the subsequent analysis, Region 9 notified the FLMs in March 2006 that it was satisfied with the modeling information and intended to propose approval of the application and issue a proposed PSD permit. AR 39.

Region 9 conducted unprecedented public notice, outreach and public hearings on the proposed DREF PSD Permit between July and November 2006. See, e.g., AR 44 and AR 48-53. In response, Region 9 received over one thousand written and oral comments. AR 56, 58, 61, 63-75, and 120.8. Region 9 conducted an extensive review of all of these comments and also accepted a number of late filed comments. AR 57, 59, and 60. Region 9 responded to newly raised issues in the late comments received through the end of March 2008 before reaching a final permit decision.

The Region's extensive review of public comments was time-consuming and led to litigation by the permit applicant to compel a final decision on its PSD permit application. On March 18, 2008, the DREC and Dine Power Authority filed suit against

<sup>2</sup> The original applicant for the PSD permit was Steag Power, LLC. On September 10, 2004, the project was sold to Post Oak Power, LLC. On March 21, 2007, Post Oak Power, LLC, assigned the permit application and all other rights to the project to Desert Rock Energy Company, LLC. Post Oak Power LLC and Desert Rock Energy Company, LLC, are subsidiaries of Sithe Global Power, LLC. AR 17 & 103. <sup>3</sup> The documents in the Administrative Record for the permit are available online at <a href="http://www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=EPA-R09-OAR-2007-1110">http://www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=EPA-R09-OAR-2007-1110</a>. Citations to documents in the Record are designated as "AR #####." The numbers in these designations correspond to the last four digits of the Document ID listed on the website. Zeroes which precede the initial numbers have been omitted (e.g., 'AR 6' refers to document EPA-R09-OAR-2007-1110-0006).

EPA in Texas District Court for failure to comply with CAA Section 165(c) requiring a decision on a PSD permit within one year of receiving a complete application. AR 98. Consistent with a Consent Decree signed by EPA's counsel at the Department of Justice, Region 9 issued its final decision on the DREF application on July 31, 2008. AR 122 (PSD Permit); AR 120, 121 (Response to Comments). The litigation by the applicant limited the Region's ability to withhold its action on the PSD permit pending completion of related reviews of the DREF project required under various federal statutes, such as section 112(g) of the Clean Air Act and the Endangered Species Act. Nevertheless, the Region took care to ensure that its action, and the DREF project as whole, would comply with all such requirements. AR 120 at 172; AR 121 at 21.

The final DREF PSD Permit included two notable changes in response to issues raised in the public comments, both of which resulted in decreases of the emissions allowed by the PSD permit. First, Region 9 included a significantly more stringent BACT limit for oxides of nitrogen ("NOx"). AR 120 at 62-63. Second, Region 9 included in the final PSD Permit a portion of a Mitigation Agreement between the Navajo Nation and DREC, with substantial input from the FLMs, which requires DREC to ensure there will be additional SO<sub>2</sub> emissions reductions. AR 120 at 140-144.

Except with respect to whether Region 9 was required to perform a BACT analysis for CO<sub>2</sub> emissions from DREF, the Administrative Record for the final PSD Permit in this matter demonstrates that EPA fully satisfied the requirements of Part C of the Clean Air Act ("CAA"), and regulations promulgated at 40 C.F.R. 52.21 and Part 124, in responding to comments and reaching a final permitting decision.

#### STANDARD AND SCOPE OF REVIEW

The Board has repeatedly noted that its review of final PSD permitting decisions is discretionary and the exercise of such discretion is circumscribed. In promulgating 40 C.F.R. Part 124, EPA stated that "most permit conditions should be finally determined at the Regional level" and therefore the power of review will only be employed "sparingly." *See* 45 Fed. Reg. 33,412 (May 19, 1980); *accord In re Zion Energy, L.L.C.*, 9 E.A.D. 701, 705 (EAB 2001). Accordingly, the Board typically defers to regional permitting authorities in its review of permit appeals, especially on matters of a technical nature. *See, e.g., In re Three Mountain Power Co., LLC*, 10 E.A.D. 39, 54 (EAB 2001).

A petitioner bears the burden of demonstrating to the Board that review is warranted. 40 C.F.R. §124.19(a). Under the Board's procedural rules, review may be granted in two circumstances. First, the decision by the Regional Administrator may be reviewed if it is based on a "finding of fact or conclusion of law which is clearly erroneous." 40 C.F.R. §124.19(a)(1). Second, review may be authorized if the permit action involves "an exercise of discretion or an important policy consideration" which the Board believes it should review. 40 C.F.R. §124.19(a)(2).

A petitioner who possesses standing to appeal is only permitted to raise issues that have been preserved for appeal through public comments or that were not reasonably ascertainable during the comment period. Under applicable regulations, "all reasonably available arguments" that support a position advocated by the petitioner must have been raised during the public comment period. *See* 40 C.F.R. §124.13; *In Re: BP Cherry Point,* 12 E.A.D. 209, 219 (EAB 2005) ("It is not an arbitrary hurdle, placed in the path of potential petitioners simply to make the process of review more difficult; rather, it

serves an important function related to the efficiency and integrity of the overall administrative scheme.")

The Board will deny review of arguments that are purely speculative so that petitioners are obliged to raise arguments in a manner that is both specific and substantiated. *In Re Three Mountain Power Co., LLC,* 10 E.A.D. 39, 58 (EAB 2001) ("The Board will not overturn a permit provision based on speculative arguments."); *In Re Avon Custom Mixing Services, Inc.,* 10 E.A.D. 700, 708 (2002). These requirements ensure that any issues challenged on appeal are well defined and actually represent "bona fide" disagreements between the petitioner and the permit authority. *See In Re Texas Indus., Inc.,* 2 E.A.D. 277, 279 (Adm'r 1986) ("Less speculation and more empirical evidence is needed by petitioner to justify review of the permit.").

The Board will also deny petitions which simply repeat assertions that were raised in comments on the proposed action, absent a full explanation of how the permitting authority's response was inadequate. The Board recently stated:

To obtain review, a petitioner must clearly and specifically identify the basis for its objection(s) to the permit, and explain why, in light of the permit issuer's rationale, the permit is clearly erroneous or otherwise deserving of review. *See Zion Energy, LLC,* 9 E.A.D. 701, 705 (EAB 2001). In order to carry this burden the petitioner must address the permit issuer's responses to relevant comments made during the process of permit development; the petitioner may not simply reiterate comments made during the public comment period, but must substantively confront the permit issuer's subsequent explanations. *Id.; see also In re Knauf Fiber Glass, GmbH,* 9 E.A.D. 1, 5 (EAB 2000)("Petitions for review may not simply repeat objections made during the comment period; instead they must demonstrate why the permitting authority's response to those objections warrants review."); *In re City of Irving, Tex. Mun. Separate Storm Sewer Sys.*,10 E.A.D. 111, 129-30 (EAB 2001).

*In Re Peabody Western Coal Co.*, 12 E.A.D. 22, 33 (EAB 2005) (extending standard of review to Title V permits). *See also In Re BP Cherry Point*, 12 E.A.D. 209, 217 (EAB 2005).

Finally, a petitioner challenging a fundamentally technical decision bears an

especially heavy burden. In Re: Carlotta Copper Co., 11 E.A.D. 692, 708 (EAB 2004).

The Board articulated its reason for assigning a heavy burden to petitioners on technical

decisions, stating:

This demanding standard serves an important function within the framework of the Agency's administrative process; it ensures that the locus of responsibility for important technical decisionmaking rests primarily with the permitting authority, which has the relevant specialized expertise and experience.

See In Re Peabody Western Coal Co., 12 E.A.D. at 33 (EAB 2005). The Board further

explained:

In other words, where a permit decision pivots on the resolution of genuine technical dispute or disagreement, the Board prefers not to substitute its judgment for the judgment of the decisionmaker specifically tasked with making such determinations in the first instance. Thus, as we explained in *NE Hub*, the Board typically will not grant review where the record demonstrates merely "a difference of opinion or an alternative theory regarding a technical matter." *Id.* at 567. Instead, where "the views of the Region and the petitioner indicate bona fide differences of expert opinion or judgment on a technical issue," deference to the Region's decision is generally appropriate if "the record demonstrates that the Region duly considered the issues raised in the comments and if the approach ultimately selected by the Region is rational in light of all of the information in the record." *Id.* at 567-68.

*Id.* at 34.

#### ARGUMENT

Petitioners here have failed to satisfy their burden of demonstrating that Region 9's permitting decisions constituted clear error or an abuse of discretion on an important policy consideration. Although we address the Petitioners' arguments in detail below, we note in opening that vast swaths of the Petitioners' arguments fail to satisfy the Board's minimum standards for review. For example, the NGO Petitioners continue to challenge Region 9's *proposed* BACT limits from 2006, not the final action and Response to Comments. See, e.g., NGO Supp. at 156 ("In this case, as explained below, EPA's BACT analysis *prior to the public comment period* for NOx and SO<sub>2</sub> for the main boilers was limited to a review of other limits in previously issued permits. There was a smattering of information about removal efficiency in the application and Ambient Air Quality Impact Report (AAQIR) but EPA never provided a connection between this thin information and the emission limits in the *draft* permit.") [emphasis added]. On this basis alone, much of the NGO Petition should be denied. To the extent the remaining Petitions challenge Region 9's Response to Comments and final action, the Petitioners fail to demonstrate clear error or an improper exercise of discretion on an important policy consideration.

## I. Petitioners Have Failed to Demonstrate Error In the BACT Analysis Supporting the final DREF PSD Permit and Region 9's Response to Comments

As the Board is aware, EPA recommends that permitting authorities use a fivestep top down process to ensure that the BACT emissions limitations in each permit comply with the criteria for determining BACT. The NGO Petition accurately describes the steps of EPA's "top-down" BACT process. NGO Supp. at Section V.1. We need not repeat that discussion because the parties differences do not lie in defining top-down BACT, but only whether Region 9's BACT determinations followed the process. They clearly did.

A. Region 9 Has Discretion Not to List Options in Step 1 of the BACT Analysis That Fundamentally Redefine The Proposed Source and Petitioners Have Not Demonstrated Error In the Exercise of That Discretion In This Case

As discussed thoroughly in Region 9's Response to Comments, the Administrator and this Board have long maintained a policy against utilizing the BACT requirement as a means to fundamentally redefine the basic design or scope of a proposed project. See, e.g., In Re Prairie State Generating Co., PSD Appeal No. 05-05, slip. op. at 22-37. (EAB Aug. 24, 2006), aff'd Sierra Club v. EPA, 499 F.3d 653 (7th Cir. 2007); In Re Knauf Fiber Glass, GmbH, 8 E.A.D. 121, 136-140 (EAB 1999); In the Matter of: Pennsauken County, New Jersey, Resource Recovery Facility, 2 E.A.D. 667, 673 (Adm'r 1988). This policy is based on a permissible interpretation of the Clean Air Act ("CAA") which was accorded deference by the Seventh Circuit upon review of the Board's order in Prairie State. Sierra Club, 499 F.3d at 656. The critique by NGO Petitioners, New Mexico, and Leslie Glustrom of Region 9's application of this established policy and legal interpretation to DREF's PSD permitting process does not demonstrate clear error in the Region 9's decision not to list Petitioners' preferred approaches for generating electric power at Step 1 of the BACT analysis for the specific facility proposed by DREF. NGO Supp. at 72-112; NM Supp. at 18-30; Glustrom Pet. at 27-37.

Region 9's Response to Comments provides detailed analysis showing that the Agency's policy against fundamentally "redefining the source" is firmly grounded on the statutory text of the CAA. AR 120 at 13-20. Because this analysis is thoroughly discussed in the Response to Comments, it is not necessary to repeat that discussion here. Rather, to rebut Petitioners' arguments that the Region's interpretation of the BACT provisions has no statutory support, it suffices to summarize Region 9's Response to

Comments, which lists three primary areas of textual support for the Agency's established interpretation that options which redefine the source need not be included in Step 1 of a top-down BACT analysis. First, the separate listing of "alternatives" and "control technology requirements" in section 165(a)(2) establishes a distinction between "alternatives" to the proposed source and the kinds of "production processes and available methods, systems and techniques" that are potentially applicable to a particular type of facility and should be considered in the BACT review. AR 120 at 14-15. See 42 U.S.C. 7475(a)(2); 42 U.S.C. § 7479(3). Second, the use of phrases "proposed facility" and "such facility" in sections 165(a)(4) and 169(3) refer to the facility proposed by the permit applicant. AR 120 at 15-16. Third, section 165(a)(4) requires BACT to be determined "on a case-by-case basis," which indicates that the particular characteristics of each facility are an important aspect of the BACT determination. AR 120 at 15-16.

NGO Petitioners' and New Mexico's arguments largely repeat the argument advanced in public comments, focusing on only one part of the statutory text. These Petitioners' allegations of legal error rest entirely on the language in the statutory definition of BACT that requires permitting authorities to consider "application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques." AR 66 at 13; NGO Supp. at 94-97. In contrast, the Region's permitting decision, as reflected in the Response to Comments, considered all of the relevant statutory text and reconciled the competing considerations reflected in the applicable provisions of the Act.

As Region 9's Response to Comments explained, the Act requires that a permitting authority conduct the BACT analysis on a "case-by-case" basis for the

"proposed facility" while concurrently considering the "application of production processes and available methods, systems and techniques" that could alter the proposed facility. The statute does not provide clear direction on how EPA is to concurrently consider the specific design of the facility proposed by the applicant while also assessing the use of methods or technology that could modify those particulars. Accordingly, Region 9 followed an established and permissible Agency interpretation that harmonizes the competing BACT criteria. This reading requires the permitting authority to conduct a detailed (steps 2-5) review of potentially applicable processes, methods, systems, or techniques (including those specifically identified in the statutory text) that may reduce pollution from the type of source proposed in the permit application, but allows an option to be eliminated (at step 1) from further consideration upon a showing that the option would fundamentally redefine the basic design or scope of the facility proposed by the permit applicant. AR 120 at 16. See also Chevron v. Natural Resources Defense Council, 104 S.Ct. 2778, 2782 (1984) (where a statute is ambiguous and Congress has not spoken to the precise issue, an administrative agency may formulate a policy to resolve the issue, provided that the policy is based on a permissible construction of the statute).

In reviewing the PSD permit issued in *Prairie State*, both the Board and the Seventh Circuit Court of Appeals identified statutory support for the Agency's interpretation that the BACT analysis need not include detailed evaluation of options that fundamentally redefine the proposed source. The Board's opinion considered various provisions of the Clean Air Act, including language that requires the "proposed facility" to be "subject to" BACT, and concluded "the statute contemplates that the permit issuer looks to how the permit applicant defines the proposed facility's purpose or basic design"

as part of Step 1 of the top-down BACT analysis. *In Re Prairie State Generating Co.*, PSD Appeal No. 05-05, slip. op. at 28-29 (EAB Aug. 24, 2006), 13 E.A.D. \_\_\_. The Seventh Circuit then considered the specific phrase relied upon by Petitioners – describing it as "the statutory definition of 'control technology'" – and held that EPA's refinement of this language "to exclude redesign" was "the kind of judgment by an administrative Agency to which a reviewing court should defer." *Sierra Club v. EPA*, 499 F.3d at 655.

Petitioners have not demonstrated that the terms of the Act preclude the Agency from reading a common-sense limitation into the specific list of "methods, systems and techniques" identified in the CAA in order to harmonize the competing principles in the definition of BACT. Petitioners' preference for a more rigid reading of the CAA, even if that reading were also a permissible one, does not demonstrate that the interpretation applied by Region 9 in this case is clearly erroneous.

Furthermore, Petitioners overlook the prior conclusions of the Administrator, EAB, and the Seventh Circuit that the terms of the CAA afford the permitting authority some discretion to determine the line between the proposed source under review and pollution control strategies that can be applied to such a source without fundamentally redefining it into something else. The Administrator and this Board have generally recognized that the decision about whether to include a lower polluting process in the list of potentially-applicable control options compiled at Step 1 of the top-down BACT analysis is a matter within the discretion of the PSD permitting authority. *See, e.g., In Re Knauf Fiber Glass*, 8 E.A.D. at 136 (EAB 1999); *In the matter of Hawaiian Commercial* & *Sugar Co.*, 4 E.A.D. 95, 100 & n.9 (EAB 1992); *In the matter of: Old Dominion* 

*Electric Cooperative*, 3 E.A.D. 779, 793 (Adm'r 1992); In the *Hawaiian Commercial* case, the Board wrote that "the permitting authority is entitled to wide latitude in how broad a BACT analysis it wishes to conduct in this regard." *In the matter of Hawaiian Commercial & Sugar Co.*, 4 E.A.D. at 100. In denying review on the issue of whether the applicant for a coal-fired boiler should instead be required to install a combined cycle turbine fueled with oil, the Board stated Petitioner had "provided no good reason for curtailing this discretion, nor has he shown that the State abused this discretion." *Id.*.

The Seventh Circuit affirmed the discretionary nature of the "redefining the source" issue when upholding the Board's Prairie State decision. The Court recognized the discretion given to EPA in making the technical judgment as to "where control technology ends and a redesign of the 'proposed facility' begins." Sierra Club v. EPA, 499 F.3d at 655. The Court wrote: "[A]s it is not obvious where to draw that line either, it makes sense to let the EPA, the author of the underlying distinction, draw it, within reason." Id. The Seventh Circuit suggested that "reason" counseled against reading the "clean fuels" language (part of the same list of options relied upon by Petitioners) out of the Act, but the Court ultimately reviewed the EPA's judgment in a borderline case under an arbitrary and capricious standard of review. *Id.* at 656. The court thus rejected a rigid reading that the "clean fuels" language took away a reviewing authority's discretion to apply reasonable limitations on the application of this phrase based on other provisions of the Act. The Board should thus be mindful of the discretionary nature of Region 9's decision on where to draw the line between a control technique applicable to the proposed source and the fundamental characteristics of the facility proposed by the permit applicant.

## 1. Region 9's Failure to Consider IGCC in Step 1 of the BACT Analysis Was Not Clearly Erroneous

The NGO and New Mexico Petitioners have not shown clear error in Region 9's decision not to list Integrated Gasification Combined Cycle ("IGCC") as an option at Step 1 of its BACT analysis for any pollutant. NGO Supp. at 74-97. NM Supp. at 18-30.

## a. The Record Supports Region 9's Determination that IGCC Technology Would Fundamentally Change the Equipment the Permit Applicant Proposed to Install.

Region 9 considered the permit application, two reports prepared by DREC addressing IGCC (AR 27 & 34)<sup>4</sup>, public comments from the Petitioners (AR 66) and others, and a recent EPA report providing a detailed comparison of the IGCC technology and pulverized coal boiler technology. AR 120.10 ("Final Report, Environmental Footprints and Costs of Coal-Based Integrated Gasification Combined Cycle and Pulverized Coal Technologies," EPA-430/R-06/006, July 2006.) After reviewing this record, Region 9 concluded that the IGCC process would fundamentally change the nature of the proposed source because it would change the basic design of the equipment DREC had proposed to construct. Region 9 observed that DREC applied to construct a facility to combust pulverized coal in a boiler to generate steam to drive an electric turbine. AR 120 at 19. In contrast, an IGCC facility "uses a chemical process to first convert coal into a synthetic gas and to fire that gas in a combined cycle turbine." AR 120 at 19.

<sup>&</sup>lt;sup>4</sup> NGO Petitioners claim that there is a third report which EPA has withheld from the record. NGO Pet. at 72 n. 52. This is false. The report attached to Gus Eghneim's May 8, 2005 email (AR 113 at 90) is the May 3, 2005 report titled "Integrated Gasification Combined Cycle Compared to the Desert Rock Energy Project." DREF later withdrew its claim of confidentiality and this report was made available to the public in the Administrative Record. The report was not attached to AR 113 on the website since it was provided separately as AR 27.

Petitioners have not shown anything in the record that contradicts Region 9's conclusion that the use of IGCC technology and its consideration in Step 1 of the BACT analysis would result in a fundamental change to the equipment DREC sought approval to construct in its permit application. Nor have Petitioners demonstrated that fundamental differences in equipment design are an insufficient basis to conclude that an inherently lower polluting process would redefine the proposed source and need not be listed as an option at Step 1 of the BACT analysis.

In questioning Region 9's determination here, the NGO Petitioners focus on the DREF's 'product or purpose.' NGO Supp. at 87. However, this is a straw man argument because it was not the basis upon which Region 9 concluded that the IGCC process would fundamentally redefine the source in this case. The record is clear that the Region based its determination on the fundamental differences between the equipment that DREC proposed to construct and the IGCC technology -- even accepting that both result in the same product (electricity). AR 120 at 20.

Region 9 observed that the core process of gasification at an IGCC facility is fundamentally different than operating a boiler. As Region 9 stated in its Response to Comments: "Coal gasification is more akin to technology employed in the refinery and chemical manufacturing industries than technologies generally in use in power generation (i.e. a controlled chemical reaction versus a true combustion process)." AR 120 at 19-20. Although Region 9 observed that the "use of coal gasification technology would necessitate different types of expertise to operate" as highlighted by Petitioners, this was one of many supporting statements for Region 9's conclusion that the equipment was

fundamentally different and not the sole basis for the Region's determination that IGCC would redefine the source. AR 120 at 19-20.

Region 9 also observed that "the combined cycle generation power block of an IGCC process employs the same turbine and heat recovery technology that is used to generate electricity with natural gas at other electric generation facilities." AR 120 at 19. Region 9 explained that the combined cycle generation power block portion of the IGCC process is very similar to power generation technology that has been characterized as technology that would fundamentally redefine a coal-fired steam boiler in decisions upheld by the EAB and the Administrator. AR 120 at 19; *see also In re SEI Birchwood Inc*, 5 E.A.D. 25, 29-30 n. 8 (1994) (EAB 1994) (Petitioner's preference for natural gas power electric generating facility would redefine a coal-fired facility); *In the Matter of: Old Dominion Electric Cooperative*, 3 E.A.D. 779, 783 (Adm'r 1992) (upholding state determination that natural gas electric generating facility would redefine a pulverized coal-fired facility); *see also Hawaiian Commercial*, 4 E.A.D. at 99 (oil-fired combined cycle facility would redefine a coal-fired bed boiler).

Although it is the most recent (and perhaps the most thorough) of the Board's opinions to address a significant issue about redefining the source, the Board's decision in *Prairie State* is just one in a line of several cases to apply the "redefining the source" concept. As Region 9 observed, cases prior to *Prairie State* have also considered whether an option would require a fundamental change in the equipment to be installed. AR 120 at 18-19. The Board's decision in *Hibbing* summed up the relevant factors that could be used to determine whether an option would force a fundamental change in the basic design of the proposed source, including the applicant's "product, purpose, or

equipment." *In Re Hibbing Taconite*, 2 E.A.D. at 843 n. 12. As Region 9 observed in its Response to Comments, the applicant's purpose was the focus in *Prairie State* (which expanded on earlier cases identifying this as a relevant factor) because the use of an alternative coal source arguably did not significantly affect the power-generating equipment to be used at the proposed source. AR 120 at 19; *see also In Re Prairie State Generating Station Co.*, PSD Appeal No. 05-05, slip. op. at 30 (EAB Aug. 24, 2006). Despite this focus, the *Prairie State* opinion does not reflect a departure from prior decisions that focused on the scope of the equipment changes advocated by commenters or Petitioners, such as those cited above involving the substitution of a combined cycle turbine (oil or gas-fired) for a coal-fired boiler. *In Re SEI Birchwood*, 5 E.A.D. at 29; *In Re Old Dominion Cooperative*, 3 E.A.D. at 793; *In Re Hawaiian Commercial*, 4 E.A.D. at 99-100.

The Petitioners' preference for narrowing the circumstances that may constitute "redefining the source" is based on only on a select few of the Board's decisions in this area and does not demonstrate clear error in the interpretation followed by Region 9, which was well-grounded on prior decisions of the Board that affirmed similar decisions not to conduct detailed review of options that would fundamentally change equipment an applicant proposed to install. The NGO Petitioners' supplemental brief includes only a passing reference to the Board's cases holding that combustion and combined-cycle turbines would fundamentally redefine a proposed coal-fired boiler and attributes those holdings solely to the change in fuel from coal to natural gas or coal. NGO Supp. at 84 n. 59. But Petitioners do not reconcile their interpretation of the turbine cases with the Board's holding in *Hibbing* that the reviewing authority should consider the option of

continuing to use a fuel that a facility is already equipped to burn. The common thread that explains the difference between the outcome in these cases is the degree of change in equipment necessary to accommodate the suggested option. In *Hibbing*, use of the existing fuel by the source required no fundamental equipment changes (indeed no equipment changes at all) while the use of oil or natural gas in *SEI Birchwood*, *Old Dominion*, and *Hawaiian Commercial* would have required a fundamental equipment change to convert a steam boiler into a combustion turbine.

## b. The Clean Air Act and EAB Precedents Do Not Preclude Region 9 from Exercising Its Discretion to Eliminate The IGCC Option When The Record Shows It Would Fundamentally Redefine the Proposed Source.

In addition to failing to show error in Region 9's exercise of discretion considering the fundamental differences in equipment, Petitioners have also failed to demonstrate that the statute clearly precludes Region 9 from exercising its discretion to eliminate IGCC technology as an option for this source at Step 1 in the BACT analysis. As discussed above, the interpretation applied by Region 9 in this case considered all of the relevant statutory text, including the phrase relied on by Petitioners that lists clean fuels and innovative fuel combustion techniques. As discussed in Region 9's Response to Comments, the "innovative fuel combustion techniques" phrase appears in the BACT definition among a list of examples of things included in the phrase "production processes and available methods, systems, and techniques." The Region reasonably concluded that the "innovative fuel combustion" language, like the phrase it modifies in the definition of BACT, is limited by other statutory language that requires BACT to be applied to each proposed facility and determined on a case-by-case basis. The Seventh Circuit deferred to EPA's interpretation that a specific example of a control strategy ("clean fuels") listed in this part of the BACT definition may be subject to reasonable limitation based on other language in the Act, and thus does not mandate evaluation of every conceivable option that might be covered by such terms. *Sierra Club v. EPA*, 499 F.3d at 655. The Board likewise observed that the terms processes, methods, systems, and techniques contained in the statutory definition of BACT "must not be read in isolation, but instead are part of a permit application process that requires the 'proposed facility' to be subject to BACT." *In Re Prairie State Generating Co.*, PSD Appeal No. 05-05, slip. op. at 29 (EAB Aug. 24, 2006).

The Region's application of the "redefining the source" concept to IGCC in this case does not read the phrase "innovative fuel combustion techniques" or "clean fuels" out of the CAA. Region 9 clearly recognized that the Agency's redefining the source policy does not obligate a PSD permitting authority to accept all elements of a proposed project when determining BACT. The Region explicitly recognized that the Act calls for an evaluation of the "application of production processes and available methods, systems, and techniques" and that some design changes to the proposed source are within the scope of the BACT review. AR 120 at 18 (citing *In Re Knauf Fiber Glass GmbH*, 8 E.A.D. 121 at 136).

Petitioners overlook the fact that Region 9 considered the option of designing DREF to use Circulating Fluidized Bed (CFB) technology, which is an inherently-lower polluting process that would change the design of the proposed source to some extent. AR 46 at 32-35. A CFB process suspends crushed coal in upward flowing air and a bed of inert solids that includes material such as limestone or dolomite to capture sulfur

dioxide within the CFB process rather than through an add on scrubber. Nevertheless, the process still uses water tubes around the combustion chamber to generate steam to drive a turbine. AR 46 at 32; *See also* AR 120.21 at 2-2 and 2-5. Thus, even though implementation of this design would require significant changes to parts of pulverized coal facility and raise questions about redefining the source, a CFB process is fundamentally a coal-fired, boiler-based design.

Region 9's Statement of Basis for the draft permit (identified as the Ambient Air Quality Impact Report by the Region) does not indicate that the CFB option was eliminated at Step 1 (as was clearly the case in the discussion that immediately follows on IGCC). AR 46 at 32-35. Region 9's BACT analysis addressed CFB in a separate assessment than the more detailed analysis of add-on pollution control technologies in earlier sections of its AAQIR. However, the record reflects that the Region eliminated the option on what are largely step 2 grounds and thus was not required to rank this option at step 3 and conduct a detailed analysis at step 4. DREC's analysis showed that there are technical limitations on the size of a CFB unit and that five or six of these units would be required to provide the same power output. Although this size limitation might have been overcome by increasing the number of units, DREC explained that this design would significantly increase the capital and operational costs of using CFB technology and also result in higher emissions than the proposed facility. AR 46 at 33. The Board has recognized that where options with comparable control effectiveness are considered, the more costly of the two options may be eliminated at step 2 of the analysis and need not be subject to a full cost-effectiveness analysis. In Re Prairie State Generating Station Co, PSD Appeal No. 05-05, slip. op. at 45-48 (EAB Aug. 24, 2006). This reasoning can

be extended to support the Region's decision not to move beyond Step 2 with an option which had significant technical limitations and was less effective (instead of equally effective) and more costly than other options under consideration.<sup>5</sup> Commenters did not significantly question this aspect of Region 9's BACT determination and it is not challenged in this case. But the fact that Region 9 conducted this level of analysis demonstrates that it did consider "innovative fuel combustion techniques" in its BACT analysis and thus did not read this language out of the CAA.

Petitioners misconstrue the Board's discussion of the IGCC option in the Prairie State opinion. The Board's opinion in *Prairie State* did not interpret the CAA to require IGCC to be listed as a potentially applicable control option at step 1 for every permit application involving a coal-fired steam electric generating unit. *Prairie State* did not directly address the issue raised by the Petitioners' comments on the DREF permit because Illinois EPA chose, in an exercise of its discretion, to list the IGCC option at step 1 of the BACT analysis for the proposed facility and further analyze the option. IEPA ultimately eliminated the option at step 2. *See In Re Prairie State Generating Station Co.*, PSD Appeal No. 05-05, slip. op. at 45 (EAB Aug. 24, 2006). In *Prairie State*, the Board pointed to IEPA's consideration of the IGCC option beyond step 1 to illustrate that there was no question IEPA had conducted a sufficiently thorough Step 1 BACT analysis in that case, because IEPA had even considered an option that "would have required extensive design changes to Prairie State's proposed facility." *Id.* at 36. The Board did not conclude that IGCC, or any other option involving such extensive design changes,

<sup>&</sup>lt;sup>5</sup> The Board recognized in its Step 2 discussion in *Prairie State* that the top-down process is not intended to encourage evaluation of unnecessarily large numbers of control options for every emissions unit and that the EPA's process allows a reviewing authority to exercise judgment in deciding which options to evaluate in detail at step 4. *Id.* at 46.

must be listed as a potentially applicable option at Step 1 in each case. Nor did the Board find that it would be an abuse of a permitting authority's discretion to decline to list IGCC at Step 1 of the BACT analysis for the type of facility proposed by DREF in this case. The Board continued to recognize, as it had previously, that the decision of where to draw the line between BACT options listed at step 1 and alternatives to the proposed source is ultimately a matter within the discretion of the permitting authority. *Id.* at 29 n. 22.

That Region 9 chose to draw this line for the DREF application between IGCC and CFB technology does not show clear error. As the Board has observed, permitting authorities have the discretion to conduct a broader analysis if they desire. *In Re Knauf Fiberglass GmbH*, 8 E.A.D. at 136; *In Re Old Dominion Cooperative*, 3 E.A.D. at 793.

Petitioners' critique of Region 9's analysis of the legislative history likewise fails to demonstrate clear error. While the Petitioners may disagree with Region 9's interpretation of the legislative history and offer an alternative reading, they have not established that the view reflected in the response to comments is clearly erroneous. Although he clearly intended for the phrase "innovative fuel combustion techniques" to cover some form of coal gasification, the context of Senator Huddleston's statement is far from clear. Petitioners' interpretation is that the Senator meant to make evaluation of coal gasification mandatory in every case, without regard to the particulars of the source under review. But the Senator's statement does not contain any reference to a particular type of source under review, and it contains the language that "all actions taken by the fuel user are to be taken into account." The latter statement suggests recognition of the need to consider the permit application itself, as Region 9 did in applying all parts of the

BACT definition in the Act. If Senator Huddleston truly intended to "leave no doubt" that each permitting authority had to conduct a detailed evaluation of coal gasification in every permit to construct a coal-fired power plant without regard to particulars of the equipment proposed for installation in a permit application, his amendment to the statutory text (or even his floor statement) could have stated this explicitly. But neither the Senator's amendment nor his floor statement compels the Petitioners' interpretation.

Contrary to New Mexico's argument, the 1990 amendment of the list of particular options in the BACT definition does provide some indication of whether Congress intended the list of particular options to require mandatory evaluation of these options in Step 1. The 1990 amendments to the Clean Air Act inserted the example of "clean fuels" into a list of particulars that already existed in the BACT definition enacted in 1977. Pub. Law No. 101-549, § 403(d), 104 Stat. at 2631 (1990). Region 9 agrees that the Congressional intent with respect to the specific meaning of the term "clean fuels" does not illuminate the meaning of the term "innovative fuel combustion techniques" adopted by a prior Congress. However, the issue here is whether the listing of these and other specific examples of processes, methods, systems, or techniques in the definition of BACT after the word "including" makes each example an option that must be considered in every BACT analysis. In the context of the complete first sentence of the BACT definition, the Congressional intent with respect to whether any one of the examples listed at the end of the sentence requires mandatory evaluation of the option in every permit review (without regard to the nature of the changes to the proposed source required to apply that option) is instructive as to Congressional understanding of the

meaning of the entire clause listing specific examples of processes, methods, systems, or techniques.

Since the legislative history suggests that Congress did not intend for the addition of the "clean fuels" example to this list in 1990 to compel mandatory use of clean fuels, it is reasonable to conclude that Congress likewise did not perceive the other elements of that list to be necessarily subject to examination in every case without regard to the nature of the source the applicant proposed to construct. Courts accord weight to established interpretations of a statute by an administrative Agency that are not repealed in a subsequent re-enactment of the statute without pertinent change. NLRB v. Bell Aerospace Co., 94 S.Ct. 1757, 1762 (1974). Courts also give weight to subsequent legislation declaring the intent of an earlier statute. *Id.* The "clean fuels" amendment was enacted two years after the Administrator's Pennsauken decision, which recognized that the scope of options subject to review in the BACT analysis was not boundless. In the Matter of: Pennsaukan County, New Jersey, Resource Recovery Facility, 2 E.A.D. 667 (Adm'r 1988); see also In the Matter of Hibbing Taconite Co., 2 E.A.D. 838 (Adm'r 1989). Though Congress did not explicitly amend section 169(3) in 1990 to say that options that redefine the proposed source may be excluded from the list of examples contained in the statute, it amended the definition of BACT in 1990 without repealing the Agency's interpretation that BACT is not intended to redefine the source and expressed an intent in legislative history consistent with the Agency's interpretation. Thus, while the legislative history of the 1990 amendments does not necessarily dispose of the issue raised by Petitioners here, it was not clearly erroneous for Region 9 to cite that history as contributing some support for the Agency's interpretation of the BACT definition.

#### 2. Region 9's Decision Not To List Concentrated Solar Power At Step 1 of the BACT Analysis Was Not Clearly Erroneous

Petitioner Leslie Glustrom does not demonstrate clear error in Region 9's conclusion that solar power need not be evaluated as part of the BACT analysis for the proposed source but should instead be analyzed as an alternative to the proposed source. Petitioner does not show that Region 9's determination that solar power options would redefine the source that DREC proposed to construct is clearly erroneous. *See* AR 120 at 222 n. 15.

In her public comments, Petitioner Glustrom provided a copy of three reports on concentrating solar power ("CSP") technology and advocated that CSP should be an option considered in the BACT analysis for the DREF. AR 63 at 1. Glustrom argued that "a BACT analysis that doesn't include a review of CSP technologies will not have considered all 'available methods, systems, or techniques." AR 63 at 4. Glustrom's comments did not provide any detail as to why Region 9 should consider solar technology in the BACT analysis or address the significance of the attached reports to the DREF project. *Id.* The most relevant report was a study of the feasibility of using concentrating solar power technology ("CSP") to generate electricity in New Mexico, but neither the report nor Glustrom's comments related the report to the particulars of the Desert Rock project. Another report addressed CSP development and jobs for California. Although Glustrom's comment letter argued that this report was easily translated for New Mexico, she did not attempt to perform such a translation.

Region 9 responded to Glustrom's request that Region 9 consider CSP in the BACT analysis for this source with the following statement: "as is the case described below for IGCC, solar power would redefine the source and thus should be analyzed as an alternative to the source." AR 120 at 222 n. 15. In the discussion of IGCC that

follows in this section of the Region's response to comments document (AR 120 at 224), the Region cross-referenced its response to comment II.B.2.b., which provided an analysis of how the IGCC technology would fundamentally change the equipment that DREC proposed to install in its permit application. AR 120 at 19-20. From the Region's reference to its analysis of the IGCC option ("as is the case described below for IGCC"), one can discern that the Region concluded that the use of solar power technology would also fundamentally change the equipment that the permit applicant proposed to install. Although the Region's response to Glustrom's comment did not summarize the differences between the technology employed by the proposed source and solar power generating technologies, the record contains detailed information on the nature of technologies that is sufficient to support the conclusion that concentrating solar power facilities use equipment that is fundamentally different from the equipment at a pulverized coal-fired facility. AR 63.1 at Chapter 2 ("New Mexico Concentrating Solar Plant Feasibility"); AR 120.10 at Chapter 3 ("Final Report, Environmental Footprints and Costs of Coal-Based Integrated Gasification Combined Cycle and Pulverized Coal Technologies," EPA-430/R-06/006, July 2006.) Given the cursory nature of the Petitioner's public comment advocating inclusion of CSP in the BACT analysis for DREF, it was not clearly erroneous for the Region's response to reflect a proportionate degree of analysis backed by reports in the record.

On appeal, Glustrom's Petition for Review does nothing to rebut the conclusion that solar power facilities use fundamentally different equipment from a pulverized coal fired boiler. Instead, this Petition argues generally that EPA's policy against using the BACT analysis to redefine the proposed source is contrary to the Clean Air Act and that

Region 9 erred by misconstruing the purpose of the DREF. As discussed above, the Agency's interpretation that the BACT requirement is reasonably construed to stop short of requiring a fundamental redesign of the proposed source is a permissible reading of the statute that is well-established. Given the fundamental differences between the equipment used at a concentrating solar power facility and a pulverized coal facility, the Region's decision not to evaluate the former in detail in a BACT analysis for the latter was not clearly erroneous.

# B. Petitioners Have Not Demonstrated Clear Error in Region 9's Final NOx or SO<sub>2</sub> BACT Limits

The NGO Petition primarily challenges the *proposed* NOx and SO<sub>2</sub> BACT emissions limits. The only basis on which Petitioners actually challenge the Region's *final* NOx BACT permit limit of 0.0385 lbs/MMBtu (post-optimization) and SO<sub>2</sub> BACT limit of 0.06 lbs/MMBtu is by repeating arguments this Board has previously rejected regarding "maximum achievable" emissions rates. *See, e.g.*, NGO Supp. at 160, 169; *In Re Newmont Nevada Energy Investment, LLC,* 12 E.A.D. 429, 440-50 (EAB 2005) ("[A] permit issuer's rejection of a more stringent emissions limit based on the absence of data showing that the more stringent rate has been consistently achieved over time is not a per se violation of the BACT requirements."); *In Re Prairie State Generating Station Co.*, PSD Appeal No. 05-05, slip op. at 68-71 (EAB Aug. 24, 2006).

#### 1. Region 9 Properly Determined the BACT Limit for NOx

The NGO Petitioners seek remand of the NOx BACT emission limit based on the following arguments: (1) Region 9 did not cast its net wide enough before *proposing* the PSD permit; (2) Region 9 improperly considered data in responding to comments; and (3)

Region 9 failed to respond to comments regarding Trimble Unit 1. NGO Supp. at Section V.2. Additionally, the NGO Petitioners assert that it was incorrect for Region 9 to finalize the NOx BACT optimization plan without notice and comment, and that the NOx optimization plan allows increased emissions and delays DREF's compliance with BACT. NGO Supp. at Section V.3. These arguments fail to demonstrate clear error because Region 9 considered the relevant information bearing on BACT for NOx in its final permitting decision and established a NOx optimization plan that is consistent with prior decisions of the Board affirming subsequent adjustments to BACT limits.

#### a. Region 9's Failure to Propose A NOx BACT Emissions Limit Lower than 0.06 lbs/MMBtu Was Not Clearly Erroneous

Petitioners' argument that Region 9 should have considered more information (specifically actual rather than permitted emissions) before *proposing* the NOx BACT limit is wrong legally and factually. Legally, the Board is charged with reviewing the Agency's Response to Comments and its final, not proposed, permit decisions. See 40 C.F.R § 124.19, *Cf. In Re Indeck-Elwood LLC*, PSD Appeal No. 03-04, slip op. at 52-59 (EAB, Sept. 27, 2006), 13 E.A.D. \_\_ ("To allow Petitioners to raise this issue at this stage would undermine the important policy of providing for efficiency, predictability and finality in the permit process achieved by giving the permit issuer the opportunity of being the first to address any objections to the permit [citations omitted]."); *In Re Christian County Generating, LLC*, PSD Appeal No. 07-01, slip op. at 14-15 (EAB 2008). Petitioners do not cite precedent supporting Board review and remand of

*proposed* BACT limits.<sup>6</sup> The Board should deny this portion of the NGO Petition because review of Region 9's *proposed* BACT limit amounts to allowing Petitioners to simply reiterate their comments and serves no useful purpose at this stage of the proceedings. Petitioners, therefore, have not satisfied their burden of demonstrating clear error in Region 9's Response to Comments and *final* NOx BACT limit. *See, e.g., In Re Knauf, Fiberglass GmbH*, 8 E.A.D. at 136.

Factually, Petitioners are also incorrect that Region 9 did not have an adequate record to support *proposing* a NOx BACT limit of 0.06 lbs/MMBtu. Before proposing the NOx BACT limit of 0.06 lbs/MMbtu in July 2006, Region 9 completed a thorough analysis. AR 46 at 8-14. The administrative record supporting the proposed NOx BACT decision included emissions data from EPA's national coal workgroup spreadsheets as well as information in the DOE/NETL database and BACT determinations from permits that were challenged in EAB decisions (upholding 0.067 lbs/MMBtu as NOx BACT on 24 hour average<sup>7</sup>) or State administrative appeal decisions (upholding a NOx BACT limit of 0.06 lbs/MMBtu over 30 days<sup>8</sup>). AR 46 at 12-14 and attachments thereto. Even if the Board's scope of review included *proposed* BACT limits, therefore, the Region's proposed NOx BACT limit of 0.06 lbs/MMbtu was adequately supported.<sup>9</sup> The fact that comments presented additional information fails to

 $<sup>^{6}</sup>$  The Board may review whether Region 9 complied with the procedural requirements, including preparing an administrative record, supporting its proposed or draft decision. See 40 CFR 124.6 – 124.9. The NGO Petition is not, however, contending that Region 9 failed to comply with those provisions. Rather the NGO Petition seeks to have the Board substitute its judgment for the Region's on the content of the proposed PSD permit.

<sup>&</sup>lt;sup>7</sup> In Re Newmont Nevada Energy Investment, LLC, 12 E.A.D. at 442 (EAB 2005)

<sup>&</sup>lt;sup>8</sup> In the Matter of an Air Pollution Control Construction Permit Issued to Wisconsin Public Service Corp. for the Construction and Operation of a 500 MW Pulverized Coal-Fired Power Plant Known as Weston Unit 4 in Marathon County, Wisconsin, Case IH-04-21 (AR 46.7).

<sup>&</sup>lt;sup>9</sup> Numerous pages of Petitioner's brief do nothing more than repeat comments submitted during the public comment period (e.g. that facilities outside of the U.S, such as Amagar

provide a factual basis demonstrating the administrative record for proposing the NOx BACT limit of 0.06 lbs/MMBtu was insufficient.

## b. Region 9's Consideration of Additional Information Submitted During the Comment Period Was Appropriate and the Final NOx BACT Limit of 0.0385 lbs/MMbtu Is Not Clearly Erroneous

Second, to extent the NGO Petitioners object to Region 9's Response to Comments and *final* NOx BACT limit of 0.0385 lbs/MMBtu, Petitioners repeat arguments already rejected by this Board about whether BACT is the "maximum achievable" or "maximum achieved" emissions limit. In a recent PSD permit appeal, the petitioners, as here, "contend[ed] instead that BACT requires the 'maximum degree of reduction' In Re Prairie State Generating Co., PSD Appeal No. 05-05, slip op. at 68 (EAB, Aug. 24, 2006). Based on precedent, this Board rejected the contention and upheld the permitting authority's discretion to consider performance variability, long term performance, and site-specific conditions in setting a BACT limit. Id. at 68-73 ("We have also explained that 'the underlying principle of all of these cases is that PSD permit limits are not necessarily a direct translation of the lowest emissions rate that has been achieved by a particular technology at another facility, but that those limits must also reflect consideration of any practical difficulties associated with using the control technology." quoting In re Cardinal FG Co., 12 E.A.D. 153 (EAB 2005)). See also In Re Newmont Nevada Energy Inv., LLC, 12 E.A.D. 429 (EAB 2005).

in Denmark, have achieved lower NOx emission rates). EPA fully responded to all of these comments (AR 120 at 69-70). Because Petitioners do not explain how Region 9's response was inadequate, these assertions are insfficient to meet the burden of establishing clear error. See, e.g., Pet. at 164-165.

Permitting authorities must exercise discretion to establish BACT limits at levels that will allow the permittee to achieve compliance continuously and over the expected lifetime of the facility. In re: Masonite Corporation 5 E.A.D. at 560-561. As explained more fully in Section 3 below, Region 9's Response to Comments and final NOx BACT emissions limit of 0.0385 lbs/MMbtu was amply supported and fully complies with BACT. Petitioners do not appear to dispute that the lowest operating NOx data of 0.035 lbs/MMBtu was collected only over a 2 year period at W.A. Parish Units 5 - 8.<sup>10</sup> Following discussions with DREC, Region 9 exercised its discretion to set the NOx BACT limit 10% higher than the 0.035 lbs/MMBtu.<sup>11</sup> This adjustment reflected Region 9's professional technical judgment that a "safety factor" was justified by the extremely low NOx BACT emission rate and unknown impacts the coal from the Navajo Mine (sub-bituminous but not Powder River Basin) might have on the SCR performance. Accordingly, Region 9's Response to Comments contained a discussion about the ash content of the coal from the Navajo Mine, which Petitioners have not refuted.<sup>12</sup> AR 120 at 60-61. See In Re Prairie State Generating Co., PSD Appeal No. 05-05, slip op. (EAB, Aug. 24, 2006) (coal characteristics are a proper consideration in the BACT analysis). Rather, Petitioners cherry-pick data and facts. For example, the NGO Petitioners claim that the chart on page 60 of the Response to Comments establishes that the DREF NOx BACT limit should be lower. However, Petitioners fail to recognize that the ash content of the fuel for all four units in the chart was approximately two to four times lower than

<sup>&</sup>lt;sup>10</sup> The NGO Petitioners calculate several lower emissions rates but do not submit any data or other support showing such rates have been achieved. NGO Pet. at 169.

<sup>&</sup>lt;sup>11</sup> Petitioners over-reach in stating: "The definition of BACT does not include setting emission limits based on deals between the regulated entity and the regulator." The permitting authority is not prohibited from discussing technical issues with the applicant.

<sup>&</sup>lt;sup>12</sup> This concern was also raised by DREC during a conference call in which we discussed lowering the NOx limits and including a margin of compliance. See AR 88 at 1-3.

the ash content for the fuel that will be used at the DREF. See AR 120.24 at 6. In response to the Petitioners' comments, EPA cited literature analyzing the high potential for ash to cause deposition, blinding, and plugging problems in SCR systems. AR 120 at 60-61. Thus, Region 9 properly evaluated a variety of conditions and parameters to establish a BACT emissions rate for DREF that can be achieved continuously.<sup>13</sup> Petitioners do not explain how the Response to Comments was inadequate and instead simply repeat that the existence of a lower emission rate, regardless of duration or site specific conditions, establishes BACT. Compare AR 120 at 41-43 to NGO Supp. at 166. This Board has rejected that argument repeatedly and should do so again here by denying the Petition for Review of the final NOx BACT limit. *In re Newmont Nevada Energy Inv., LLC,* 12 E.A.D. 429 (EAB 2005).

### c. Region 9 Did Not Fail to Respond to Comments Regarding NOx Emissions Performance at Trimble Unit 1

Petitioners eventually claim Region 9's final NOx BACT limit of 0.0385 lbs/MMbtu (post-optimization) must be remanded because EPA's Response to Comments failed to address actual emissions data from the Trimble County Generating Station Unit 1. *See* NGO Supp. at 156, 169. However, this issue was not raised during the public comment period, and has not, therefore, been preserved for review. *See In Re: BP Cherry Point*, 12 E.A.D. 209 (EAB 2005).

<sup>&</sup>lt;sup>13</sup> EPA acknowledges that we do not need decades worth of data to consider it reliable for establishing BACT. However, we also recognize that "it is wholly appropriate for the permit issuer to consider, as part of the BACT analysis, the extent to which the available data demonstrate whether the emissions rate at issue has been achieved by other facilities over a *long term*." *In Re Newmont Nevada Inv., LLC*, 12 E.A.D. at 447 (EAB 2005) [emphasis added].

Petitioners provided EPA with limited information about Trimble Unit 1 (and many other topics) during a meeting early in the permitting process, in 2005. *See* NGO Supp. at 161, AR 25 at 4. However, the comments submitted by the Petitioners during the comment period, to which EPA responded at length, were limited in scope to a discussion of Trimble Unit 2. *See* AR 66 at 40; AR 67 at PDF page 35. Thus, since Petitioners comments did not specifically assert during the public comment period that it was erroneous for EPA not to use the data for Trimble Unit 1 that Petitioners had provided earlier, their allegation of error on this point should not be heard by the Board.

That being said, Region 9's Response to Comments did consider NOx emissions rates from lower-emitting units than Trimble Unit 1 that were identified in public comments (i.e., Units 5 through 8 at the W.A. Parish facility). The Trimble Unit 1 emissions in the Petitioners' 2005 summary are equal to or higher than the emissions listed for the W.A. Parish facility. Thus, there is nothing in the record to suggest that the outcome of the final permitting decision would be any different had the Region also considered the Trimble Unit 1 data. For all of these reasons, the Petition should be denied as to this issue.

### 2. The NOx Optimization Plan is a Logical Outgrowth of the Comments on the Proposed Permit and Represents NOx BACT

The "NOx optimization plan" established in Condition IX.E of the final DREF permit is not clearly erroneous. NGO Supp. at 170-174. Petitioners have not demonstrated that the NOx optimization plan deviates from parameters set by the Board in previous cases upholding similar approaches, that Region 9 was compelled to reopen the comment period to allow Petitioners to comment on Region 9's effort to lower the

NOx limit in response to their comments, or that the optimization plan itself is not supported by the record.

### a. The Board Has Previously Upheld BACT Optimization Plans With Characteristics Similar to the One Developed by Region 9 for the DREF permit.

Conspicuously absent from Petitioners' criticism of the DREF's NOx optimization plan is any reference to this Board's precedent in upholding such provisions. Recently, the Board rejected a challenge to a PM<sub>10</sub> BACT emissions limit that consisted of a range of rates and a process for finalizing a single rate after testing and reporting. The Board summarized: "On two prior occasions, we have sustained a permitting authority's decision to issue a permit containing BACT limits that were subject to adjustment based on post-construction performance data." In Re Prairie State Generating Co., PSD Appeal No. 05-05, slip op. at 111 (EAB, Aug. 24, 2006), citing In Re AES Puerto Rico, L.P., 8 E.A.D. 324, 348-50 (EAB 1999); In Re Hadson Power 14, 4 E.A.D. 258 (EAB 1992). The Board rejected the objection in *Prairie State* that such provisions "violate[d] the pre-construction nature of PSD permitting requirements." Id. See also In Re Indeck Niles Energy Center, PSD Appeal No. 04-01, slip op. at 17-18, Unpublished Order (EAB Sept. 30, 2004). Petitioners' assertion here that the NOx optimization plan delays compliance with BACT rings equally hollow. In AES Puerto *Rico*, the Board upheld the permitting authority's decision to set a low BACT emissions limit but allow for it to be increased based on operating data. In Re AES Puerto Rico, L.P., 8 E.A.D. at 348-50 (EAB 1999). Relying on its decision in Hadson, the Board reasoned: "Both cases involve a situation where the permitting authority was faced with some uncertainty as to what emission limit was achievable. In the circumstances of this

case, as in *Hadson Power*, the use of an adjustable emissions limit, constrained by certain parameters, and backed by a worst case air quality analysis, is a reasonable approach." *Id.* at 349.

DREF's NOx optimization plan satisfies these factors. There is uncertainty regarding the achievability of the final NOx BACT limit of 0.0385 lbs/MMBtu, there are ample enforceable constraints in the final permit (including notice and comment if the limit is increased), and DREF's modeling was based on its proposed permit limit of 0.06 lbs/MMBtu. AR 12 at 6-3 (PDF page 74).

An optimization plan of this nature complies with BACT because it promotes the establishment of the lowest achievable limit for DREF. BACT limits must be "achievable for such facility." 42 U.S.C. § 7479(3). Given the uncertainty in the record concerning the achievability of the lower limit, the principal alternative supported by the record would be a NOx limit at the higher level that is clearly "achievable" with no opportunity for adjustment to a lower limit if a lower level proves achievable after construction. Petitioners' suggested alternative of establishing the lower limit with no reservation of the power to adjust it would overlook the uncertainty over achievability of the lower limit and risk creating a permit condition that is unachievable after the source is constructed. Since the facility must be designed and built to meet an achievable level of emissions, it is sensible to begin with the level that is more certain to be achievable and provide for downward adjustment once it is verified that the source can in fact achieve a lower limit after it is constructed. Including an optimization plan as an express condition of the permit is thus an effective way to establish the lowest achievable limit in the face of uncertainty ..

The NGO Petitioners claim that the NOx optimization plan is unlawful because it delays the application of BACT for at least five years, and possibly indefinitely. NGO Supp. at 173. As explained above, yet unmentioned in the Petition, this Board has already declined to hold that an adjustable BACT emissions limit is erroneous as a matter of law. *See, e.g., In Re AES Puerto Rico L.P.,* 8 E.A.D. at 349 (EAB 1999).

Petitioners, therefore, resort to challenging the Region's factual basis for the adjustable NOx optimization plan. Petitioners have not met their burden of demonstrating that the NOx optimization plan defeats BACT. Importantly, the final permit clearly states that DREF must be designed to achieve a NOx emission rate of 0.035 lb/MMBtu. AR 122 at Condition IX.E.2.a. The final permit requires the Permittee to develop a catalyst management plan, which not only sets forth the measures that will be taken to maintain the system and optimize its performance, but also specifies the records that will be maintained so EPA can determine if the measures in the plan are being followed and DREF's actual operating parameters and conditions are consistent with the catalyst design conditions. AR 122 at Condition IX.E.2.b. Thus, there is an explicit connection between designing the plant to achieve an emission rate of 0.035 lb/MMBtu and operating the plant during the optimization period consistent with that design. To strengthen that connection, the final DREF permit requires that in order to seek an adjustment of the post-optimization period limits, the Permittee must submit CEMS data, the records specified in the catalyst maintenance plan, and a report which analyzes a) the extent to which the initial catalyst design conditions differ from actual operating parameters and conditions during the NOx Optimization Period, b) the impact such differences have on the ability to comply with the post-optimization NOx emission

limits, and c) actions taken to mitigate such impacts. The NOx optimization plan requires DREF to make every effort possible to achieve the post-optimization period emission rates even during the first five years. Thus, the actual emissions during that five year period are likely to be consistent with post-optimization BACT limit of 0.0385 lbs/MMBtu.

Finally, Petitioners' claim, again based only on speculation, is that the postoptimization period limits will likely never apply.<sup>14</sup> NGO Supp. at 173. This Board has indicated that review should not be granted based merely on speculation. *In Re Three Mountain Power*, 10 E.A.D. 39, 58 (EAB 2001).

### b. Region 9 Did Not Commit Clear Error By Failing to Reopen the Public Comment Period to Seek Comment on the NOx Optimization Plan

The NGO Petitioners also seek remand and vacatur of the entire DREF PSD Permit based on their lack of opportunity to comment on the NOx Optimization Plan. NGO Supp. at 170. Petitioners cite no authority for this proposition and their assertions fail to establish clear error.

Permitting authorities are allowed to make changes in the final permit conditions in responding to comments, provided those changes are adequately specified in the final decision. 40 C.F.R. 124.17(a)(1); *See also In Re Zion Energy LLC*, 9 E.A.D. 701, 707-09 (EAB 2001) (finalizing more stringent emissions limits in response to comments than were proposed); *In Re Metcalf Energy Center*, PSD Appeal Nos. 01-07 and 01-08, slip op. at 27-28 (EAB 2001), *aff'd Santa Teresa Citizens Action Group v. EPA*, No. 01-

<sup>&</sup>lt;sup>14</sup> If the Petitioners are as sure as they say that the 0.0385 lb/MMBtu limit is achievable at the DREF, then the Permittee will not be able to justify a higher limit under the stringent requirements of the optimization plan and there will be no reason to modify the permit before the end of the optimization period.

71611, 2002 U.S. App. Lexis 24011 (9<sup>th</sup> Cir. Nov. 21, 2002) ("A permitting agency is expressly authorized to compile new materials in an effort to respond to comments submitted on a draft permit. 40 C.F.R. § 124.17(b)"); *see also In Re: Conoco Phillips Company*, PSD Appeal No. 07-02, slip op. (EAB, June 2, 2008) (remanding for permitting authority to specify changes made to the final permit).

The regulations provide the permitting authority with discretion to determine if re-noticing is appropriate. 40 C.F.R. §124.14(b) provides: "If any data, information or arguments submitted during the public comment period, including information or arguments required under section 124.13, appear to raise substantial new questions concerning a permit, the Regional Administrator *may* take one of the following actions [to reopen the comment period]"(emphasis added). The Board affords the permitting authority deference in determining when to reopen the comment period. *Metcalf*, slip op. at 28 ("'The Board has long acknowledged the deferential nature of this standard'," quoting *NE Hub*, 7 E.A.D. at 85).

Region 9's decision not to reopen the DREF PSD Permit for additional comment on the NOx optimization plan and final permit was not clearly erroneous. Region 9 reasonably proposed a NOx BACT limit of 0.06 lbs/MMBtu in July 2006. The Region received voluminous comments and data on the proposed limit. Region 9 evaluated the data, contacted state permitting authorities and also contacted DREC to determine the feasibility of lowering the NOx BACT limit in the final PSD permit based on the sitespecific conditions and fuel at DREF. The record for the final NOx BACT limit demonstrates that DREC had substantial uncertainty whether it could meet the very stringent final BACT limit of 0.0385 lbs/MMBtu, which will depend on a number of

variables in operating the control device and the coal characteristics. Therefore, Region 9 allowed DREF to have a 5-year optimization period. AR 120 at 60-63.

The Response to Comments fully explains the reasons that Region 9 lowered the NOx BACT limit in the final PSD permit and provided a period of optimization for DREF to tune its system to comply with the NOx BACT limit. AR 120 at 57-63. The NOx optimization process and final NOx BACT limit of 0.0385 lbs/MMBtu are significantly more stringent than the proposed NOx BACT limit of 0.06 lbs/MMBtu. Region 9 was permitted to add material to the Administrative Record in response to the comments submitting NOx operating data from W.A. Parrish Units 5 – 8 and the Region properly exercised its discretion not to seek additional comment.

#### c. Petitioners Do Not Demonstrate Error In The Region's Formulation of the Optimization Plan.

Petitioners' criticisms of the particulars of the optimization plan itself are based largely on speculation and not substantiated by the record. Rather than encourage purely speculative arguments, this Board requires a petitioner to demonstrate there was error. The closest the NGO Petitioners come to alleging error is their contention that 5 years for NOx optimization plan (based on an expected catalyst life cycle for SCR systems of 4 to 5 years) because Petitioners believe catalyst life is only 2 to 3 years. The NGO Petitioners do not submit any substantiation or evidence to show that catalyst life is shorter than determined by Region 9, and this is precisely the type of technical decision that should remain within the discretion of the permitting authority. *See In Re Tondu Energy Co.*, 9 E.A.D. 710, 725 (EAB 2001) ("By merely asserting his opinion that alternative technologies would be preferable unsubstantiated by any data, Mr. Collins falls far short of meeting that burden.") For these reasons, the Board should deny review.

The NGO Petitioners mistakenly claim that the NOx optimization plan makes the NOx BACT limit less stringent because the proposed permit contained a "lb/hr" emission limit with a 24-hour average which the final permit eliminated. Further, the NGO Petitioners state that the final permit is "less protective of public health and welfare after the optimization period because there is, effectively, no emission limit during periods of startup and shutdown." NGO Supp. at 171. The portions of this argument concerning startup and shutdown are addressed in detail.

During the optimization period, two "lb/hr" limits apply to startup and shutdown emissions as well as to steady state emissions – 378.5 lb/hr on a 365-day rolling average and 408 lb/hr on a 24-hr average. Following the NOx optimization period, there are also two applicable "lb/hr" limits (both of which apply during startup and shutdown and steady state operations) – 262.1 lb/hr on a 365-day rolling average, and 340.5 lb/hr on a 30-day rolling average. It is accurate that the second (post-optimization) set of limits does not include a 24-hr averaging period. But, the numerical value of the limit decreases by over *116 lb/hr* averaged on a 365-day rolling average (378.5 lbs to 262.1 lbs).

Similarly, the numerical lb/hr value for the shorter term 30-day average is 67 *lb/hr* lower than the pre-optimization 24-hr average. While the Petition argues the post-optimization limit is less stringent, Petitioners do so based only on speculation – not on any facts or data. Region 9 exercised its best technical judgment to set a significantly lower numerical NOx emission limit on a lb/hr and lbs/MMBtu basis, albeit over a longer

averaging time, in the final PSD permit. Petitioners have failed to submit any showing that doing so will result in higher emissions or is in any way clear error. Indeed, the assertion appears to rest on pure speculation. This Board has rejected speculation as a basis for granting review. *In Re Three Mountain Power*, 10 E.A.D. 39, 58 (EAB 2001).

As discussed in more detail in below, Region 9's final PSD permit also provided for more stringent NOx permit conditions during startup and shutdown operations by adding language requiring the SCR system to be operated in accordance with good engineering practice and the manufacturer's recommendations for minimizing NOx and ammonia emissions to the extent practicable.

The NGO Petitioners' additional contentions concerning the NOx optimization plan are equally mistaken. For example, Petitioners challenge the final permit condition which specifies the information DREF must provide to justify modifying the 0.0385 lbs/MMBtu limit, stating it only requires DREF to submit CEMS data in lb/MMBtu units. NGO Supp. at 171. However, Petitioners fault Region 9 without demonstrating how requiring emissions information in terms other than lbs/MMBtu would be relevant to the application the NOx optimization plan. Petitioners, therefore, have failed to meet the burden to demonstrate clear error and the argument again appears to rest solely on speculation. The Petitioners concerns about the enforceability of the limits derived through the optimization plan are unfounded. There nothing in this condition to prevent EPA from obtaining CEMS data in other units, such as lbs/hr, and the final PSD permit

requires DREF to record and retain its CEMS data for NOx.<sup>15</sup> Region 9, therefore, can easily obtain the NOx emissions data in lbs/hr.

# **3.** The Petitioners have Not Demonstrated Clear Error on EPA's Part in Establishing the Final SO<sub>2</sub> BACT Limits

Region 9 also clearly followed the top-down BACT process in establishing a SO<sub>2</sub> BACT limit of 0.06 lbs/MMBtu in the final DREF permit. Petitioners' two central complaints about Region 9's SO<sub>2</sub> BACT determination are that the Region did not evaluate sufficient data before *proposing* the SO<sub>2</sub> BACT limit (NGO Supp. at 174-176) and that the Response to Comments did not adequately consider removal efficiencies for the BACT control technology (NGO Supp. at 177-79).

## a. Region 9's Failure to Propose A SO<sub>2</sub> BACT Limit Lower Than 0.06 lbs/MMBtu Was Not Clearly Erroneous

For the same reasons discussed above, Petitioners are legally and factually incorrect in challenging Region 9's *proposed* SO<sub>2</sub> BACT limit. This Board is charged with reviewing final permit conditions and the permitting authorities' responses to comments. See 40 C.F.R. § 124.19, *Cf. In re: Indeck-Elwood LLC*, PSD Appeal No. 03-04, slip op. at 52-59 (EAB, Sept. 27, 2006) ("To allow Petitioners to raise this issue at this stage would undermine the important policy of providing for efficiency, predictability and finality in the permit process achieved by giving the permit issuer the

<sup>&</sup>lt;sup>15</sup> Conditions IX.E.3 and IX.E.4 state that continuous compliance with all limits specified in the conditions (including those specified in units of lb/hr) shall be demonstrated by continuously monitoring emissions using continuous emission monitors installed and operated pursuant to Condition IX.Q. Condition IX.R.1 further requires the permittee to maintain records of all continuous emissions monitoring system data for a period of at least five years. Finally, Condition V requires the Permittee to give EPA access to and allow EPA to copy any records required to be kept under the terms and conditions of the permit.

opportunity of being the first to address any objections to the permit [citations omitted].").

Factually, the administrative record on Region 9's proposed action nonetheless demonstrates that the proposed  $SO_2$  BACT limit was adequately supported. AR 46 at 15-19.

### b. Region 9's Response to Comments Concerning Removal Efficiencies in the SO<sub>2</sub> BACT Determination Was Not Clearly Erroneous.

Petitioners also contend that Region 9's final  $SO_2$  BACT determination and Response to Comments is erroneous because the Region failed to consider a 98% removal efficiency in the BACT analysis. NGO Supp. at 178. The administrative record supporting the final BACT determination and the Response to Comments demonstrates Petitioners are misrepresenting the Region's position and are incorrect.

Petitioners assert that the uncontrolled SO<sub>2</sub> emissions from the facility would be 1.84 lb/MMBtu and that a limit of 0.060 lb/MMBtu represents 96.7% control. NGO Supp. at 175. Region 9, however, fully responded to this comment. Region 9 explained that because the DREF would be a mine mouth plant with a dedicated fuel source, it is necessary to consider the variation in the fuel characteristics when setting an emission limit. Region 9 reviewed the fuel characteristics provided in Table 2-2 of the permit application to calculate DREF's worst case uncontrolled emission rate from the facility, which was 2.8 lb/MMBtu rather than 1.84 lbs/MMBtu. AR 120 at 55. The final SO<sub>2</sub> BACT rate of 0.060 lb/MMBtu represents a control efficiency of 100\*(2.8-.06)/2.8 = 97.9%, not 96.7%. Petitioners omit any discussion of the Region's Response to this

Comment in seeking review of this issue, despite the well-established standard of review before this Board. On this basis alone, review should be denied.

Moreover, the Petition fails to establish any reason why its calculated uncontrolled emission rate of 1.84 lbs/MMBtu is more appropriate for establishing the SO<sub>2</sub> BACT limit, particularly given the longstanding precedent upholding this Board's deference to the permitting authority's site-specific considerations to set a BACT rate allowing continuous compliance. *See, e.g., In Re Knauf Fiber Glass, GmbH,* 9 E.A.D. 1, 15 (EAB 2000) ("There is nothing inherently wrong with setting an emission limitation that takes into account a reasonable safety factor.")

The NGO Petitioners submitted comments stating that Chiyoda's bubbling jet reactor has consistently achieved greater than 99% SO<sub>2</sub> removal during long-term operation at the Shinko-Kobe power plant in Japan and that Region 9's BACT analysis was flawed because it failed to consider removal efficiencies greater than 98%. AR 66 at 42-43. To fully consider this comment, Region 9 contacted Kobe Steel, Ltd., the company that owns and operates the Shinko-Kobe plant, to determine their experience with the technology. In response to the Region's request for information, the manager of the Power Plant Technology Section stated that although the SO<sub>2</sub> removal efficiency never dropped below the guaranteed performance level, they experienced problems with the system's sulfur gas fan, which required them to shut down the plant for two days every two to three months for preventive maintenance. Region 9 explained in the Response to Comments that it does not believe it is reasonable to require the use of a technology with unresolved operational issues that require such frequent shutdowns of the plant. AR 120 at 49; see also AR 120.15. Petitioners attempt to downplay the gravity

of this issue by characterizing it as an excuse and by claiming that the issue has been resolved. NGO Supp. at 179. However, Petitioners fail to submit any evidence to substantiate the claim and continue simply to reiterate their previous comments rather than demonstrating error in Region 9's Response to Comments.

Finally, the NGO Petitioners take issue with Region 9's use of SO<sub>2</sub> emissions data in its Response to Comments by stating that the Region used the data to say that 99% control was not achievable. NGO Supp. at 179. Region 9 agrees that outlet data by itself cannot be used to determine the efficiency of a control device. However, the data remains useful. In their comments, the NGO Petitioners pointed to other facilities that use Chiyoda's bubbling jet reactor or another technology to achieve a high level of control. The recent emissions data obtained for those facilities shows that, control efficiency aside, the emissions from the DREF would be consistently lower than the emissions from the facilities identified by the Petitioners as models for DREF. AR 120 at 47-48, and 50. The data Region 9 gathered for the Response to Comments further underscores that the limits in the final DREF permit are BACT.

Petitioners have failed to demonstrate error in Region 9's Response to Comments and the Petition should be denied.

# C. The Permit Assures Compliance with BACT Emission Limits During Periods of Startup and Shutdown

The NGO Petition partially describes the legal standard under PSD that applies to emissions limits during start-up and shutdown but selectively omits relevant precedent. NGO Supp. at 187-88. The issue was recently examined by this Board in *Indeck.*, where the Board remanded the PSD permit for the permitting authority to justify its inclusion of

*non-numeric* limits during start-up and shut down of CFB boilers. *In Re Indeck-Elwood, LLC,* PSD Appeal No. 03-04, slip op. at 67-76 (EAB, Sept. 27, 2006). However, a month before deciding the *Indeck* petition, this Board upheld start-up and shutdown permit limits in *Prairie State* that are vastly more comparable to those in DREF's permit than the non-numeric limits at issue in *Indeck. In Re Prairie State Generating Co.*, PSD Appeal No. 05-05, slip op. at 113-18 (EAB, Aug. 24, 2006). This Board stated:

Instead, as noted above, the Permit specifically establishes 'secondary limits' which are also numeric limits, for these pollutants.... [Citation omitted]. These secondary "numeric BACT" limits are stated as pounds of the pollutant emitted each hour (i.e., lb/hour) based on a three-hour average and correspond to the heat in-put limit at the units' rated capacity. [citation omitted] As such, the secondary BACT limits were derived directly from the primary heat in-put "BACT limits" and do not authorize emissions greater than the primary limits would allow at the units' rated heat in-put capacity. Notably, Petitioners, who bear the burden of proving that IEPA's decision was clear error, have not suggested any other appropriate method for calculating or establishing an emissions limit for these pollutants during startup, shutdown and malfunction.

*Id.* at 117

As discussed in more detail below, DREF's startup and shutdown emissions limits are comparable and the Board's holding in *Prairie State* should settle the issue.

### 1. The Technical Justification for Condition IX.N.3 is Documented in the Permit Record

Region 9 always included numeric start-up and shutdown limits in the permit for the DREF. These limits were always and only expressed in terms of "lb/hr". The proposed PSD permit contained separate, higher lb/hr emission limits for the boilers during periods of startup and shutdown. AR 54 at 7. Region 9 received numerous comments criticizing the proposal to allow DREF to operate at higher lb/hr rates during start-up and shutdown periods. *See, e.g.*, AR 66 at 47-50. To respond, Region 9 engaged in technical discussions with DREF to determine if its boilers could be operated to meet the lb/hr BACT limits rather than the proposed higher lb/hr limits during periods of startup and shutdown. DREC confirmed that its boilers could meet the lb/hr BACT emission limits that applied during normal operation. However, DREF also requested Region 9 to clarify that lb/MMBtu limits would not apply during startup and shutdown. AR 86 at 1 and 5.

The technical reason that lb/MMBtu limits do not apply during startup and shutdown, as discussed in the Response to Comments, is that heat input (i.e. MMBtu) is lower and therefore "emissions from the boilers are greater relative to the heat input during startup and shutdown." AR 120 at 105. That is, the actual emissions (lbs or lbs/hr) are not higher but the heat input (MMBtu) is lower during startup and shutdown.

Contrary to the NGO Petitioners' unsupported assertions, Region 9 did not "exempt" DREF from BACT limits during start-up and shutdown. *See* NGO Supp. at 180. The issue is only whether there is an environmental or technical justification for imposing an emissions limit in units of "lb/MMBtu" when the boilers are operated at lower heat input rates. As fully explained in the Response to Comments, Region 9 there is no environmental or technical justification for the "lb/MMBTU" limit during low heat input periods.<sup>16</sup> AR 120 at 105. In the final DREF PSD Permit, Region 9 lowered the emissions limits in units of "lb/hr" during startup and shutdown and re-worded Condition IX.N.6 to clarify that the emission limits in units of "lb/MMBtu" do not apply to the emissions during startup and shutdown. AR 122, Condition IX.N.3. Region 9's

<sup>&</sup>lt;sup>16</sup> The emissions data from the W.A. Parish facility is consistent with this. Charts of the daily emissions data from units Parish units 5 through 8 are attached in AR 88 as file "2004 Daily Data.xls." Each pair of red squares in the charts marks the shutdown and eventual startup of the boilers. The significance of this data is that startup and shutdown emissions from these units are *not* appropriately measured in units of lb/MMBtu.

Response to Comments and the final permit condition complies with the requirement for BACT. *See In Re Prairie State Generating Co.*, PSD Appeal No. 05-05, slip op. at 117 (EAB, Aug. 24, 2006).

The Condition in the final DREF PSD Permit is more stringent, Region 9's Response to Comments was not erroneous, and the Petition should be denied.

# 2. The Lb/hr Mass Emission Limits in the Permit Applicable to Startup and Shutdown Emissions Are BACT

The NGO Petitioners' primary objection to the final DREF PSD Permit's start-up and shutdown limits appears to be one of nomenclature not emissions consequences. As discussed above, DREF is not *exempt* from start-up and shutdown emissions limits. Indeed, the final DREF permit decreased the amount of pollution DREF could emit during these periods. As Region 9 fully explained in the Response to Comments (AR 120 at 105), the lb/hr limits, which are derived from the lb/MMBtu limits, remain fully enforceable. For example, the SO<sub>2</sub> BACT limits in Condition IX.D.1 of the final permit are:

- a. 612 lb/hr, averaged over a 3-hour block period.
- b. 0.060 lb/MMBtu, averaged over a 24-hour block period.
- c. 378.5 lb/hr, averaged over a rolling 365-day period.

Inserting the 0.060 lb/MMBtu BACT limit from the final permit condition into a standard engineering equation<sup>17</sup> yields a value of 378.48 lb/hr, which was rounded to 378.5 lb/hr in the final DREF permit. The limit in Condition IX.D.1.a is averaged over a 3-hr period rather than a 24-hr period because in addition to the BACT requirement, there is also a 3-hr NAAQS for SO<sub>2</sub>. Given this very short averaging period driven by the SO<sub>2</sub> NAAQS,

<sup>17</sup> .06 
$$\frac{\text{lb}}{\text{MMBtu}}$$
 x 110,516,160  $\frac{\text{MMBtu}}{\text{yr}}$  x  $\frac{1 \text{ yr}}{8760 \text{ hr}}$  x  $\frac{1}{2 \text{ boilers}}$  = 378.45  $\frac{\text{lb}}{\text{hr}}$ 

it is usual and appropriate to allow a higher emission rate to compensate for short-term variability of the emissions and provide a margin of compliance. In this particular case, the application states, "For 3-hour averages, an SO<sub>2</sub> emission rate of 0.09 lb/MMBtu was assumed to account for short term variability." AR 12 at PDF page 86, Table 6-8a. Substituting 0.09 lb/MMBtu into a similar equation<sup>18</sup> yields the BACT limit of 612 lb/hr in Condition IX.D.1.a.<sup>19</sup> As Region 9's Response to Comments states: "The steady state [lb/hr] limits will apply at all times the emissions units are in operation and EPA will continue to require that the CEMS operating during all startup and shutdown events." AR 120 at 105. Thus, the NGO Petitioners' claim that the final permit exempts startup and shutdown emissions from compliance with BACT is incorrect and either ignores or seriously misrepresents Region 9's Response to Comments. Because the NGO Petitioners have failed to demonstrate clear error, the Petition should be denied.

### D. Region 9's Collateral Environmental Impacts Analysis in the BACT Determination Was Not Clearly Erroneous

In the top-down BACT analysis EPA considers the energy, environmental, and economic impacts – otherwise known as collateral impacts – of each BACT option at Step 4. Most of the NGO Petitioners' attempted criticism of Region 9's collateral impacts analysis, however, boils down to continuing to fault the Region for not including IGCC in Step 1 of the BACT analysis. *See* NGO Supp. at 113 (EPA's response to comments regarding the collateral impacts analysis "is based on the erroneous exclusion

<sup>&</sup>lt;sup>18</sup>  $.09 \frac{\text{lb}}{\text{MMBtu}} \ge 6,800 \frac{\text{MMBtu}}{\text{hr}} = 612 \frac{\text{lb}}{\text{hr}}$ ; here the approximate maximum heat input to the boiler (see AR 12 at 2-9) was used rather than annual average heat input (as in the equation above) also to account for the short averaging time.

<sup>&</sup>lt;sup>19</sup> Similar calculations can be performed to demonstrate that all of the lb/hr limits in the permit are derived from the respective lb/MMBtu BACT limits.

of IGCC from the BACT analysis"). As such, the NGO Petitioners provide extensive arguments about the perceived benefits of selecting IGCC over PC boilers in Step 1 for DREF. *See, e.g.,* NGO Supp. at 124 (the "relative advantages of IGCC over pulverized coal technology...are collateral environmental effects that EPA must consider"). The permitting authority, however, is not required to consider the collateral impacts of technologies eliminated in Step 1 because they fundamentally redesign the source. Because the NGO Petitioners do not show clear error in the Region's Response to Comments on the collateral impacts for the control technologies that were included in Step 1, the Petition should be denied.

Permitting authorities are not required to consider all control technologies at each step of the BACT analysis; the analysis proceeds only with those technologies that have not been excluded from consideration in Steps 1-2. *See generally Prairie State Generating Co.*, PSD Appeal No. 05-05, slip op. at 17 (EAB Aug. 24, 2006) (control technologies eliminated during step 1 and 2 of the BACT analysis "are eliminated from the BACT analysis as inapplicable or infeasible does not come back into consideration simply because the technology has positive (or perhaps less negative) collateral impacts. Since Petitioners have made no attempt to show error in the Region's analysis of the collateral impacts of the technologies that remained under consideration at Step 4 of the BACT analysis, this is sufficient to dispose of Petitioners' allegations of error with respect to the collateral impacts analysis for this permit.

To the extent the Board reaches the issue, the Petitioners have shown no error in Region 9's discussion of the scope of its collateral impacts analysis. NGO Petitioners

argue there is no language in the CAA limiting the collateral impacts analysis to local impacts (NGO Supp. at 117), but they fail to point to language requiring the collateral impacts analysis to look beyond local impacts. Given that the Agency adopted the Act's collateral impacts phrase in the PSD regulations without providing any additional guidance on how to conduct the collateral impacts analysis, Region 9 reasonably relied on the relevant statutory language, legislative history, EAB decisions, and EPA policies and permitting decisions to determine that its collateral impacts analysis should focus on local impacts. AR 120 at 31-32 (citing Senate Comm. On Environment And Public Works, A Legislative History of the Clean Air Act Amendments of 1977 (Comm. Print August 1978), vol. 6 at 4723-24; Memorandum from Gerald Emison, OAQPS Director entitled Implementation of North County PSD Remand (Sept. 22, 1987); In Re Interpower of New York, 5 E.A.D. 130 (EAB 1994); In Re Kawaihae Cogeneration *Project*, 7 E.A.D. 107 (EAB 1997)). The NGO Petitioners generally assert that Region 9's reliance on these decisions is "misplaced," but they give no specific reason why such support is inapplicable to the present case and instead fall back to the conclusion that the Region must address the CO<sub>2</sub> impacts of using IGCC. NGO Supp. at 118-119.<sup>20</sup> Thus, NGO Petitioners have failed to show clear error in Region 9's determination that prior

<sup>&</sup>lt;sup>20</sup> NGO Petitioners also incorrectly assert that EPA has stated greenhouse gas emissions should be considered in the collateral impacts analysis in a draft of EPA's 1990 *NSR Workshop Manual*. NGO Pet. at 115. NGO Petitioners fail to note that the Region already addressed this issue in responding to a similar comment they raised during the public comment period. At that time, the Region explained that EPA "never finalized the draft guidance cited by the commenters, and other drafts of that same document do not include the phrase 'greenhouse gas emissions' as an example of the type of environmental impact to be considered in the BACT analysis." AR 120 at 32, n.2, *citing* 

http://www.epa.gov/region07/programs/artd/air/nsr/nsrmemos/1990wman.pdf, at B49. As Petitioners have done nothing but re-assert their previous comment without showing how the Agency's previous response was "clearly erroneous or otherwise warrants review," review on this ground is not warranted. *In re Kawaihae Cogeneration Project*, 7 E.A.D. 107, 114 (EAB 1997); *see also In re BP Cherry Point*, 12 E.A.D. 209. 217 (EAB 2005).

EAB decisions and Agency policy justified limiting the collateral impacts analysis to local impacts.

The NGO Petitioners also incorrectly assert that Region 9's collateral impacts analysis is flawed because the Region failed to acknowledge that the impacts of global warming will be felt locally, reiterating late-filed comments on the overall impacts of global warming. NGO Supp. at 17-18. The NGO Petitioners' timely comments on considering  $CO_2$  impacts in the collateral impacts analysis did not mention any impacts, either general or specific, that would occur in the local area surrounding the DREF (AR 66 at 6-12), and the late-filed comments provide only a general list of global warming impacts, including one point on impacts in the "mountains of western North America," (AR 57 at 4). As with many of the Petitioners arguments, the Petitioners allegations of error on this point are based largely on speculation. Because the NGO Petitioners have failed to show any clear error in the Response to Comments (either timely or late-filed) regarding local area impacts, and also failed to provide specific contrary evidence in their present Petition, review should be denied. See Prairie State Generating Co., PSD Appeal No. 05-05, slip op. at 58-59 (EAB, Aug. 24, 2006) (finding that review is only warranted if petitioners can point to "any evidence, in the record or otherwise," to show the Board an "identified error [that] may alter the permitting decision").

The NGO Petitioners' claims on the collateral costs of anticipated carbon regulation are equally unfounded. Continuing to misrepresent the Region's Response to Comments, the NGO Petitioners wrongly assert that the "sole" reason the Region gave for not addressing the future collateral costs of carbon regulation was that the costs are too speculative. NGO Supp. at 119. In fact, the Response to Comments went beyond a

simple statement of speculation and explained that "the exact type of regulation – if any – that may be enacted is uncertain, making the economic costs that might be associated with it unascertainable." AR 120 at 32. Region 9 also noted that Congress had introduced numerous bills addressing emissions of  $CO_2$  but that none had passed. Id. In sum, given that the various proposals that NGO Petitioners' alluded to in their comments were not yet law and were not assured of becoming law in the future (and, in fact, have not yet become law), the Region reasonably concluded that it had no practical way of assessing which control mechanisms such future regulation might require or the costs that might be associated with implementing those mechanisms. Id. Accordingly, the Region concluded that without more specific information about the type of future CO<sub>2</sub> regulation and the costs associated with it, the Region could not undertake the type of economic analyses and technology comparisons that are at the heart of the BACT economic impacts analysis. Id.; See also In Re: Inter-Power of New York, 5 E.A.D. 130, 150 n.33 (EAB 1994); In Re: Columbia Gulf Transmission Co, 2 E.A.D. 824, 826 (Adm'r 1989). The NGO Petitioners have not demonstrated how the Region could have conducted the type of economic impacts analysis required in the BACT analysis without the specific type of information the Region identified as necessary in its Response to Comments.<sup>21</sup>

The NGO Petitioners' reliance on the decision in *Center for Biological Diversity v. National Highway Traffic Safety Administration*, 538 F.3d 1172 (9th Cir. 2008), is also misplaced because that case can also be distinguished from this one in an important way. In finding that the National Highway Traffic Safety Administration (NHTSA) acted arbitrarily and capriciously in failing to consider the economic costs and benefits of CO<sub>2</sub>

<sup>&</sup>lt;sup>21</sup> Providing additional, generalized information as in the NGO Petition does not meet the burden of demonstrating that the Region's Response to Comments regarding the speculative nature  $CO_2$  regulation and the costs associated with it was clearly erroneous.

reductions from motor vehicles in its fuel economy rule, the Ninth Circuit noted that NHTSA failed to substantively address the specific evidence in the record regarding the costs and benefits of CO<sub>2</sub> reductions, including specific monetary estimates, that was provided to NHTSA during the public comment period. *See id.* at 1199, 1199-201. In this case, the permit record did not contain and NGO Petitioners did not provide (either in their timely or late filed comments, or in the Petition) the type of evidence – such as published estimates of the cost differentials of collateral CO<sub>2</sub> reductions (if any) between the various technologies actually under consideration in the BACT analysis – relevant to Region 9's consideration of the collateral costs of future CO<sub>2</sub> regulation similar to that which commenters had provided NHTSA during their analysis.

Accordingly, NGO Petitioners have failed to show that Region 9 committed clear error in finding that it did not have the specific type of regulatory and cost information necessary to consider the alleged collateral economic impacts of some anticipated, but unknown, future regulation of CO<sub>2</sub> emissions. *See Prairie State Generating Co.*, PSD Appeal No. 05-05, slip op. at 58-59 (EAB, Aug. 24, 2006) (finding no clear error where petitioners failed to direct the Board to "any evidence, in the record or otherwise," showing that the permitting authority's concerns regarding certain aspects of the collateral impacts analysis were erroneous).

#### II. Region 9 Provided Reasoned Responses to Comments Advocating Construction of Concentrating Solar Power and Other Alternatives

The Region fulfilled its obligation under section 165(a)(2) of the Clean Air Act to consider and provide a reasoned response to Petitioner Glustrom's comments advocating that Region 9 only allow DREF to construct a concentrating solar power facility as an

alternative to pulverized coal fired boilers. Under section 165(a)(2) of the Act, the permitting authority is required to consider and respond to comments advocating alternatives to the proposed source, but the Agency is not required to conduct an independent analysis of available alternatives. *In re Prairie State Generating Co.*, PSD Appeal No. 05-05, slip op. at 39 (EAB Aug. 24, 2006); *In re: Deseret Power Electric Cooperative*, PSD Appeal No. 07-03, slip. op. at 21-22 EAB, Nov. 13, 2008). As reflected in these opinions, the Agency's interpretation regarding the nature of the PSD alternatives analysis is firmly grounded in the terms of the CAA.

The Glustrom Petition does not demonstrate clear error in Region 9's response to Ms. Glustrom's comments or the Region's decision not to require the application of concentrated solar power ("CSP") technology in this instance. *See* AR 120 at 222-223. This Petition relies on broad, speculative statements about the general potential for CSP, but fails to demonstrate that Region 9 clearly should have required CSP as an alternative for the facility proposed by the DREC.

Notably, in arguing that Region 9's Response to Comments incorrectly characterized her comment as being too vague and lacking specificity to DREF, Ms. Glustrom states:

"[T]he reports submitted with this petitioner's comments more than adequately demonstrate that:

- New Mexico is an excellent location for Concentrating Solar Power (e.g. page 10, WGA Solar Task Force Report found in Document # 0063.1)
- CSP plants were already (in 2006) being ordered by utilities in the hundreds of MW with some power purchase agreements ranging up to 900 MW (e.g. page 14, WGA Solar Task Force Report found in Document # 0063.1)
- CSP plants are commercially available and have demonstrated a track record of excellent performance for over 20 years. (e.g. page 14, WGA Solar Task Force Report found in Document # 0063.1)"

Glustrom Pet. at 12. Region 9 does not deny that New Mexico has solar resources, or that CSP plants may be built at sizes in the hundreds of megawatts. But in making such general statements, Ms. Glustrom does not demonstrate that a CSP plant should clearly be required as an alternative to the DREF given the source- and site-specific considerations that must be made to issue a PSD permit for a specific facility.

Ms. Glustrom goes on to acknowledge that CSP costs depend on a variety of factors. Rather than attempting to analyze any of those factors as they relate to the DREF, Petitioner merely states that Region 9 should have directed DREC to conduct such an analysis. Glustrom Pet. at 12. As discussed above, Region 9's is not obligated to conduct independent analysis or require that the permit applicant do so. Region 9 fulfilled the requirements of section 165(a)(2) of the Act by reviewing and responding to the information submitted in public comments.

Ms. Glustrom later concedes that only after a site-specific analysis is completed can it be determined whether the area around DREF is appropriate for CSP development. Glustrom Pet. at 19. Thus, by her own admission, Petitioner cannot demonstrate that the record clearly shows Region 9 should have required DREC to construct this alternative.

Ms. Glustrom criticizes Region 9's Response to Comments for rejecting the usefulness of the New Mexico CSP report she submitted during the comment period. She claims Region 9 erred in assuming that only CSP facilities of 50 MW in size are commercially viable and that CSP can only be developed in central and southern New Mexico. As Ms. Glustrom notes in her Petition, the New Mexico report was focused on 50 MW facilities, "because the New Mexico task force was studying the possibility of development of a 50 MW CSP facility in New Mexico that would be operational by

2007." Glustrom Pet. at 13. Regardless of the reason for its limited scope, given the lack of discussion on Ms. Glustrom's part in her comments and the differences between a 50 MW facility and a 1500 MW facility, Region 9's reasonably determined the report was not particularly relevant in this case.

In her Petition, Ms. Glustrom highlights for the first time specific information in the report by the Western Governors' Association which states Southern California Edison and San Diego Gas & Electric have signed power agreements for projects in the 300-500 MW range with a possible (but as yet uncertain) expansion up to 900 MW. However, even at their largest, these plants are considerably smaller than the 1500 MW power plant DREC seeks to construct. Petitioner does not demonstrate that a CSP facility which is anywhere from 20% to 60% of the size of the DREF would be a suitable alternative to the proposed source.

Ms. Glustrom's next claim is that Region 9's Response to Comments is flawed because the Region allegedly assumed the only sites available for CSP development were those considered in the New Mexico study. Glustrom Pet. at 15. However, Region 9's Response to Comments recognized that there is potential for utilizing solar resources in the southern portion of the Navajo Nation land within the New Mexico border. AR 120 at 222. The New Mexico report focused on completely different areas in the state and only noted that it is likely there are other viable sites not identified in the study. Given this and the lack of specificity in Ms. Glustrom's comments, EPA was not given information adequate to fully assess that potential. On appeal, Ms. Glustrom refers to the map on page 10 of the WGA report (AR 63.1 at PDF page 84), which she says "shows the excellent solar resource found in northwest New Mexico." This is another

generalization which says nothing about whether CSP is actually viable at the Desert Rock site or whether it must be considered in Step 1 of DREF's BACT analysis. This map does demonstrate that solar resources are highly variable by location and it underscores the Petitioner's flawed reasoning that the existence of a large solar plant at one location means a similar plant is feasible at another location.

Ms. Glustrom also argues that Region 9's Response to Comments should not rely on this Board's decision in *Prairie State* because the solar resources are greater in New Mexico than they are in Illinois. Glustrom Pet. at 21. However, like Prairie State's facility, DREF is intended to operate at full capacity for up to 24 hours per day and neither New Mexico nor Illinois receives sunlight at night. Although the WGA report submitted by Ms. Glustrom mentions a solar facility that had thermal storage capability and was able to produce electricity 24 hours per day, this was a 10 MW prototype facility and it is thus not a useful model in this case.

Finally, Ms. Glustrom claims Region 9's Response to Comment erred in stating that inadequate cost information was supplied. Glustrom Pet. at 22. Yet, Ms. Glustrom admits that none of the cost information she submitted was specific to the DREF location. She therefore did not demonstrate error on EPA's part.

Thus, the Glustrom Petition fails to demonstrate that the DREC should alternatively be required to construct a CSP facility in lieu of its proposed facility pursuant to CAA Section 165(a)(2). Therefore, the Board should not grant review on the basis of this Petition.

### III. The Air Quality Analysis In The Record Supports Region 9's Determination That the Source Will Not Cause or Contribute to a Violation of the NAAQS or PSD Increments

Under section 165(a)(3) of the CAA, a PSD permit cannot be issued unless the permit applicant demonstrates that emissions from the proposed source will not cause or contribute to a violation of the NAAQS or PSD increments. *See also*, 40 C.F.R. 52.21 (k). This requirement is fully-satisfied for the DREF permit, and Petitioners have failed to point to any clear error in Region 9's air quality analyses related to these demonstrations. These issues are technical and Petitioners therefore bear a heavy burden before this Board. Offering alternative theories or suggestions on technical issues is insufficient to meet this burden. *See In Re Peabody Western Coal Co.*, 12 E.A.D. 22, 33 (EAB 2005); *In Re BP Cherry Point*, 12 E.A.D. 209 (EAB 2005).

#### A. Region 9 Did Not Err In Assessing DREF'S Impact On Ozone Air Quality

The NGO and NM Petitioners mainly repeat arguments they made in comments on EPA's proposed approval of the PSD permit for DREF, adding a few criticisms of Region 9's Response to Comments. The NGO and NM Petitioners assert, as they did in their comments, that Region 9 relied on flawed analyses to conclude that DREF would not cause or contribute to a violation of the ozone NAAQS, specifically by using incorrect monitoring data, using a screening method known as "Scheffe Tables," and using the inputs to and results from the CAMx photochemical model. The NGO and NM Petitioners also criticize Region 9's characterization of a 2-4 ppb modeled ozone impact as "minimal." Petitioners have not demonstrated that Region 9's Response to Comments on these issues was inadequate. With respect to the Petitioners' request for a sourcespecific impact analysis, this type of analysis was already performed using the CAMx

model, as part of New Mexico's Early Action Compact ("EAC"), which EPA approved into New Mexico's SIP three years ago. *See* 70 FR 48,285 (Aug. 17, 2005); 40 C.F.R. § 52.1620(e). This modeling had already been accepted as adequate. EPA's Guideline on Air Quality Models (40 C.F.R. Part 51, App. W) allows Region 9 the flexibility to apply this modeling for a PSD permit ozone impact analysis. Region 9 determined that the projected impacts are small enough not to cause or contribute to a violation of the ozone NAAQS. In any case, given the inherently regional nature of ozone, the existing ozone concentrations in the Four Corners area are appropriately addressed in the context of New Mexico's State Implementation Plan for the area, and not in the context of a PSD permit.

Finally, for reasons discussed elsewhere in this brief, Region 9's use of an analysis in the Response to Comments does not automatically create an obligation for Region 9 to seek further public comment. EPA has discretion to determine whether to reopen the record and reasonably concluded that it was not warranted in this instance.

#### 1. Region 9's Reliance on Certain Ozone Impact Analysis Techniques Does Not Constitute Clear Error

# a. Ozone impact analysis was performed, and included representative monitoring data

The NGO Petitioners challenge the Response to Comments for purportedly implying that something less is required for analyzing ozone than for other air quality impacts. That characterization misrepresents Region 9's Response to Comments. Region 9 stated that "EPA does not require ozone modeling under PSD" (AR 120 at 125), but this does not mean that some kind of impact analysis is not required; modeling is only one kind of analysis. The record demonstrates that Region 9 relied on two analytical tools: the "VOC/NOx Point Source Screening Tables" (Richard D. Scheffe, September

1988 ("Scheffe Tables")), and New Mexico's EAC photochemical modeling (which is the type of modeling now being requested by the NGO Petitioners).

As stated in the Response to Comments, for scientific and practical reasons a different approach is needed for analyzing ozone modeling than the kind of analysis typically used for other pollutants. EPA has grappled with the issue of single source ozone impacts multiple times in the past two decades, but there has been no clear resolution of the associated regulatory and technical issues. As Region 9 noted in the Response to Comments, ozone is an inherently regional pollutant, the result of chemical reactions between emissions from many sources over a period of hours or days, and over a relatively large area. AR 120 at 124. Individual source impacts are generally within the range of "noise" of the model (i.e., imprecision in predicted concentration due to uncertainty in model inputs for emissions, chemistry, and meteorology). Region 9 also noted that the modeling should be considered illustrative of the magnitude of impacts from a large power plant rather than a precise estimate of the impacts from an individual source. AR 120 at 125. Thus, while it is possible to run models and predict impacts from individual point sources, the results are at best used as rough indicators of potential impact.

EPA does not have a recommended modeling approach for assessing the impact of an individual source on ozone. EPA's Guideline on Air Quality Models (40 C.F.R. Part 51, App. W), which is applicable to PSD permit modeling, reflects this understanding. Guideline §5.2.1(a) notes that "Simulation of ozone formation and transport is a highly complex and resource intensive exercise," and paragraph (c) states: "Choice of methods used to assess the impact of an individual source depends on the

nature of the source and its emissions. Thus, model users should consult with the Regional Office to determine the most suitable approach on a case-by-case basis." Under the Guideline, EPA has considerable discretion in selecting a method for assessing the ozone impact of individual sources. See *In re: Prairie State Generating Co.*, PSD Appeal No. 05-05, slip op. at 133 (EAB, Aug. 24, 2006). In practice, it is very rare for EPA to require ozone modeling, *per se*, for individual sources. AR 120 at 124.

Despite these important limitations to individual source ozone modeling, in this case, DREC performed ozone modeling which Region 9 determined was adequate based on the Agency's technical expertise. The NGO Petitioners have failed to demonstrate any error in using the Scheffe Tables and EAC photochemical modeling platform to evaluate potential impacts on regional ozone from DREF.

The NM Petitioner also argues that the DREF permit application did not include a required component of the air quality impact analysis -- either new monitored data for ambient ozone concentrations or existing data found by the permitting authority to be representative of the area of concern. While Region 9 did not require the collection of new ambient ozone data, as explained in the Ambient Air Quality Impact Report, the Region did determine that existing data collected at Farmington, NM, was regionally representative. AR 46 at 36. Region 9 also addressed this issue in the Response to Comments. AR 120 at 129. Petitioners have not demonstrated why this Response to Comment is in error or inadequate.

#### b. VOC/NOx Screening ("Scheffe") Tables

The NGO Petitioners allege that Region 9 relied on a "discredited" method for its Response to Comments on potential ozone impacts. The method was the "VOC/NOx

Point Source Screening Tables" (Richard D. Scheffe, September 1988), also known as the "Scheffe Tables." Petitioners have not established that the Scheffe Tables are discredited. Although using the Scheffe Tables lacks refinement, the results are well understood to be conservative (i.e., over-predict impacts), and the method continues to be used for PSD permitting. As Region 9 explained in its Response to Comments, Scheffe Tables are sometimes used in PSD permit applications to assess ozone impacts in the absence of other accepted techniques. AR 120 at 124. In this case Region 9 considered the Scheffe Tables and the additional EAC photochemical modeling information that DREC submitted. Both methods support Region 9's conclusion that DREF does not cause or contribute to a violation of the ozone NAAQS.

#### c. CAMx base ozone modeling in NM EAC

The NGO Petitioners also argue that EPA failed to adequately respond to comments that the ozone photochemical modeling for the EAC was flawed and should not be relied on for assessing DREF's ozone impacts. New Mexico performed photochemical modeling using the CAMx model to support its request for an "Early Action Compact" (EAC). In this modeling, New Mexico developed a "base case" and demonstrated that the CAMx model performed adequately compared to monitored ambient data for then-current conditions (2002, in this case). Projected future emissions were then supplied to the model to predict future ambient concentrations, and finally, an additional "sensitivity" model run simulated emissions from two power plants that have yet to be built, including the DREF (called "STEAG" at the time). Petitioners now contend that both the base case modeling and the sensitivity run were problematic. Petitioners also contend that evidence of current actual monitored ambient ozone

concentrations prove that the ozone modeling used as the basis for assessing DREF's ozone impact is unreliable. While specific monitored ambient concentrations were not supplied in the comments EPA received, EPA oversees the monitoring network, and is aware of high ambient ozone concentrations in the Four Corners Area, as summarized by the NM Petition. AR 57.9 at 3. The underlying issue of model adequacy was addressed in the Response to Comments. Region 9 noted the fact of high ozone levels in the Response to Comments (AR 120 at 123) and went on to cite the EAC modeling as part of the DREF ozone impact analysis, stating that "EPA believes the modeling should be considered as illustrative of the magnitude of impacts from a large power plant." AR 120 at 125.<sup>22</sup>

In sum, the Petitioners have not demonstrated that either the EAC base case or sensitivity modeling is incorrect or that the Region's reliance on EAC modeling in the Response to Comments constitutes error. Further, Petitioners have not met their burden to demonstrate that the ozone modeling was erroneous by merely citing high current monitored ozone data.

#### 2. EPA Reliance on Specific Application of Ozone Modeling to DREF Does Not Constitute Clear Error

The NGO Petitioners also repeat a number of the issues raised in their comments and addressed in the Response to Comments relating to the particular application of the

<sup>&</sup>lt;sup>22</sup> Petitioners have not carried their burden on the factual issue of whether monitored concentrations contradict the EAC modeling. The monitored 2006 design values cited by Petitioner (AR 57.9 at 3) were 71 ppb for Shiprock Substation and 69 ppb for Bloomfield. The monitored 2007 design values were 72 and 69 ppb for Shiprock Substation and Bloomfield, respectively; the corresponding 2007 predicted values from the EAC modeling were 72.87 and 74.78 ppb. The 69 ppb EAC modeling value relied upon by Region 9 in the Response to Comments was the overall maximum projected for 2012, when DREF might be in operation. Real-world meteorological conditions vary from year to year, whereas those conditions are necessarily held constant at the 2002 parameters in the model. The higher monitored values in 2007 could simply be due to the meteorology being more conducive to ozone formation than was the 2002 meteorology used in the modeling.

ozone model to DREF. For example, NGO Petitioners contend the model inputs for DREF's emissions, location, and stack height were not sufficiently representative of DREF, that inappropriate modeled time periods were used, and that Region 9 unreasonably dismissed the impacts. EPA's Response to Comments explicitly addressed each of these issues, and concluded the model application to DREF was adequate, especially in light of the flexibility accorded EPA in handling a single source ozone impact assessment.

The Response to Comments acknowledged that some model inputs for DREF were different than the input values that became available after the EAC modeling was complete, but explained that these input differences do not affect the conclusion that DREF would not cause or contribute to a violation of the ozone NAAQS, given the regional nature of ozone formation and how it is handled in the model. AR 120 at 125-126. Region 9 also acknowledged that the time period modeled for the DREF "sensitivity run" was not chosen to reflect DREF's maximum potential impact; but Region 9 determined that the modeled period was appropriate, as it was suitable for assessing DREF's contribution to total maximum ozone concentrations, which is what is compared to the NAAQS. AR 120 at 126. For reasons discussed elsewhere in this brief, EPA has considerable discretion in methods for assessing the ozone impact of individual sources. The NGO Petitioners have not demonstrated that Region 9's Response was clearly erroneous and the Petition should be denied.

#### 3. EPA Conclusion of No Significant DREF Ozone Impact Does Not Constitute Clear Error

Finally, the NGS and New Mexico Petitioners allege that, given the high monitored ozone concentrations in the area, EPA was unreasonable in dismissing a 2 - 4 ppb ozone impact from DREF as "minimal", so that EPA's Response to Comments about DREF's ozone impact was inadequate.<sup>23</sup>

As Region 9 explained in the Response to Comments (AR 120 at 124), there is no regulatory criterion for determining what constitutes a significant ozone impact, so EPA has some discretion in deciding what impact level is significant. Various "ppb" ozone levels have been used for various purposes, e.g. for deciding which source areas should be included within a nonattainment area, or subject to a nationwide rule, as in the examples cited by Petitioners. Region 9 concluded that the projected 4 ppb impact of DREF was not significant, given that this impact does not coincide in time or space with the maximum predicted maximum ozone concentration. AR 120 at 124. Region 9's concluding statement that "the potential addition of two power plants to the area would have a minimal effect on [maximum] 8-hr ozone concentrations" remains true.<sup>24</sup>

Since ozone is an inherently regional, multi-source pollutant, for scientific and practical reasons, it is best dealt with on a regional basis. Region 9 acknowledges the severity of the ozone situation in the Four Corners Area, where ambient ozone concentrations are around the 0.075 ppm NAAQS level, despite a slight downward trend

<sup>&</sup>lt;sup>23</sup> EPA's use of the word "minimal" should be read in context. The word "minimal" appears in the original ozone EAC modeling report at pp. 4-3, cited in footnote 12 of the Response to Comments. AR 120 at 125. The report also states that there is only a small area of detectable impact, in a location that does not correspond to high overall ozone concentrations.

<sup>&</sup>lt;sup>24</sup> EPA also stated that even if the 4 ppb coincided in time and space with the 2012 predicted ozone maximum of 69 ppb, the result would be below the NAAQS. This statement remains true, but this simple addition is too conservative if applied to the 2007 monitored design value of 72 ppb. The conclusion that a 4 ppb impact would not cause or contribute to a NAAQS violation remains correct.

over the past three years. This situation, caused by thousands of existing sources over a large area, cannot be resolved within the context of the DREF PSD permit. If the area is redesignated to nonattainment for the ozone NAAQS, a new planning and modeling effort will be required. Region 9's Response to Comments was not clearly erroneous in determining that a 2 - 4 ppb modeled impact did not justify denying the PSD permit for the DREF.

#### 4. Region 9 Determined That DREF Will Not Cause or Contribute to a Violation of the Current Ozone NAAQS

On March 27, 2008, EPA lowered its NAAQS for ozone from 0.08 to 0.075 ppm.<sup>25</sup> 73 Fed. Reg. 16436 (Mar. 27, 2008). The revised standard became effective on May 27, 2008. The NGO Petitioners and New Mexico contend Region 9 failed to analyze whether DREF's emissions will cause or contribute to a violation of the new standard. In addition, the Petitioners argue that the San Juan County area near the DREF will be classified as a non-attainment area in the future, which triggers more stringent requirements including the non-attainment NSR permitting program.

However, in its responses to late-filed public comments, Region 9 fully evaluated whether DREF's emissions would cause or contribute to a violation of the ozone NAAQS that became effective in May 2008. AR 121 at 7. The Region relied on the New Mexico Environment Department's ozone modeling that shows an ozone maximum of 69 ppb, and an estimated impact of approximately 4 ppb from the Desert Rock facility. The sum of these numbers, 73 ppb, is less than new standard of 75 ppb. Thus, under the ozone NAAQS that became effective in May 2008, the best and most reliable available data

<sup>&</sup>lt;sup>25</sup> Equivalent to 80 ppb and 75 ppb, except for numerical rounding conventions. *Compare* 40 CFR § 50.10 and Appendix I *with* 40 CFR § 50.15 and Appendix P.

demonstrates that the DREF would not cause or contribute to an ozone NAAQS violation. Moreover, Region 9's analysis is conservative because the modeled ozone maximum (69 ppb) and the DREF impact (4 ppb) do not occur at the same location so adding these two values together overestimates the impact.

San Juan County is currently classified as an ozone attainment area. EPA has received a preliminary indication from the New Mexico Environment Department (NMED) that if a relatively new monitor in San Juan County (specifically, the one located in Blanco, NM) yields elevated ozone data in 2008, San Juan County will have the three years of data that are necessary to re-classify the area to nonattainment status. However, whether that will actually happen remains uncertain. Furthermore, EPA has yet to promulgate rules to implement the new ozone standard. Even if New Mexico eventually submits a recommendation to classify San Juan County as non-attainment, EPA must go through the full rulemaking process to designate the area nonattainment. Until such a designation is made, EPA must continue to permit sources according to the designation that is currently in place.

Thus, Petitioners have not met their burden of showing that Region 9's ozone air quality analysis was clearly erroneous.

# B. The DREF PSD Permit Satisfies CAA Section 165(a) For PM<sub>2.5</sub> By Using PM<sub>10</sub> As a Surrogate, and Comments Have Not Demonstrated That Region 9 Committed Clear Error

The NGO Petitioners and New Mexico argue that Region 9 failed to demonstrate that DREF will not cause or contribute to a violation of the  $PM_{2.5}$  NAAQS under the terms of the final permit, as required under section 165(a)(3) of the CAA. *See, e.g.*, NGO Pet. at 206-208; NM Supp. at 56. These arguments do not demonstrate clear error

because Region 9 was not precluded as a matter of law from using a  $PM_{10}$  analysis as a surrogate to demonstrate compliance with the  $PM_{2.5}$  requirement. Furthermore, Petitioners arguments that  $PM_{10}$  is generally not an adequate surrogate for  $PM_{2.5}$  are insufficient to demonstrate that Region 9 erred in this particular instance by relying upon the Agency's prior conclusion that  $PM_{10}$  can serve as an adequate surrogate for PSD permitting analysis. *See, e.g.*, NGO Supp. at 208-215; NM Supp. at 60-62.

EPA originally promulgated a NAAQS for PM<sub>2.5</sub> on July 18, 1997 and recently revised it on October 17, 2006, with an effective date of December 18, 2006. 71 Fed. Reg. 61144 (Oct. 17, 2006). Since 1997, EPA has interpreted its PSD regulations to allow a demonstration of compliance with the  $PM_{10}$  NAAQS to be used as a surrogate to show compliance with the PM<sub>2.5</sub> NAAQS in permitting reviews. See Interim Implementation of the New Source Review Requirements for PM<sub>2.5</sub>, John Seitz, Director, Office of Air Quality Planning and Standards, EPA (Oct. 23, 1997) (AR 120.30). The original policy was based on the lack of analytical tools for PM<sub>2.5</sub> and was extended due to the absence of certain implementing regulations for applying the PSD and nonattainment NSR permitting program to PM<sub>2.5</sub>. See Implementation of New Source Review Requirements in PM-2.5 Nonattainment Areas, Stephen D. Page, Director, Office of Air Quality Planning and Standards (Apr. 5, 2005) [AR 120.31]. EPA published the implementing regulations on May 16, 2008, and they took effect on July 15, 2008. 73 Fed. Reg. 28321 (May 16, 2008). Promulgation of the regulations ended the surrogate policy on July 15, 2008, for federal PSD permit applications that are determined to be complete after this date. However, for any permit applications that were submitted prior to July 15, 2008 and determined to be complete as submitted, these implementing

regulations include a grandfathering provision that authorizes permitting authorities to continue to use a  $PM_{10}$  analysis to satisfy the  $PM_{2.5}$  requirement in accordance with EPA's prior interpretation. 40 C.F.R. 52.21(i)(1)(xi) (published in 73 Fed. Reg. 28,349-350 (May 16, 2008)). Because Region 9 determined the DREF permit application submitted prior to July 2008 was complete, Region 9 was authorized to use a  $PM_{10}$ analysis as a surrogate to meet the  $PM_{2.5}$  requirement for the DREF PSD permit.

Where  $PM_{10}$  is an adequate surrogate, the requirement of section 165(a)(3) of the Act can be satisfied for  $PM_{2.5}$  through the fulfillment of these requirements for  $PM_{10}$ . *In Re Prairie State Generating Co.*, PSD Appeal No. 05-05, slip op. at 130 (EAB, Aug. 24, 2006) (upholding use of  $PM_{10}$  as a surrogate for  $PM_{2.5}$ ); *In Re BP Cherry Point LLP*, 12 E.A.D. 209, 221-23 (EAB 2005). Thus, the central issue before the Board here is whether Petitioners met their burden to show that Region 9's use of  $PM_{10}$  as a surrogate for  $PM_{2.5}$  for DREF's permit is clear error. Whether  $PM_{10}$  is an adequate surrogate for  $PM_{2.5}$  is the kind of technical judgment to which this Board accords broad deference to the permitting authority. *In Re Prairie State Generating Co.*, PSD Appeal No. 05-05, slip op. at 129 (EAB, Aug. 24, 2006) ("A party wishing to obtain a grant of review of a technical issue must carry a heavy burden of convincing us that the permitting authority's technical analysis is erroneous.") (*citing In Re Ash Grove Cement Co.*, 7 E.A.D. 387, 403 (EAB 1997).

Petitioners make the argument that  $PM_{10}$  cannot be a surrogate for  $PM_{2.5}$  only in a generic fashion: they argue that  $PM_{10}$  cannot be an adequate surrogate based on general statements about differences between  $PM_{10}$  and  $PM_{2.5}$  with respect to sources, formation, transport, health effects and controls. *See, e.g.*, NGO Supp. at 213. Petitioners, however,

fail to present any permit-specific information or arguments showing that the use of  $PM_{10}$  as a surrogate for  $PM_{2.5}$  is erroneous for the DREF permit in particular.

Petitioners' generic arguments are insufficient to demonstrate clear error. The *Prairie State* and *Cherry Point* decisions demonstrate there is no general rule that  $PM_{10}$  cannot serve as a surrogate for  $PM_{2.5}$  simply because of the general differences between  $PM_{10}$  and  $PM_{2.5}$  that Petitioners rely on. Moreover, this Board has repeatedly cautioned Petitioners that arguments based primarily on speculation cannot support review. *In Re Three Mountain Power LLC*, 10 E.A.D. 39, 58 (EAB 2001) ("The Board will not overturn a permit provision based on speculative arguments"); *see also In re: Texas Indus., Inc.,* 2 E.A.D. 277, 279 (Adm'r 1986)("Less speculation and more empirical evidence is needed by petitioner to justify review of the permit."). Thus, Petitioners seeking to obtain review of the use of  $PM_{10}$  as a surrogate for the DREF permit must present permit-specific information and arguments showing that the use of  $PM_{10}$  as a surrogate in this instance is clear error. Petitioners here have not done that, and so their Petitions for review on this issue should be denied.

Petitioners make a number of additional arguments that warrant a response. For example, the NGO Petitioners argue that the CAA Section 168(b)'s grandfathering provision (which is applicable to pre-1977 construction) bars grandfathering that would apply to the DREF permit. NGO Supp. at 208. As an initial point, this argument is a challenge to an aspect of EPA's May 2008 implementing rule, 73 Fed. Reg. 28321 (May 16, 2008). Thus, it may be made to the D.C. Circuit as part of the pending challenge to that regulation (*NRDC v. EPA*, No. 08-1250 (D.C. Cir. filed 2008), but it is not properly presented here. *See, e.g., In Re USGen New England, Inc., Brayton Point Station*, 11

E.A.D. 525, 556 (EAB 2004) ("[T]]he Board has concluded that there is an especially strong presumption against entertaining a challenge to the validity of a regulation subject to a preclusive judicial review provision.") (internal quotation marks and citations omitted); *In Re Echevarria*, 5 E.A.D. 626, 634-35 (EAB 1994) (CAA 307(b)(1) creates the sole avenue for judicial review of CAA regulations, and "ordinarily, the only way for a regulation that is subject to a preclusive review provision to be invalidated is by a court in accordance with the terms of the preclusive review provision.") Moreover, the premise of Petitioners' contention here is that the grandfathering provision in CAA Section 168(b) should be read to preclude all other grandfathering under the CAA. CAA Section 168(b) does not support that premise. CAA Section 168(b) provides for certain grandfathering, but says nothing – either expressly or implicitly -- about whether other grandfathering may occur under the statute or by regulation.

The NGO Petitioners also assert that  $PM_{10}$  surrogacy will allow new major sources of  $PM_{2.5}$  to be exempt from permitting requirements. NGO Supp. at 209. This assertion is incorrect because all direct  $PM_{2.5}$  emitted from a source also counts as  $PM_{10}$ . Thus, any new source that emits  $PM_{2.5}$  in amounts above the applicable threshold stated in the statutory definition of "major emitting facility" (CAA Section 169) will necessarily emit  $PM_{10}$  in amounts above the statutory threshold, and so will trigger the PSD permitting requirements.

The NGO Petitioners further argue that because the pending litigation of EPA's May 2008 implementation rule includes a challenge to the grandfathering provision, the Board should either remand the DREF permit or stay the permit and hold this case until the D.C. Circuit resolves the issue in that case. Part of the premise of this argument is that

a judicial remand of the May 2008 implementation rule will require the Board to remand the DREF PSD permit. NGO Supp. at 212. This is not correct. A ruling (or the lack of one) from the D.C. Circuit on the implementation rule will not impact this Board's review. If the rule is upheld by the D.C. Circuit, the issue before the Board is still whether petitioners have shown that the use of  $PM_{10}$  surrogacy here was clear error. If the implementation rule is vacated by the D.C. Circuit, this remedy would reinstate the pre-existing  $PM_{10}$  surrogacy policy for all federal PSD permits (because the grandfather provision is part of the provision that ended the surrogate policy for federal PSD permits), and so the issue here (again) will be whether petitioners have shown that the use of  $PM_{10}$  surrogacy here was clear error. In short, whether the D.C. Circuit grants or rejects the challenge to the implementation rule, or delays taking action on it, the issue before the Board is the same: whether the use of  $PM_{10}$  surrogacy here was clear error.

The New Mexico Petition asserts that recent state decisions "confirm that  $PM_{10}$  modeling is no longer an acceptable surrogate for  $PM_{2.5}$ ," citing a Georgia state court decision and a Montana state ALJ's decision. NM Supp. at 62. As an initial point, these state decisions cannot serve as precedent that overturns this Board's prior decisions denying challenges to the use of  $PM_{10}$  as a surrogate for  $PM_{2.5}$ . At most, these decisions might contain reasoning that this Board would consider persuasive on a particular set of facts. In fact, however, these decisions do not support New Mexico's argument. First, the Georgia trial court expressly stated that it was not reaching any general decision about the use of  $PM_{10}$  as a surrogate for  $PM_{2.5}$ , and said that the issue before it was whether the permitting agency could ignore actual  $PM_{2.5}$  modeling evidence showing the  $PM_{2.5}$  NAAQS would be violated. *Friends of the Chattahoochee, Inc. v. Couch*, Docket No.

2008CV146398, at 11-12 (GA Sup. Ct. 2008) (N.M. Ex. V) ("The issue here is not whether  $PM_{10}$  surrogate modeling may or may not be relevant, or even sufficient in some circumstances. Rather, the issue in this case is whether the decision-maker can ignore relevant evidence on the issue of whether or not the NAAQS for  $PM_{2.5}$  will actually be violated."). Not surprisingly, the Georgia court held that the permitting authority's use of the  $PM_{10}$  surrogate was improper when it ignored specific information presented to it showing that the  $PM_{2.5}$  NAAQS would be violated. *Friends of the Chattahoochee*, Docket No. 2008CV146398, at 12 (N.M. Ex. V). Thus, the Georgia court's holding does not undermine EPA's position: that using  $PM_{10}$  as a surrogate for  $PM_{2.5}$  can be appropriate in the absence of information that the NAAQS will be violated. Here, Petitioners have not presented modeling data or any other specific information showing that the  $PM_{2.5}$  NAAQS will be violated or otherwise showing that the  $PM_{10}$  surrogacy is clear error.

Second, with respect to the Montana ALJ decision (Southern Montana Elec., Case No. BER 2007-07 AQ (May 30, 2008) (N.M. Ex. W), the New Mexico Petition cites to page 25 of that decision, but does not explain how the findings on this page support its broad statement that  $PM_{10}$  is no longer an acceptable surrogate for  $PM_{2.5}$ . The Montana ALJ's decision overall reveals many findings that are fact-specific to the application of  $PM_{10}$  surrogacy at the Montana facility, and it is correct that the ALJ concluded that using  $PM_{10}$  as a surrogate for  $PM_{2.5}$  was not acceptable based on the findings in the case before it. But Petitioners do not cite to these findings or explain how any of them are instructive or relevant to DREF.

Neither of the state decisions cited by Petitioners held that  $PM_{10}$  could never be used as a surrogate for  $PM_{2.5}$  in demonstrating compliance with PSD permitting criteria. In both cases, the trial judge and ALJ evaluated the merits of using  $PM_{10}$  as a surrogate on the basis of the record before the permitting authority. Thus, instead of supporting Petitioners view that  $PM_{10}$  is on its face an inadequate surrogate for  $PM_{2.5}$ , these cases are consistent with the view expressed here that Petitioners must make a more specific showing that Region 9 erred by using  $PM_{10}$  as a surrogate for  $PM_{2.5}$  in this instance.

For the above reasons, Petitioners have failed to shoulder their burden to demonstrate any clear error in Region 9's Response to Comments and these portions of the NGO and New Mexico Petitions must be denied.

# C. Region 9's Determinations Regarding the SO<sub>2</sub> Increment Analysis and Modeling Were Correct and Fully Supported.

The NGO Petitioners argue that Region 9's Response to Comments did not address Petitioner's perceived deficiencies in the SO<sub>2</sub> increment analysis and did not provide a sufficient explanation of modeling methodologies. Petitioners further contend the public should have had an additional opportunity to comment on those methodologies. NGO Supp. at 237-251. In summary, these portions of the Petition should be denied because Petitioners' claims about the SO<sub>2</sub> increment analysis and the sufficiency of Region 9's explanation of the modeling methodologies essentially repeat comments on the proposed DREF permit without providing any indication how these comments were not adequately addressed in the Response to Comments. *See* AR 120 at 131-139. Petitioners also fail to provide compelling reasons for the Region to provide an additional opportunity for public comment.

#### 1. Region 9's SO2 Increment Analysis Is Correct and Fully Supported by the Administrative Record and Response to Comments.

The NGO Petition recites at length the rather convoluted regulatory history of the Four Corners Power Plant (FCPP) and the San Juan Generating Station (SJGS), repeating much from the comments these Petitioners submitted on the proposed DREF permit. The purpose of that exercise is to establish FCPP's and SJGS' emissions at the time of the applicable baseline date for setting the SO2 baseline concentration, beyond which only an insignificant amount of deterioration is allowed under the PSD regulations. Emissions at the time of the baseline date generally do not count toward consumption of the PSD increment. Emissions changes after that date are used in determining the degree of air quality deterioration relative to the baseline in the following way. Emissions increases after the baseline date "consume" increment, thus reducing the remaining amount of deterioration allowed. Emissions decreases after that date may "expand" the available increment, increasing the remaining amount of deterioration allowed under PSD. *See* 40 C.F.R. 52.21(b)(13).

Region 9 evaluated the analysis in DREF's permit application of the baseline concentration together with increment consumption and expansion before proposing the DREF permit. AR 46 at 41-42. Region 9 considered comments and then rechecked the analysis in responding to the voluminous comments on the issue. As with much of the NGO Petition, the bulk of the argument on this issue merely repeats the comments on the proposed DREF permit without explaining how the Region's Response to Comments is inadequate. Therefore, review should be denied on this basis alone.

The NGO Petitioners preferentially select the lowest emission limits mentioned anywhere and omit any other emissions limits, without evaluating whether the limits were legally binding. Region 9's Response to Comments explained that the legally binding emissions limits are the correct limits to establish baseline and increment consumption or expansion.<sup>26</sup> In proposing the DREF permit, Region 9 relied on the SO<sub>2</sub> emissions limits that the Region determined were the most factually and legally correct. As described in the Response to Comments, Region 9 reasonably chose emissions rates for FCPP and SJGS that were contained in federally approved or promulgated regulatory instruments. *See* AR 120 at 132. The NGO Petitioners have failed to demonstrate that decision was erroneous.

As fully explained in Region 9's Response to Comments, EPA approved SO<sub>2</sub> emissions limits for FCPP into the New Mexico SIP in 1981 (46 Fed. Reg. 43152-43154, Aug. 27, 1981). EPA approved those SO<sub>2</sub> limits for FCPP as being sufficient for the area to attain the SO<sub>2</sub> NAAQS. FCPP's SO<sub>2</sub> emissions reductions beyond those limits, however, *expand* the available increment. *See* 40 C.F.R. § 52.21(c). While the NGO Petitioners may disagree with EPA policies for calculating increment expansion for additional reductions in the area (specifically reductions from FCPP and SJGS Petitioners allege were necessary for NAAQS compliance), Petitioners have not met their burden to demonstrate how Region 9's calculation of increment expansion was erroneous or otherwise constitutes an abuse of discretion or raises an important policy consideration.

For modeling the  $SO_2$  increment, the annual average limits in the 1981 approved New Mexico SIP were scaled up to higher emission rates appropriate for the 3-hour

<sup>&</sup>lt;sup>26</sup> Some limits for FCPP imposed by New Mexico were rescinded, since the State does not have jurisdiction over the Navajo Nation lands on which FCPP is located. Some limits were mentioned in company letters as planned for the future. Some limits were subject to litigation, and later changed.

averaging time of the SO<sub>2</sub> NAAQS, by using a "peak-to-mean" ratio that reflects the short-term variability of emissions. Region 9 found that the 1981 approved New Mexico SIP is the best regulatory tool for establishing SO<sub>2</sub> baseline emissions. Nevertheless, in the Response to Comments, Region 9 evaluated an alternative method suggested by a commenter. AR 66 at 14-16 ("Review of the SO<sub>2</sub> PSD Increment Consumption Emission Inventory for the Desert Rock Prevention of Significant Deterioration Permit," November 9, 2006, Vicki Stamper).<sup>27</sup> Based on this comment, Region 9 performed additional modeling. As discussed fully in the Response to Comments, the additional modeling based on the commenters method for establishing the baseline concentration continued to show that DREF's SO<sub>2</sub> emissions would not violate the increment. AR 120 at 132. The NGO Petitioners have not shown that Region 9's Response to Comments was erroneous factually or legally, or that the permitting decision constitutes an important exercise of discretion or policy decision that this Board should review.

# 2. Region 9 Determinations Regarding Minor Source Baseline Dates Were Correct and Fully Supported by the Administrative Record and Response to Comments.

The NGO Petitioners contend that Region 9 should have been more explicit about minor source baseline dates<sup>28</sup> for the various areas and pollutants. When Region 9 proposed the DREF permit, the statement of basis explained that it was not necessary to precisely establish the minor source baseline dates for SO<sub>2</sub> because all of the SO<sub>2</sub>

<sup>&</sup>lt;sup>27</sup> The commenter pointed out that the original modeling by the State of New Mexico in support of the emissions limits in the 1981 approval were not scaled up by a "peak-to-mean" ratio, but rather applied New Mexico 602 rule limits directly, as if they were already short term emission limits. The conclusion is that for SJGS, the original New Mexico modeling showed that the emission rates required to meet the SO<sub>2</sub> NAAQS are lower than the rates used in the Sithe's analysis. Since only emissions reductions beyond what is required to meet the NAAQS are eligible for expanding the available PSD increment, this lowers the calculated baseline emissions, and reduces increment expansion created by subsequent emission reductions.

<sup>&</sup>lt;sup>28</sup> (A minor source baseline date is the date after emission changes at all sources, including minor ones, affect available PSD increment.)

emitting sources in the area were modeled at their full emission rates. AR 46 at 414-42. This means that the modeling did not eliminate any of the  $SO_2$  emitting sources from consuming increment on the grounds that those sources preceded a minor source baseline date. There were three exceptions to this methodology of full minor source inclusion: SJGS, FCPP, and Cameo. This methodology is a conservative analysis that is more protective of the PSD  $SO_2$  increment than is required. For this reason, and because the NGO Petitioners again fail to provide any reason in which Region 9's Response to Comments is erroneous, the Petition should be denied.

#### 3. The Region's Decisions Regarding Other SO<sub>2</sub> Modeling Issues Are Correct and Fully Supported by the Administrative Record and the Response to Comments.

To the extent the NGO Petitioners allege Region 9's modeling decisions were otherwise defective, the Response to Comments is fully responsive and the Petition has not demonstrated any error. For example, in the Response to Comments, Region 9 included in the increment analysis some previously omitted small sources in the area and on Navajo Nation land, and Region 9 corrected an erroneous emission rate for the Cameo power plant, a significant, though distant, source. Region 9 also examined alternative short-term emission rates submitted during the comment period (e.g. maximum vs. 99th percentile rates, current vs. future emissions from FCPP and SJGS). However, these additional refinements in response to the comments did not demonstrate that DREF's emissions would result in any violation of the SO<sub>2</sub> increment. While NGO Petitioners continue to allege that SO2 increment would be violated, the NGO Petitioners have failed to demonstrate any factual or legal error in Region 9's Response to Comments and final permit decision. Additionally, the NGO Petitioners allege that Region 9's various modeling scenarios were not adequately documented in Region 9's proposed DREF decision. It bears repeating here that this Board has consistently stated that it will review the final permitting decision and Response to Comments, not the proposed decision. Even if the proposed decision were under review, Region 9 included full information in the administrative record for the proposed DREF permit, including text documents describing the modeling procedures and their rationale, spreadsheets detailing the model emissions input calculations, and all the model input and output files. The Board should deny review of this issue.

#### 4. Region 9's NO<sub>2</sub> Increments Analysis Was Sufficient

Lastly, the NGO Petitioners assert that Region 9 improperly relied on draft Significant Impact Levels (SILs) to excuse DREF from performing a cumulative Class I NO2 increment analysis for DREF. Region 9 fully responded to this issue in the Response to Comments. AR 120 at 127. As discussed, Region 9 went significantly beyond relying on the draft SILs to determine that it was not necessary for issuing this permit to perform a cumulative Class I increment analysis. Region 9's consideration of the emissions levels specified in the draft SILs was one factor in the determination. Region 9's Response to Comments also indicated that the commenters had not provided any factual support showing the NO<sub>2</sub> increment is threatened in this area and that DREF's emissions had been modeled to have a very small impact confined to an area within a few kilometers of the DREF's project site. Region 9 considered these several factors in its analysis, as fully described in the Response to Comments. Petitioners have failed to demonstrate clear error and that there is an exercise of discretion or important policy

consideration that should be reviewed. *See also, In re: Prairie State Generating Company*, PSD Appeal No. 05-05, Slip. op. at 140-144 (EAB 2006) (discussing the permissibility of using SILs in PSD permit reviews).

#### IV. Region 9 Did Not Commit Clear Error Regarding Potential Impacts to Visibility in Class I Areas from DREF

The NGO Petitioners, New Mexico Petitioner and *amicus curiae* NPCA contend that Region 9's Responses to Comments on potential Class I area visibility issues is clearly erroneous. These arguments rely on misrepresenting several key facts in the Administrative Record. In addition, Petitioners fail to provide any citation to generally comparable facts in this Board's decision on *Prairie State*. As discussed in more detail below, Region 9 did not "arbitrarily" reject Federal Land Managers' "adverse impact findings" and the "mitigation agreement" was hardly "undisclosed." *See* NGO Supp. at 215-16 NM Supp. at 64-65; NPCA Amicus Brief.

The NGO Petitioners base their claims of clear error on five grounds: (1) Region 9 arbitrarily rejected the FLMs letters regarding adverse impact; (2) Region 9 failed to require a cumulative visibility analysis; (3) Region 9 failed to "disclose" the mitigation agreement during public comment; (4) Region 9 failed to explain the relevance of the mitigation agreement; and (5) Region 9's regional haze analysis was incorrect. NGO Pet. at 228. NPCA and New Mexico Petitioner assert that the NPS made an "adverse impact finding" in the comment letter that it submitted after Region 9 proposed to approve the PSD permit. NPCA and New Mexico Petitioner also challenge the NPS's judgment that the SO<sub>2</sub> mitigation provisions Region 9 included in the final DREF PSD permit will address any potential visibility problems.

#### A. The Region Fully Responded to FLMs Comments Regarding a Potential Adverse Impact Finding

There is no question that DREC performed significant modeling, with full participation by Region 9 and the FLMs to predict impacts on Class I area visibility. AR 120 at 141-142. Nor is there any dispute that some of the modeling predicted some visibility extinction in some of the numerous surrounding Class I areas. See AR 120 at 147. The FLMs had copies of DREC's PSD permit application and became full participants in the modeling in 2004. AR 120 at 141. Subsequently, the FLMs, EPA and DREC held regular conference calls and DREC submitted many updates to the modeling in response to requests from the FLMs, including a substantial amount of information in 2006. AR 120 at 141. In 2005, EPA and DREC attended meetings in the FLMs Colorado office to review modeling issues. AR 28. The Class I area visibility modeling efforts stretched over 2 years prior to Region 9's proposal to approve the permit in July 2006. *See, e.g.*, AR 42 at 2.

In March 2006, Region 9 was satisfied with the modeling results and satisfied that the emissions from DREF would not adversely impact visibility in Class I areas. Being mindful of the prescriptive procedures in the regulations regarding adverse impact findings, on March 24, 2006, Region 9 advised the FLMs that it intended to propose the PSD permit 30 or more days later. Region 9 provided this notice specifically to allow the FLMs to submit an analysis supporting an adverse impact finding to us, which the Region could then accept or reject in the course of issuing public notice of the proposed action. AR 39. *See also* 40 C.F.R. 52.21(p). On April 26, 2006, the USFS sent Region 9 a letter stating, without support or explanation, that DREF may have a potential adverse impact on visibility if Region 9 did not incorporate into the permit the terms of a publicly

available "mitigation agreement" between DREF and Navajo Nation. The USFS did not provide any analysis supporting its claim about a potential adverse impact on visibility. USFS did not provide any data regarding visibility impacts, and did not identify which specific portions of the massive amount of modeling information supported its statement. Thus, the USFS did not provide Region 9 with any basis to evaluate the unsupported and unexplained conclusion in the April 26, 2006 letter. Region 9, therefore, rationally concluded that the USFS April 2006 letter failed to meet the requirement at 40 C.F.R. 52.21(p)(3) to provide an analysis showing an adverse impact ("The Administrator shall consider any analysis performed by the Federal land manager, provided within 30 days of the notification required by paragraph (p)(1) of this section, that shows that a proposed new major stationary source or major modification may have an adverse impact on visibility in any Federal Class I area."). Region 9 subsequently issued its public notice proposing to approve the DREF permit in July 2006.

The NPS submitted comments and some visibility analysis to Region 9 on October 26, 2006, near the end of the public comment period. AR 120.8. Because the NPS did not submit the analysis until after Region 9 had proposed the permit, the Region could not comply with the applicable statutory and regulatory requirements concerning how to consider and address adverse impact findings before issuing the draft permit and were not required by the regulations to re-propose the permit on this basis. *See* 40 C.F.R. 52.21(p).

Thus, the core issues are whether Region 9 erred in (1) no treating the NPS October 2006 letter submitted during the comment period as an "adverse impact finding" that required Region 9 to do more than respond to the NPS letter as a comment, and (2)

not treating the USFS's April 2006 letter as a document providing sufficient "analysis" to trigger the regulatory requirements of 40 C.F.R. 52.21(p). Finally, as discussed in Section 4 below, Region 9 largely satisfied the FLMs' concerns by including the SO<sub>2</sub> portion of the Mitigation Agreement in the final DREF PSD Permit. AR 120 at 140-144. Other parts of the mitigation agreement had no apparent connection to visibility impacts.

As to the first issue – was Region 9 required to do more than provide an adequate Response to the NPS' comment letter -- this Board's holding in *Prairie State* is dispositive. In *Prairie State*, which this Board decided during the 2006 DREF 90-day public comment period for the DREF permit, the FLMs had "communicated concerns" to the permitting authority about adverse impacts before the permit was proposed, but failed to submit any analysis until the public comment period. *In Re Prairie State Co.*, PSD Appeal No. 05-05, slip op. at 151 (EAB, Aug. 24, 2006). Rejecting an implication that the FLM's comments compelled another round of public notice, this Board stated:

We specifically reject Petitioners' implied contention that the adequacy of the February 2004 notice must be judged based upon the information subsequently provided by the FLM as part of its May 14, 2004 letter setting forth the FLM's adverse impact determination. We hold instead that where, as here, the permit issuer provided notice to the FLM that complies with 40 C.F.R. 52.21(p)(1), and the FLM did not make an adverse impact determination and provide such determination to the permit issuer in the time frame specified in 40 C.F.R. 52.21(p)(3), the regulations do not require the permit issuer to subsequently provide a new notice to the public when the FLM issues a later adverse impact finding. The Petitioners' argument would lead to delay in the permitting proceedings that is neither contemplated nor countenanced by the regulations. [note omitted]

*Id.* at 152-53. Therefore, to the extent that Petitioners are implying Region 9 erred because it did not respond to the NPS October 2006 comment letter by beginning another round of public comment, this Board has spoken to the issue.

The only distinction in this case is that USFS submitted a letter to Region 9 on April 26, 2006, before the Region had proposed the DREF permit, which raises the second issue, whether that letter constituted an adverse impact determination. It did not because the USFS's letter contained only a conclusory statement, without supporting data or specific information. It contained nothing that EPA could have used to determine whether there was an adverse impact. Without such information, EPA had no proceed differently than it had in the draft permit. Because the letter did not satisfy the requirement to submit an analysis triggering the regulatory requirements in 40 C.F.R. 52.21(p), the Board should reject the Petitioners' argument that Region 9 clearly in issuing based on the record before it.

In sum, the FLMs' letters to Region 9 triggered only a requirement for the Region to respond fully to the FLMs' comments. Region 9 did not commit clear error in failing to follow the specific procedures set forth in 40 C.F.R. 52.21(p) based on the April 2006 USFS letter. The NPS letter in October 2006 did not trigger a requirement for Region 9 to start a new round of public notice. Region 9 properly determined that it was not obligated either to comply with the 52.21(p) procedures based on the USFS's April 2006 letter or to re-notice the permit because of the NPS's October 2006 public comment letter. Thus, the sole issue is whether Petitioners and NPCA have demonstrated that Region 9's Response to Comments on this issue was clearly erroneous. As discussed in detail below, Petitioners and NPCA have failed to meet their burden of demonstrating Region 9's Response to Comments and its technical determinations regarding visibility in the Class I areas was clearly erroneous.

# B. Region 9's Decision Not To Conduct Cumulative Modeling In This Case Was Not Error

Petitioners allege EPA erroneously declined to perform a cumulative visibility assessment in this instance. This issue was raised during the public comment period, and addressed in Region 9's Response to Comments. AR. 120 at 146. The PSD regulations concerning visibility at 40 C.F.R. 52.21(p) require a visibility impact analysis for assessing adverse impacts on visibility, but do not explicitly state that such an assessment must include cumulative modeling in all cases. Although EPA has sometimes interpreted these regulations to call for a cumulative analysis, these interpretations do not preclude a permitting authority from conducting a screening analysis that leads to the conclusion that cumulative analysis is not necessary in a particular case to support the conclusion that a source will not adversely impact visibility.

Petitioners' allegations of error rest primarily on the policy of the FLMs as to when it is appropriate to model cumulative impacts on visibility. However, this policy has not been codified as a binding requirement in EPA's Part 52 regulations or any regulations of the Federal Land Managers that govern PSD permit review. Furthermore, Petitioners do not address Region 9's Response to Comments, which notes that the FLMs backed off their earlier request for cumulative analysis in this instance after the mitigation agreement was developed.

The Petitioners' also cite the Administrator's decision in *In re: Old Dominion Electric Cooperative*, 3 E.A.D. 779 (Adm'r 1992), which interpreted EPA's 1985 rules to call for an assessment of the cumulative visibility impacts of the PSD permit application against background visibility conditions. *See, id.* at 788 n. 24. However, this decision does not preclude a permitting authority from using a reasonable screening technique to

assess visibility impacts and concluding that a cumulative analysis is not needed in a particular case if a source-specific analysis is sufficient to demonstrate that the source will not adversely impact visibility. Despite the various conclusory allegations in the record that the source might adversely impact visibility, as noted in the Response to Comment, there was nothing in the record that contradicted Region 9's analysis of the visibility analysis or that gave Region 9 a basis to believe the source would have an adverse impacts on visibility. AR. 120 at 142. Petitioners have not demonstrated that this conclusion was clearly in error or that it would have been contradicted by a cumulative analysis.

# C. Region 9 Disclosed the Mitigation Agreement During the Public Comment Period

On May 15, 2007, the Navajo Nation and DREC signed a memorandum of understanding for the development of a voluntary air emissions reduction plan ("mitigation agreement"). AR 81. The NGO Petitioners contend that EPA failed to disclose this mitigation agreement. NGO Supp. at 230. On this point, Petitioners are factually incorrect. Although Region 9 was not a party during the negotiations and is not a party to the final mitigation agreement, the Region included a copy of the draft mitigation agreement in the Administrative Record for the proposed permit. AR 41. It is also obvious the NGO Petitioners obtained a copy of the draft mitigation agreement prior to submitting their comments because they included it as attachment 64 to their comment letter and referenced it at least 23 times in their public comments. The NGO Petitioners, in fact, state in their public comments that they obtained a copy of the mitigation agreement from EPA through a FOIA request. AR 66 at 78.

In response to the comments received from the FLMs and others, Region 9 incorporated the portion of the mitigation agreement relating to SO<sub>2</sub> emissions into the final PSD permit. See, for example, AR 120 at 140-144. The Board should therefore disregard the NGO Petitioners unfounded statements that Region 9 "failed to disclose" the mitigation agreement and deny the NGO Petitioners' request that the permit be remanded.

# **D.** Region 9 Did Not Commit Error By Incorporating the SO<sub>2</sub> Provisions of the Mitigation Agreement Into the Final PSD Permit

The NGO Petitioners next argue that Region 9 erred by relying on the provisions of the mitigation agreement to "remed[y] the adverse impact finding" and "obviate[] the need for a cumulative visibility analysis." NGO Supp. at 231-32. Petitioners have factually misrepresented Region 9's position and ignored the Response to Comments. Then, after misrepresenting Region 9's position and ignoring its Response, the NGO Petitioners fault the Region for not having a record to support the misrepresented position.

Region 9's response to the public comments was quite clear as to the reason for incorporating provisions from the mitigation agreement into the final PSD permit. The response states:

As discussed elsewhere in this document, EPA *does not agree* that an analysis has been presented showing that there may be an adverse impact, *so there is no need to show that the proposed mitigation remedies such an impact*. As also discussed elsewhere, EPA also has no basis to question the Federal Land Managers' judgment that the mitigation would be sufficient to avoid any risk of adverse impact. (emphasis added)

AR 120 at 148-49. In other words, Region 9 incorporated the  $SO_2$  portion of the mitigation agreement as a reasonable response to the FLMs comments – not to remedy a potential adverse impact.

Similarly, Region 9 did not rely on the mitigation agreement for any purposes related to cumulative visibility modeling. Rather, Region 9 concluded that such modeling was not necessary in this case regardless of the mitigation agreement. AR 120 at 146.<sup>29</sup>

Petitioners have not only failed to carry the burden to demonstrate clear error on this technical issue, they have failed to faithfully represent Region 9's position in the Response to Comments. For both reasons, this portion of the Petition should be denied.

#### E. Region 9 Did Not Rely on the Regional Haze Modeling In Issuing the DREF PSD Permit

The NGO Petitioners also contend that Region 9's reliance on a regional haze analysis improperly supported the permitting decision. NGO Supp. at 233. Region 9,

however, did not rely on a regional haze analysis in making its final permit decision

because such an analysis is not required by the PSD regulations. The Region's Response

to Comments states:

whether cumulative modeling was required.

EPA did not rely on this analysis [citation omitted] for the proposed approval of the DREF permit application. The supplemental regional haze analysis performed by [DREF] was optional; there is no requirement to show regional haze reasonable progress in a PSD permit....

AR 120 at 149. Region 9 notes further that in promulgating the Regional Haze Rule, EPA recognized regional haze is not a single-source issue. *See American Corn Growers* 

v. EPA, 291 F.3d 1, 11 (DC Cir. 2002) citing EPA's Responses to Significant Comments

<sup>&</sup>lt;sup>29</sup> The NGO Petition quotes the Response to Comments, which specifically refers to the FLMs' opinions on cumulative modeling. Region 9 did not rely on the Mitigation Agreement for any of its decisions about

("allowing localized air quality increases in the short-term due to the emissions from major new sources subject to PSD is not inconsistent with the regional haze program"). This Board should deny the NGO Petitioners' assertions that Region 9 erred in failing to include Regional Haze requirements in making its determination on DREF's PSD Permit.

## V. Region 9 Did Not Commit Clear Error In Responding to Comments on the Additional Impacts Analysis

Region 9 completed an additional impacts analysis meeting the requirements of 40 C.F.R. 52.21(o) of the regulations and Section 165(e)(3) of the CAA before proposing the DREF permit. AR 46 at 43-45. The NGO Petitioners accuse Region 9 of doing what these Petitioners themselves do in their supplemental brief -- conflating and confusing the PSD requirement to conduct a soils and vegetation analysis as required by 40 C.F.R. 52.21(o) with the Region's independent ESA compliance obligation. NGO Supp. at 276. The section of the Response to Comments referenced on pages 275-76 of the NGO Petitioners supplement brief makes no mention of the additional impacts analysis under section 52.21(o). *See* AR 120 at 169. Nor does this comment response indicate that EPA is expecting the BIA to complete the PSD soils and vegetation analysis. AR 120 at 168-172. Thus, the NGO Petitioner's attempt to use the Response to Comments on the ESA obligation to attack the adequacy of the additional impacts analysis does not demonstrate clear error.

NGO Petitioners misread a portion of the Board's opinion in *In Re Indeck-Elwood*, PSD Appeal No. 03-04, slip op. (EAB, Sept. 27, 2006). That opinion did not hold that an ESA consultation must be completed in order to meet the requirements of section 52.21(o) of the PSD regulations or section 165(e)(3) of the CAA. In addressing

the relationship of the ESA and PSD permitting requirements under the CAA, the Board observed that "the documents generated during the ESA consultation process may be instructive in the context of the permitting agency's decision." *Id.* at 114. The Board also recognized that a permitting Agency is not precluded from "relying upon ESA-related materials in making PSD determinations (e.g. soil and vegetation analysis)." *Id.* at 114, 116 n. 159. But this falls far short of holding that ESA documents are required to be completed to comply with the PSD soils and vegetation analysis requirement found in 40 C.F.R. 52.21(o) and under the CAA. The Board was clear throughout the opinion that the soils and vegetation analysis is an "independent" obligation under PSD and the CAA and not necessarily tied to the ESA. *Id.* at 50 n. 70, 114. Thus, the permitting authority may independently satisfy the requirements of section 52.21(o) with an analysis like the one Region 9 performed in this case. Region 9 was not required to use ESA-related materials to demonstrate compliance with section 52.21(o) of the PSD regulations.<sup>30</sup>

Separately, NGO Petitioners attack the adequacy of the soils and vegetation component of the additional impacts analysis in the context of their arguments about Environmental Justice. NGO Supp. at 262-265. In response to comments on the additional impacts analysis, Region 9 explained that it concluded the permit applicant's soils and vegetation analysis met regulatory requirements because this analysis followed EPA guidance on preparation of such an analysis. AR 120 at 150. Petitioners have not demonstrated that this conclusion was clearly erroneous in this case. While the Board did call for a more thorough soils and vegetation analysis in the *Indeck* decision, that case involved a source immediately adjacent to preservation site for vegetation of national and

 $<sup>^{30}</sup>$  In fact many PSD permits are issued without an ESA analysis because there are no species in the area that trigger an ESA consultation. This does not mean that the permitting authority does not need to comply with 52.21(o).

historic significance. *In Re Indeck-Elwood*, PSD Appeal No. 03-04, slip op. at 41 (EAB, Sept. 27, 2006). Petitioners do not demonstrate that additional impacts analysis for the Desert Rock permit neglected to consider specific soils or vegetation near the DREF site that are of particular significance. The additional impacts analysis need not consider all vegetation in the vicinity of a site and may exclude vegetation having "no significant commercial or recreational value." 40 C.F.R. 52.21(1)(o).

#### VI. Nothing Requires that Region 9 Establish Hazardous Air Pollutant Limits In PSD Permits or Before A PSD Permit May be Issued

Petitioners have shown no error in Region 9's decision to comply with the section 112(g) hazardous air pollutant requirements through a separate application review process that will conclude after the PSD permit review. Region 9 does not dispute that section 112(g) of the CAA applies to DREF and the Region is on record that limitations on hazard air pollutants must be established for this facility on a case-by-case basis before DREC may begin actual construction. AR 104 at 1; AR 121 at 21. Thus, the primary issue raised by the Petitioners is simply a question of timing -- whether the reviewing authority must establish case-by-case MACT limitations under section 112(g) of the Act and EPA's implementing regulations (40 C.F.R. Part 63, Subpart B) at the same time as (or before) the issuance of a PSD permit under different regulations set forth at 40 C.F.R § 52.21.

Neither the applicable regulations nor statutory provisions mandate that a reviewing authority integrate these requirements or complete them simultaneously. Furthermore, the NGO Petitioners have not demonstrated clear error in Region 9's assessment that the application of the case-by-case MACT requirements is unlikely to require a change to the design of DREF significant enough to produce a clear substantive error or omission in the Region's PSD permitting analysis.

#### A. Petitioners Arguments Regarding Compliance With Hazardous Air Pollutant Requirements Are Not Properly Before the Board

Petitioners' make several policy and legal arguments in this proceeding with respect to the integration of the PSD and case-by-case MACT requirements that are not properly before the Board in this matter. Since 40 C.F.R. § 52.21 contains no provision incorporating the 40 C.F.R. Part 63 requirements into the PSD, it is questionable whether the Board has jurisdiction to consider and review Region 9's compliance with CAA section 112(g) in this proceeding or the Region's decision to complete this review separately under discretion accorded by the Part 63 regulations. *In re Indeck-Elwood*, PSD Appeal No. 03-04, slip op. at 118 (EAB, Sept. 27, 2006).

Furthermore, the NGO Petitioners' argument that the CAA compels section 112(g) and PSD permitting reviews to occur simultaneously is an improper collateral attack on EPA's regulations and should not be heard in this proceeding. Petitioners may disagree with the discretion afforded permitting authorities under EPA's section 112(g) regulations, but the time to challenge those regulations has long since passed. *See* CAA § 307(b)(1); 42 U. S. C. § 7607(b)(1) (prescribing 60 day period for filing petitions for review of agency rulemaking); 61 Fed. Reg. 68384 (Dec. 27, 1996) (final action on Part 63 regulations); 67 Fed. Reg. 80186 (Dec. 31, 2002) (final action revising PSD regulations to reflect 1990 amendments to section 112). Petitioners should not be allowed to mount a challenge to the established process for issuing MACT determinations and PSD permits in the course of individual permit reviews. This permit proceeding is not the proper forum for Petitioners' broader policy arguments.

Nevertheless, to the extent the Board considers these matters reviewable here, Region 9 does not contest the Petitioners' position that arguments based on the applicability of section 112(g) of Clean Air Act were not ascertainable during the public comment period. At the time the comment period closed, this source was subject to the EPA's Clean Air Mercury Rule. The D.C. Circuit issued its opinion vacating EPA's Section 112(n) Revision Rule and the Clean Air Mercury Rule on February 8, 2008, and the court issued its mandate making the vacatur effective on March 14, 2008. *See, State of New Jersey v. EPA*, 517 F.3d 574 (D.C. Cir. 2008); AR 120 at 35.

Likewise, Region 9 does not dispute that Petitioners submitted comments on March 4 after the close of the comment period raising certain concerns arising out of the applicability of section 112(g), and that Region 9 elected to respond to several of these comments. AR 121. Thus, Region 9 does not contest Petitioners ability to Petition for Review of those issues that Region 9 elected to address in the March late-filed comments, to the extent such issues are within the scope of the Board's jurisdiction to consider under the Part 124 regulations and the applicable permitting criteria in section 52.21 of the regulations.

However, Region 9 and other EPA offices have not been given a reasonable opportunity to address the statutory arguments now advanced by Petitioners to collaterally attack the regulations. New Mexico, but curiously not NGO Petitioners, reference an additional late-filed comment (dated June 17) in the administrative record for the Desert Rock permit from some of the NGO Petitioners that includes a form of this

statutory argument. However, the Region was not required to respond to these or any other late comments. Furthermore, it was not unreasonable for the Region to decline to address the June 17 comments that were received just 45 days before the Region issued the final permit. In addition, the caption at the beginning of the June 17 letter references only a new report regarding climate change. The argument that Clean Air Act compels EPA to complete the section 112(g) determination at the same time as the PSD permit is buried at the end of the June 17 comment letter after 15 pages of discussion of the report. The statutory arguments were reasonably ascertainable at the time of the March 4, 2008 comment letter that Region 9 did elect to address in a supplemental comment response. Furthermore, Petitioners have not demonstrated that any party submitted comments arguing that section 169 of the Clean Air Act requires a PSD permit to issue contemporaneously with a section 112(g) determination.

#### B. Neither the PSD nor the Hazardous Air Pollutant Regulations Require That A Permitting Authority Complete A Case-by-Case MACT Determination Before Issuing a PSD Permit

The review process employed by Region 9 in this instance is fully consistent with both the regulations governing PSD permit review and the regulations governing case-bycase MACT determinations under section 112(g). EPA's regulations do not require that a permitting authority complete a case-by-case MACT determination before issuing a PSD permit. The NGO Petitioners acknowledge that EPA's regulations are silent on the question of timing of the MACT analysis and PSD permitting. NGO Supp. at 137. The policy arguments provided by Petitioners to support their preference for tightly integrating these two programs do not establish any legal error in the Region's decision to employ separate processes that nevertheless comply with both requirements under the applicable regulations.

Nothing in 40 C.F.R. 52.21 requires that EPA integrate the PSD permit review and the review required under section 112(g) of the Act, when applicable. In fact, consistent with section 112(b)(6) of the CAA, the PSD regulations specifically exclude hazardous air pollutants from the definition of "regulated NSR pollutants" subject to PSD unless such pollutants are constituents or precursors of criteria pollutants. 40 C.F.R. § 52.21(b)(50).

Furthermore, Petitioners have not pointed to anything in EPA's regulations implementing section 112(g) that requires case-by-case MACT determinations to be made simultaneously with issuance of PSD permits. See 40 C.F.R. §§ 63.40 – 63.44. As discussed in the Region's Response to Comments, the section 112(g) regulations provide several alternative mechanisms for obtaining case-by-case MACT determinations, including obtaining a notice of MACT approval. AR 120 at 35. Although one of the options for obtaining a section 112(g) limit is to use "any other administrative procedures for preconstruction review," which could include administrative procedures for PSD permit review, this is simply one approach and nothing in the section 112(g) regulations requires that the section 112(g) case-by-case MACT determination be made as part of, or before, issuance of a PSD permit. See, AR 104 at 1. Furthermore, while the section 112(g) regulations provide the option of combining the section 112(g) determination process with other permit processes, the PSD permit itself may not include emissions limits for hazardous air pollutants under the exclusion in section 52.21(b)(50) of the regulations and the Act.

C. The Clean Air Act Does Not Require that a Permitting Authority Complete the 112(g) Analysis Before Issuing a PSD Permit

As discussed above, Petitioners allegations of error on the basis of sections 165(a)(3) and 110(j) of the Clean Air Act are a collateral attack on the applicable regulations and were not reasonably preserved for review. Even if the Board considers the merits of these arguments, Petitioners have still failed to demonstrate that the CAA compels the Agency to complete a case-by-case MACT determination and PSD permit review simultaneously. Section 112(b)(6) of the CAA exempts hazardous air pollutants listed under section 112(b)(1) from the PSD requirements in part C of Title I of the CAA. Section 112(g) references only the Title V permitting program and makes no mention of the PSD program provision in Part C of Title I of the CAA. In an attempt to overcome the lack of any direct connection in the statute between the PSD program and a case-bycase MACT determination, Petitioners resort to an interpretation of sections 165(a)(3)and 110(j) of the CAA not previously espoused by anyone in the relevant agency rulemakings to implement PSD and section 112(g). See 61 Fed. Reg. 68384 (Dec. 27, 1996) (final action on Part 63 regulations); 45 Fed. 52676 (Aug. 7, 1980); 67 Fed. Reg. 80186 (Dec. 31, 2002). Neither of the statutory provisions cited by Petitioners, which predate section 112(g) of the Clean Air Act,<sup>31</sup> compels the Agency to combine a case-bycase MACT determination with the PSD permit review process or complete one before the other.

<sup>&</sup>lt;sup>31</sup> With respect to the enactment of 112(g)(2)(B), see Clean Air Act, Amendments, Pub. L. No. 101-549, § 301, 104 Stat. 2399, 2545 (1990). With respect to the enactment of section 165(a)(3)(C), see Clean Air Act Amendments of 1977, Pub. L. No. 95-95, § 127(a), 91 Stat. 685, 735-36 (1977), reference to 110(j) added by Safe Drinking Water Act Amendments of 1977, Pub. L. No. 95-190, § 14(a)(45), 91 Stat. 1393, 1402 (1977). For the enactment of § 110(j), see Clean Air Act Amendments of 1977, Pub. L. No. 95-95, § 108(g), 91 Stat. 685, 697 (1977); redesignated as section (j) by Safe Drinking Water Act Amendments of 1977, Pub. L. No. 95-190, § 108(g), 91 Stat. 1393, 1399 (1977).

Section 165(a)(3)(C) provides, as required pursuant to section 110(j), that "no major emitting facility ... may be constructed in any area to which this part applies unless" the owner or operator of the facility demonstrates that "emissions from construction or operation of such facility will not cause, or contribute to, air pollution in excess of ... (c) any other applicable emissions standard or standard of performance under this chapter." This provision does not mandate the Region 9 complete the section 112(g) analysis at the time of PSD permitting.

Section 165(a)(3)(C) is reasonably construed not to cover hazardous air pollutants, and thus does not require a permitting authority to condition a PSD permit on compliance with particular emission standards for hazardous air pollutants or preclude issuance of a PSD permit before completion of a case-by-case MACT determination. As discussed above, section 112(b)(6) of the Clean Air Act exempts hazardous air pollutants from the PSD program as follows: "The provisions of part C of this subchapter (prevention of significant deterioration) shall not apply to pollutants listed under this section." 42 U.S.C. § 7412(b)(6). Since section 165(a)(3)(C) is a provision in Part C of the applicable subchapter (Title I of the CAA), it is permissible to interpret the Act to exclude section 112 pollutants from section 165(a)(3)(C) of the Act. Furthermore, section 165 was enacted in 1977, while section 112(b)(6) was enacted in the 1990 amendments to the Clean Air Act. Thus, to the extent the general "under this chapter" phrase in section 165(a)(3)(C) appears to give that provision a broader effect than section 112(b)(6), the more-specific, later-enacted provision excluding hazardous air pollutants from Part C of Title I of the Act would control under statutory construction principles. See FDA v. Brown and Williamson Tobacco, 120 S.Ct. 1291, 1306 (S.Ct. 2000). This

reading is consistent with EPA's existing PSD regulations, which do not require any demonstration that a source will meet standards established under Part 63 in order to obtain a PSD permit.

Even if section 165 of the CAA is read to apply to HAPs, there can be no violation of section 165 in this instance because Region 9 has made clear that the facility may not construct before demonstrating compliance with section 112(g) of the Act. All that section 165(a)(3) requires is that no major emitting facility "may be constructed" unless it is demonstrated that the source will not violate emissions standards. Region 9 has made clear that DREF may not construct until it complies with section 112(g). Section 165(a)(3) does not suggest that the permit referenced in section 165(a)(1) cannot be issued unless the determination in section 112(g) has already been made.

Furthermore, section 110(j) does not provide a basis to find clear error with the Region's decision to issue the final DREF PSD permit before completing the 112(g) determination. Section  $110(j)^{32}$  is not contained in Part C of Title I of the CAA, so its applicability to the PSD permit program and hazardous air pollutants is not entirely clear. Petitioners have not established that section 110(j) of the Act applies independently of section 165(a)(3)(C), and as explained above, section 165(a)(3)(C) does not require a 112(g) determination before issuance of a permit. Nevertheless, Region 9 does not dispute that a PSD permit is a permit that is required under subchapter I of Chapter 85 of

 $<sup>^{32}</sup>$  Section 110(j) provides: "As a condition for issuance of any permit required under this subchapter, the owner or operator of each new or modified stationary source which is required to obtain such a permit must show to the satisfaction of the permitting authority that the technological system of continuous emissions reduction which is to be used will enable such source to comply with the standards of performance which are to apply to such source and that the construction or modification and operation of such source will be in compliance with all other requirements of this chapter." 42 U. S. C. § 7410(j).

the U.S. Code (Title I of the CAA). Furthermore, section 110 addresses SIP requirements, which include PSD programs.

Some of the language in CAA section 110(j) can be read to support an interpretation that CAA section 110(j) was not intended to apply to PSD permits. While "standard of performance" is defined broadly in CAA section 302(l) of the Act<sup>33</sup> to include emission limitations, in context, the use of "standard of performance" in CAA section 110(j) suggests that this provision is directed at ensuring compliance with section 111 New Source Performance Standards. Specifically, CAA section 110(j) links "standard of performance" with the term "technological system of emission reduction," a term of art used only in CAA section 111 of the Act. Indeed, under the 1977 version of the Act, CAA section 111 standards of performance were required to be based on the "best technological system of continuous emission reduction." *Compare* 42 U.S.C.A. §7411(a)(1)(C) (1989), *with* 42 U.S.C.A § 7411 (2008) (section 111 of the CAA before and after 1990 amendments).

Even if the language in section 110(j) can be read broadly to apply to PSD permits, section 110(j) requires nothing more than that the owner or operator of each new source show to the satisfaction of the permitting authority "that construction or modification and operation of such source will be in compliance with all other requirements of this chapter." This language does not require that EPA complete the case-by-case MACT determination at the same time it issues the PSD permit. This

<sup>&</sup>lt;sup>33</sup> Enacted initially in 1977. See, Clean Air Act Amendments of 1977, Pub. L. No. 95-95, § 301(a), 91 Stat. 685, 770 (1977)

language merely requires a showing that the construction or modification and operation of a source "will be" in compliance with other requirements.

In this case, the permit record sufficiently demonstrates that construction of the DREF facility will be in compliance with the case-by-case MACT determination requirement of CAA section 112(g). Region 9's supplemental Response to Comments and EPA's letter to Governor Richardson, both of which are part of the DREF PSD permit's Administrative Record, state that the Desert Rock facility cannot be constructed until it obtains a section 112(g) case-by-case MACT determination. *See* AR 120 at 35; AR 121 at 21; AR 104 at 1 (Richardson letter). EPA also states in the letter to Governor Richardson that the Agency intends to make the section 112(g) determination for the DREF facility.<sup>34</sup> AR 104 at 1. This is sufficient to show that the source "will be" in compliance with section 112(g) before commencing construction, thus satisfying CAA section 110(j) to the extent it even applies as an independent standard for PSD permitting.

Thus, CAA sections 165(a)(3) and 110(j) do not require EPA to conduct a MACT analysis prior to issuing a PSD permit. To the extent they apply at all to PSD permits, at most these provisions only require 112(g) limits to be in place before construction begins, and Region 9 has demonstrated that it will ensure this will be the case.

The NGO Petitioners also argue that the MACT determination is a mandatory component of the BACT analysis pursuant to section 169 of the Act. NGO Supp. at 140-141. CAA Section 169 provides that emissions resulting from BACT measures shall not exceed any applicable standard under CAA sections 111 and 112. However, the

<sup>&</sup>lt;sup>34</sup> The Desert Rock facility is located on tribal lands, and the Navajo Nation has not adopted a section 112(g) program. Therefore, Region 9 has stated that it will make a case-by-case MACT determination for the Desert Rock facility consistent with CAA section 112(g) and the regulations implementing that section, including the public participation requirements set out in the regulations. See, 40 C.F.R. §§ 63.40 - 63.44.

reference to CAA section 112 in section 169 is an artifact of the initial enactment of the PSD provisions in 1977 before Congress excluded CAA section 112 pollutants from the PSD program in the 1990 Amendments.<sup>35</sup> See, FDA, 120 S.Ct. at 1306, quoting U.S. v Estate of Romani, 523 U.S. 517, 530-31 (1998) ("a specific policy embodied in a later federal statute should control our construction of the earlier statute, even though it has not been expressly amended.") Since BACT does not apply to hazardous air pollutant regulated under Part 63, there is not necessarily a direct corollary between the stringency of a BACT limit and a Part 63 limit. To the extent the reference to CAA section 112 in section 169 has any meaning after the enactment of the CAA section 112(b)(6) exclusion, at most CAA section 169 could be read to require consistency between BACT and a categorical MACT standard or a previously "established" case-by-case MACT standard. This provision refers to any applicable "established" standard and does not on its face require that a case-by-case analysis to establish a MACT standard (which was not a requirement of the Act when CAA section 169 was enacted) be performed before, or at the same time, as the BACT analysis.

### D. Region 9 Provided a Sound Reason for Not Integrating The PSD and Hazardous Air Pollutant Review In This Case And A Reasonable Solution If Any Consistency Issues Arise.

Assuming arguendo that the Board may consider Region 9's exercise of discretion to conduct the PSD permit review and CAA section 112(g) review separately, the Petitioners have not demonstrated clear error in the Region's justification for separating

<sup>&</sup>lt;sup>35</sup> For the enactment of § 169(3), see Clean Air Act Amendments of 1977, Pub. L. No. 95-95, § 127(a), 91 Stat. 685, 741 (1977). For the enactment of § 112(b)(6), see Clean Air Act, Amendments, Pub. L. No. 101-549, § 301, 104 Stat. 2399, 2537 (1990).

the two reviews for the DREF project while leaving open the option for adjustments to the prior approval if necessary. In response to the comments that New Mexico relies upon to establish that it preserved this issue for review, the Region explained that it decided against a combined process for the PSD permit because the public comment period had closed on the proposed DREF PSD permit and EPA's review of the comments on the proposed action was nearly complete. AR 104 at 1. In addition, as discussed in more detail below, the Region explained that it had no cause to believe that the case-by-case MACT analysis would affect the PSD permit or the control technologies selected as BACT and supported that using an example based on mercury control technology. AR 121 at 22-23. Nevertheless, in the event the MACT determination for any HAP produced an unforseen inconsistency with the PSD permit conditions, Region 9 agreed to assess whether revisions to the DREF PSD permit at that time if there is cause to do so. AR 104 at 1-2; AR 121 at 22-23.

Petitioners have failed to show that it was clearly erroneous for Region 9 to elect, under the circumstances, to satisfy these requirements separately while allowing for adjustment if it determined that re-opening the PSD permit was necessary if an unexpected inconsistency were to materialize. Even if, as Petitioners advocate, it would be better policy for EPA to combine such reviews in most cases, this does not establish that it was erroneous under the circumstances in this instance for Region 9 to complete its work on a PSD permit process that was nearly complete and initiate a new process to address the 112(g) requirement that was triggered unexpectedly after the comment period closed on the PSD permit.

Furthermore, permitting authorities are obligated under section 165(c) of the Clean Air Act to complete action on PSD permit applications in a timely manner. As noted elsewhere in the permitting record, Region 9 faced litigation to enforce the duty arising under this provision of the Act. AR 120 at 171; AR 118. In light of this duty and the pending litigation to enforce it, it was not clearly erroneous for the Region to exercise its discretion to complete the pending process on the PSD permit and to subsequently complete a process to satisfy the 112(g) requirements that did not arise until after the close of the comment period on the PSD permit. The alternative advocated by Petitioners of holding up the PSD permit in order to complete case-by-case MACT process risked a continuing violation of section 165(c) of the Clean Air Act. The separation of the two processes in this instances allowed Region 9 to harmonize the requirements under the Act to complete a case-by-case MACT analysis and to complete action on the permit application in a timely manner.

### E. NGO Petitioners Failed to Substantiate Their Allegations That the Case-by-Case MACT Analysis Will Alter the Proposed Facility In A Manner That Undermines the PSD Permit Analysis

Forced to acknowledge that "EPA's regulations are silent about how case-by-case MACT determinations and [the] PSD permit process must proceed in relation to one another," the NGO Petitioners attempt to establish that Region 9's PSD permitting analysis was substantively flawed on the basis of wholly speculative assertions that the case-by-case MACT analysis will fundamentally alter the nature of the proposed source or change the underlying basis of the BACT analysis for the source under the PSD permitting criteria. Because Petitioners point to no specific information in the record to support their general belief that such a result is "inevitable," NGO Supp. at 150, they have failed to carry their burden on this issue.

NGO Petitioners Supplemental Briefs have failed to point to anything concrete to substantiate their allegation that the case-by-case MACT analysis will change the facility in a way that undermines the PSD permitting analysis. They merely argue that they are certain this will be the case, but provide no factual information from the record or other extraneous sources to back up their blanket assertions. *See e.g.*, NGO Pet. at 142. This is not a showing of clear error.

Contrary to Petitioners' assertion, Region 9 considered the possibility of interactions between the technology selected as BACT and potential technologies that may be required under the case-by-case MACT requirements. Petitioners unreasonably equate Region 9's acknowledgment of some uncertainty regarding the outcome of the case-by-case MACT analysis with a complete absence of a rationale for declining to hold up Region 9's PSD permitting analysis on the basis of the possibility of unspecified changes to the proposed facility. A complete review of the Region's response, including a key sentence that Petitioners neglect to mention, demonstrates that Region 9's response was reasoned and substantiated, rather than inconsistent and wholly conclusory as Petitioners allege. See AR 121 at 22 (third paragraph of Response). The mere fact that there is uncertainty does not establish that Region 9 cannot reasonably conclude based on available information that there is unlikely to be a significant alteration of the proposed source through the case-by-case MACT analysis that would undermine the PSD permitting analysis. Furthermore, Region 9 substantiated its conclusion that there is "no basis to believe that HAP controls will affect the controls selected as BACT for criteria

pollutants" with a specific example. Commenters omit the substantiating statement that "if a sorbent was employed to achieve a greater level of mercury control, the sorbent would be removed by the baghouse along with other particulate matter." AR 121 at 22.

Petitioners' comments provided no specific information to demonstrate that Region 9 should have resolved the uncertainty regarding whether the case-by-case MACT review would significantly affect the design of the facility by completing the case-by-case MACT analysis before the PSD permit review. Given the uncertainty, Region 9 could have chosen to proceed with issuance of the PSD permit or delay the PSD permitting process as Petitioners requested, but at the risk of a continuing transgression of section 165(c) of the Act. Region 9 chose to proceed with the PSD permit based a reasoned conclusion that a dramatic alteration of the proposed source was unlikely to occur. Lacking any contrary information to suggest the Petitioners' alleged effect on the proposed facility was in fact likely to occur as a result of the section 112(g) process, it was not clearly erroneous for the Region to decline the Petitioners' request to reopen the PSD permitting proceeding. However, the Region did not ignore the possibility of an unforseen interaction and preserved the option of reopening the PSD proceeding at a later date if the Petitioners' concerns were in fact substantiated, despite no clear record to support that this would be so at the time Region 9 issued the PSD permit. There is no clear error in such an approach to the issue raised by Petitioners.

#### VII. Region 9 Ensured That Its Action And The Construction of the Project Complies With Other Federal Requirements

#### A. Region 9's Permitting Action Is Consistent With Endangered Species Act Requirements

Section 7(a)(2) of the Endangered Species Act ("ESA") requires federal agencies to ensure, in consultation with the relevant ESA Service, that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of federally-listed endangered or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. 16 U.S.C. § 1536(a)(2). Under ESA implementing regulations,  $^{36}$  consultation under Section 7(a)(2) is required where the federal agency determines that the relevant action may affect listed species or critical habitat and may be concluded either informally or formally. 50 C.F.R. §§ 402.13, 402.14. Further, the regulations provide that where more than one federal agency is involved in an action, the consultation requirements may be fulfilled by a designated lead agency on behalf of itself and the other involved agencies. 50 C.F.R. § 402.07. Following initiation of consultation, ESA Section 7(d) prohibits federal agencies and any permit or license applicant from making any irreversible or irretrievable commitment of resources that would have the effect of foreclosing the formulation or implementation of reasonable and prudent alternative measures that may be needed to avoid violation of Section 7(a)(2). 16 U.S.C. § 1536(d).

Petitioners allege that Region 9 violated the ESA by failing to initiate and complete consultation with the U.S. Fish and Wildlife Service ("FWS") under Section 7(a)(2) of the ESA prior to issuing the DREF permit. NGO Supp. at 270-87; CBD Pet. at

<sup>&</sup>lt;sup>36</sup> The ESA implementing regulations are found at 50 C.F.R. Part 402 (see 51 Fed. Reg. 19926 (June 3, 1986)). On December 16, 2008, these regulations were amended (see 73 Fed. Reg. 76272). Pursuant to the notice of final rulemaking, the amendments become effective on January 15, 2009.

5-32; NM Supp. at 10-18. In support of this allegation, Petitioners put forth several related arguments. First, Petitioners argue – contrary to the plain meaning of the relevant ESA regulation – that EPA may not rely on the U.S. Bureau of Indian Affairs ("BIA") as the lead agency to initiate and conduct the consultation. NGO Supp. at 280-81; CBD Pet. at 21-25. Thus, in Petitioners' view, EPA has failed to initiate what they see as a required Section 7(a)(2) consultation separate and apart from the consultation being conducted on the DREF project by BIA. Petitioners appear to further argue that because BIA has not yet initiated formal consultation with FWS under the ESA, Region 9's issuance of the DREF permit, conditioned on BIA's completion of ESA consultation, was not permissible under ESA Section 7(d). NGO Supp. at 282-85. In addition, they argue that even if EPA can rely on BIA as lead agency, and even if BIA has appropriately initiated consultation, Region 9's issuance of the Permit – prior to the conclusion of ESA consultation – with a condition prohibiting any construction until EPA's ESA obligations are satisfied and providing for modification of the permit or application to address the outcome of the consultation, constitutes an irreversible or irretrievable commitment of resources in violation of ESA Section 7(d). NGO Supp. at 281-87; CBD Pet. at 25-30; NM Supp. at 10-18. Finally, Petitioners claim that this approach is inconsistent with this Board's decision in *Indeck*.

All of Petitioners' ESA-related arguments are without merit. Region 9's issuance of the Permit under the circumstances surrounding this action was grounded in the plain language of relevant provisions of the ESA and implementing regulations, FWS guidance, and case law interpreting Section 7(d) and was not clearly erroneous. Region 9's approach was also consistent with the EAB's holding in *Indeck*.

#### 1. EPA's Reliance on BIA as Lead Agency for ESA Section 7 Consultation is Appropriate.

The CBD and NGO Petitioners assert that EPA's reliance on BIA to act as the lead agency for conducting ESA Section 7 consultation for this action was clearly erroneous. Petitioners argue that Region 9 has improperly "transferred" its responsibilities under ESA Section 7 to the BIA, that Region 9 may not fulfill its ESA consultation responsibilities through BIA's acting as the "lead agency" for consultation, and that EPA should conduct its own, separate ESA consultation for issues concerning air emissions regulated by the PSD permit. NGO Supp. at 280; CBD Pet. at 21. However, Petitioners have not cited any legal authority for this proposition, nor can they, because the ESA's implementing regulations explicitly support the approach taken by Region 9 here. The ESA regulations generally require that all effects of an agency action be addressed in one ESA consultation, rather than in piecemeal fashion in multiple consultations. See, e.g., 50 C.F.R. § 402.02 (definition of "Effects of the action"); 50 C.F.R. § 402.14(c). The regulations also explicitly provide that when a particular action such as Region 9's approval of the DREF PSD Permit involves more than one federal agency, the consultation and conference responsibilities may be fulfilled through a lead agency. 50 C.F.R. § 402.07. EPA's reliance on BIA as a lead agency is entirely within the meaning of that regulation and is the most efficient means to ensure that all effects of the Desert Rock project are analyzed and considered as part of the ESA consultation.

## a. BIA Must Address, and Is Addressing, All Effects of the Action in its ESA Consultation

In this case, BIA, the lead agency for ESA consultation as well as NEPA compliance, has defined the action for purposes of ESA consultation to include (1) the

construction and operation of a 1500 megawatt coal-fired power plant covering 150 acres, as well as access roads, electrical transmission lines and a water well field, and (2) the expansion of coal mining operations within approximately 17,500 acres of the Navajo Mine lease area to provide fuel for the power plant. AR 80. Petitioners acknowledge that a variety of Federal agencies have permitting or other approval authority for this action, including BIA, EPA, the Bureau of Land Management, the Office of Surface Mining Reclamation and Enforcement, and the U.S. Army Corps of Engineers. *See, e.g.*, CBD Pet., Ex. 17 at ES-1. BIA has approval responsibility for a long-term business land lease between DREF and the Navajo Nation for portions of the action, including the power plant, as well as approval authority for rights of way for the water-supply system, the proposed transmission lines, and the proposed access roads. *See, e.g., id.* at ES-20-21. The other federal agencies mentioned, including EPA, have varying levels of jurisdiction over discrete aspects of the action. *See id.* 

Petitioners argue that the action described above is made up of "multiple, though complementary" agency actions that may not be addressed in a single ESA consultation (*See* CBD Pet. at 21), and that EPA's PSD permitting action therefore should be carved out from BIA's ESA consultation and addressed in a separate ESA consultation conducted by EPA. Such an approach would result in substantial duplication of efforts on the parts of the federal action agencies involved in this action as well as the FWS and would entirely negate the efficiencies allowed by the ESA lead federal agency regulation (50 C.F.R § 402.07). In order to determine the effects of its action for purposes of ESA consultation,<sup>37</sup> BIA is required to analyze *all the direct and indirect effects of its action and interrelated and interdependent actions*, which necessarily would include any effects associated with air emissions and other effects associated with the power plant regulated under DREF's PSD permit:

*Effects of the action* refers to the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline. . . Indirect effects are those that are caused by the action and are later in time, but still are reasonably certain to occur. Interrelated activities are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration.

50 C.F.R. § 402.02 (emphasis in original).<sup>38</sup> Indeed, in correspondence from FWS to BIA commenting on the biological assessment ("BA") prepared by BIA for purposes of ESA consultation for the DREF action, FWS has explicitly stated that BIA must analyze air quality effects in its BA, rather than having those effects covered in a separate ESA consultation conducted by EPA: "Air Quality Effects. Chemical pollutants and toxicants associated with the Desert Rock Power Plant need to be presented and analyzed in the BA, not through a separate consultation with Environmental Protection Agency (EPA)." AR 82 at 3. Thus, conducting one ESA consultation that fully considers all the effects of the DREF action as described above is precisely what the ESA regulations contemplate and what FWS has indicated is required in this case.

 $<sup>3^{37}</sup>$  See, e.g., 50 C.F.R. § 402.14(c) (written request to initiate formal consultation must include a description of the action to be taken, the area to be affected by the action, the listed species and critical habitat that may

be affected, and the manner in which the action may affect those species).

<sup>&</sup>lt;sup>38</sup> "The test for interrelatedness or interdependentness is 'but for' causation: but for the federal project, these activities would not occur." *Sierra Club v. Marsh*, 816 F.2d 1376, 1387 (9<sup>th</sup> Cir. 1987); *see* 51 Fed. Reg. 19,926, 19,932 (June 3, 1986) (preamble to final ESA consultation rule) ("the 'but for' test should be used to assess whether an activity is interrelated with or interdependent to the proposed action"). *See In Re Phelps Dodge Corporation*, 10 E.A.D. 460, 486 n. 22 (EAB 2002).

### b. BIA is An Appropriate Lead Agency for the Desert Rock ESA Consultation

ESA regulations further provide that "[w]hen a particular action involves more than one federal agency, the consultation and conference responsibilities may be fulfilled through a lead agency." 50 C.F.R. § 402.07.<sup>39</sup> The ESA regulations offer a great deal of discretion in determining which agency may be a lead agency for purposes of ESA

consultation:

Factors relevant in determining an appropriate lead agency include the time sequence in which agencies would become involved, the magnitude of their respective involvement, and their relative expertise with respect to environmental effects of the action.<sup>40</sup>

50 C.F.R. § 402.07. Petitioners argue that because only EPA has expertise over, and responsibility for, air emissions and related issues, EPA must be the lead agency for ESA consultation for the PSD permit. However, in accordance with the factors described above, Region 9 explained in the Record why BIA is an appropriate lead agency for the ESA consultation. Most importantly, BIA is the lead agency for purposes of NEPA

<sup>&</sup>lt;sup>39</sup> Petitioners also argue that because EPA and BIA will not authorize precisely the same activities through their respective approvals for the Desert Rock action, the action on which consultation is occurring is not a "particular action" within the meaning of 50 C.F.R. 402.07 and therefore no lead agency may be designated for purposes of consultation. However, under Petitioners' cramped reading of the regulation, Federal agencies would almost never be able to designate a lead agency to fulfill ESA consultation responsibilities because Federal agencies' areas of jurisdiction and authority generally are complementary, not identical. Because, as described above, BIA must consider all effects of its action (including any air quality effects of the project) as part of its ESA consultation, Petitioners' reading would also necessarily result in duplicative consultations with multiple agencies considering identical projects and project impacts in separate proceedings. Further, Petitioners' reliance on Washington Toxics Coalition v. EPA to support their theory that distinct "agency actions" by one or more agencies necessarily result in separate ESA consultations for each agency action is misplaced (see CBD Pet. at 25 n.8). While Washington Toxics recognized that EPA FIFRA registration actions for different pesticide products are distinct ongoing agency actions for purposes of ESA section 7, the Washington Toxics court did not indicate that EPA would need to conduct separate ESA consultations for each agency action at issue in the case; indeed, the Court recognized that EPA could engage in ESA consultation on its approval of *multiple pesticide registrations* that involved the same active ingredient. See Washington Toxics Coalition v. EPA, 2002 U.S. Dist. LEXIS 27654 at \*25 and n.16 (W.D. Wash. July 2, 2002).

<sup>&</sup>lt;sup>40</sup> EPA noted in its Response to Comments that "[a] variety of factors beyond agency expertise can be considered when determining the appropriate lead agency, such as the magnitude of the respective involvement and the role of the different agencies." (AR 120 at 169.)

compliance and as such is responsible for examining all aspects of the action in a comprehensive manner, with appropriate input from the various agencies that have expertise and jurisdiction in this action. Region 9 addressed this issue in detail in its Response to Comments:

The Bureau of Indian Affairs (BIA) was designated to act as the lead agency for the ESA section 7 compliance for the whole project, and is performing this role in coordination with EPA. We continue to believe it is most efficient for BIA to continue in that role since the Desert Rock project is a particular action that requires multiple federal approvals and BIA is the lead agency for preparation of the EIS, which considers all of those federal approvals in a comprehensive manner . . . BIA is currently engaged in section 7 consultation with the U.S. Fish and Wildlife Service (FWS). As part of its role as lead agency, BIA will account for all impacts of the proposed project, including impacts associated with EPA's permitting action, in its consultation with FWS and any other section 7 compliance action that may be appropriate. EPA is monitoring BIA's ESA compliance process but does not have a duty under the ESA regulations to conduct an independent ESA process for the single action of issuing the PSD permit. EPA is satisfied that BIA's ESA process is, in fact, addressing the entire project, including EPA's permitting action, and that BIA has received and will appropriately address comments on BIA's DEIS relating to particular aspects of the ESA analysis.

AR 120 at 169-170. Furthermore, as a cooperating agency under NEPA, Region 9 has

provided relevant information to BIA about the action and associated environmental

issues (see, e.g., AR 120 at 168;<sup>41</sup> CBD Pet. Ex. 17 at ES-20), and such information

would be used in the ESA consultation process as well.<sup>42</sup> As the ESA consultation

<sup>&</sup>lt;sup>41</sup> EPA's Response to Comments states: "Region 9 has coordinated with the Bureau of Indian Affairs (BIA) to provide them with all information needed regarding the PSD permit and our Air Quality Analysis as they undergo the EIS process as follows: 1) we are a cooperating agency for the preparation of the Environmental Impact Statement, 2) we have provided BIA with extensive technical information from our review of the project, and 3) we have provided BIA with copies of public comments on the proposed PSD permit, and contact information for persons who have expressed interest in the proposed DREF." AR 120 at 168.

<sup>&</sup>lt;sup>42</sup> ESA regulations specifically provide that consultation under ESA section 7 may be consolidated with other interagency coordination procedures required by other statutes, such as NEPA. 50 C.F.R. § 402.06(a).

progresses, EPA may provide additional input in areas within its expertise if requested by BIA and FWS or otherwise deemed necessary by EPA.<sup>43</sup>

It is important to note that while EPA is relying on the BIA in this case as the lead agency to conduct and complete ESA consultation, as contemplated by the ESA regulations, Region 9 does not dispute that EPA retains legal responsibility for ensuring its own compliance with the ESA for its PSD permitting action. To that end, Region 9 has included a permit condition to ensure that (1) construction of the project will not commence until EPA notifies the permittee that EPA has satisfied any consultation obligations under ESA Section 7 with respect to the issuance of the permit, and (2) the permit or related application may be modified as EPA deems necessary to ensure ESA compliance as a result of the ESA consultation process. AR 122 (Condition II.A.); AR 120 at 172.

In sum, there is no basis for concluding that Region 9 has committed "clear error" by relying on the BIA to act as the lead agency in conducting ESA Section 7 consultation for this action.

## 2. EPA's Reliance on BIA's Initiation of Consultation is in Accordance with ESA Section 7(d)

There is no question that BIA has initiated consultation with FWS for the action at issue here.<sup>44</sup> Petitioners appear to argue, however, that because that BIA had not, as of

<sup>&</sup>lt;sup>43</sup> Petitioners raise numerous alleged deficiencies pertaining to the ESA consultation process in which BIA has engaged to date (see CBD Pet. at 22-23), but these issues are not properly before this Board. First, the BIA's actions are not subject to review by this Board. Second, to the extent that Petitioners intend to challenge EPA's substantive compliance with ESA section 7 through a challenge to the substance of the BIA consultation on which EPA intends to rely, "ESA substantive decisions are appropriately regarded as separately operative, with challenges to such decisions proceeding as APA challenges separate from PSD permit appeals." *See In Re: Indeck-Elwood, LLC*, PSD Appeal No. 03-03, slip op. at 118-19 & n. 162-163 (EAB Sept. 27, 2006).

the date of the petitions, initiated *formal* consultation with FWS under the ESA, EPA's issuance of the permit in reliance on BIA to complete the ESA consultation process was not permissible under ESA Section 7(d). *See*, NGO Supp. at 283-84; CBD Pet. at 7. Yet Petitioners ignore the plain language of ESA Section 7(d), which makes no distinction between formal and informal consultation:

After initiation of consultation required under [section 7(a)(2)], the Federal agency and the permit or license applicant shall not make any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures which would not violate [section 7(a)(2)].

16 U.S.C. § 1536(d); see also 50 C.F.R. § 402.09. The regulations promulgated under

Section 7(a)(2) provide for informal<sup>45</sup> and formal<sup>46</sup> consultation, both of which satisfy

the consultation process required by Section 7(a)(2). See, e.g., Southern Utah Wilderness

Alliance v. Smith, 110 F.3d 724, 728 (10th Cir. 1997) ("section 7(a)(2) does not require

formal consultation if the BLM has informally consulted the FWS, the FWS has issued a

written concurrence in the action, and that concurrence is not arbitrary or capricious");

Fund for Animals, Inc. v. Thomas, 326 U.S. App. D.C. 412, 127 F.3d 80, 84 (D.C. Cir.

1997) (citing 50 C.F.R. 402.13(a)). Further, detailed FWS guidance on the operation of

Section 7(d) indicates that Section 7(d) applies when an agency determines that its action

<sup>&</sup>lt;sup>44</sup> Petitioner CBD concedes that "[i]n connection with its review and approval of the business land lease, BIA is consulting with FWS pursuant to the ESA . . ." (CBD Pet. at 22). See also AR 80; CBD Pet., Ex. 18 at ES-20 ("The analyses for this Draft EIS were completed in consultation with other agencies and the public. . . . The U.S. Fish and Wildlife Service was the sixth agency invited to be a cooperating agency; however, its participation occurred as part of consultation for Section 7 under the Endangered Species Act").

<sup>&</sup>lt;sup>45</sup> "Informal consultation is an optional process that includes all discussions, correspondence, etc., between the Service and the Federal agency . . . prior to formal consultation, if required." 50 C.F.R. 402.02; see also 50 C.F.R. 402.13.

<sup>&</sup>lt;sup>46</sup> Formal consultation begins with the action agency's written request for formal consultation and is required for actions that may affect listed species or critical habitat unless the Federal agency determines during informal consultation, with the Service's written concurrence, that the action is not likely to adversely affect listed species or critical habitat. See 50 C.F.R. 402.14(a)-(c).

"may affect" listed species or critical habitat and requests formal or informal consultation. *See Endangered Species Consultation Handbook*, U.S. Fish and Wildlife Service and National Marine Fisheries Service, March 1998, at 2-7 to 2-9. [available at <www.fws.gov>]

Petitioners appear to cite Pacific Coast Federation of Fishermen's Associations v. U.S. Bureau of Reclamation, 138 F. Supp. 2d 1228 (N.D. Cal. 2001), as support for the proposition that the initiation of informal consultation does not trigger ESA Section 7(d). See NGO Supp. at 283. However, the court in *Pacific Coast Federation* did not reach this conclusion; instead, it concluded that the Bureau of Reclamation had not initiated informal consultation and therefore had proceeded with its action in violation of the ESA. 138 F. Supp. 2d at 1245. The *Pacific Coast Federation* court further concluded that even if the Bureau had initiated informal consultation, the fact that the Bureau was implementing an ongoing Operations Plan for a large water project while consultation was underway violated ESA Section 7(a)(2). Id. at 1246. In contrast, in the instant case, PSD permit requirements preclude construction of the project at issue – and thus avoid any potential irreversible or irretrievable commitment of resources that might conceivably violate ESA Section 7(a)(2) and Section 7(d) – until EPA has determined that it has satisfied ESA consultation requirements, and allow for the permit or related permit application to be modified as EPA deems necessary to ensure ESA compliance as a result of the ESA consultation process. AR 122 (Condition II.A); AR 120 at 172.

In sum, EPA's reliance on BIA's initiation of informal consultation fully comports with the mandate in Section 7(d), and is not clearly erroneous.

3. Region 9's Issuance of the Permit Prior to Completion of ESA Consultation – With a Condition Prohibiting Construction and Providing for Appropriate Modifications – Was Consistent With ESA Requirements and EAB Precedent

As described above and as detailed in EPA's Response to Public Comment, Region 9 decided to issue the DREF permit prior to completion of the ESA consultation being conducted by BIA (as lead federal agency on behalf of itself and EPA). In part, Region 9's decision was based on the substantial length of time that had already elapsed in processing the permit application (which was deemed complete in 2004) as well as the need to address statutory CAA timing requirements being raised in a lawsuit by the permit applicant and the Navajo Nation Diné Power Authority seeking EPA action on the permit. AR 120 at 170-72. Region 9 was careful, however, to ensure that its action was consistent with ESA requirements and, in particular, that issuance of the permit would not result in any irreversible or irretrievable commitment of resources per ESA Section 7(d). Region 9 was aware, for instance, that no on-the-ground activity on the permitted project could proceed in the absence of additional federal approvals yet to be obtained by the permit applicant. Most significantly, the project could not proceed absent certain approvals by BIA, the very entity that was conducting ESA consultation as lead federal agency. This alone virtually guaranteed that no disturbances in the action area would occur prior to completion of ESA compliance. Region 9 recognized, however, that it was also important for EPA to retain authority over the permit in the event that ESA consultation revealed impacts on listed species that might appropriately be addressed in the context of CAA permitting. In order to provide absolute assurance that the status quo would be preserved, Region 9 thus included a condition in the permit prohibiting any construction prior to completion of ESA compliance and retaining full EPA discretion

with regard to amendment of the permit or permit application to address the outcome of the consultation. The condition reads as follows:

Construction under this permit may not commence until EPA notifies the Permittee that it has satisfied any consultation obligations under Section 7(a)(2) of the Endangered Species Act with respect to the issuance of the permit. EPA shall have the power to reopen and amend the permit, or request that the Permittee amend its permit application, to address any alternatives, conservation measures, reasonable and prudent measures, or terms and conditions deemed by EPA to be appropriate as a result of the ESA consultation process.

AR 122 (Permit Condition II.A.)

Notwithstanding Condition II.A., the Petitioners allege that Region 9's issuance of the DREF permit prior to the conclusion of ESA consultation constitutes an irreversible or irretrievable commitment of resources in violation of ESA Section 7(d). (NGO Supp. at 281-87; CBD Pet. at 25-30; NM Supp. at 10-18). In particular, Petitioners variously appear to argue that issuance of the permit constitutes an illegal commitment of EPA staff resources and time (NGO Supp. at 285) as well as – through an apparent inference unsupported by the permit condition language or the record - an irreversible or irretrievable tendency to preserve the permit as currently written and avoid modifications needed to address any issues regarding listed species identified during consultation (NGO Supp. at 286-87; CBD Supp. at 26-29). These allegations are without merit and fail to account for the explicit preservation of the status quo provided in Condition II.A. The ESA, relevant case law, FWS guidance, and EAB precedent clearly allow EPA's approach, which EPA has determined, in the circumstances of this case, provides the most appropriate means to balance the timing of implementation of CAA and ESA statutory requirements.

#### a. Section 7(d) and FWS Implementing Guidance Allow EPA's Approach of Proceeding with Non-Irreversible/Irretrievable Activities

By its terms, ESA Section 7(d) prohibits (following the initiation of Section 7 consultation) irreversible or irretrievable commitments of resources that have the effect of foreclosing the formulation or implementation of reasonable and prudent alternative measures which would not violate Section 7(a)(2). 16 U.S.C. § 1536(d). The provision's prohibition is thus limited to those activities in furtherance of a federal agency action that are irreversible or irretrievable; and, even then, the activity must foreclose the ability to develop and proceed with alternative measures needed to comply with Section 7(a)(2) in order to fall within the prohibition. Detailed FWS guidance on the operation of Section 7(d) explains that "resource commitments may occur as long as the action agency retains sufficient discretion and flexibility to modify its action to allow formulation and implementation of an appropriate reasonable and prudent alternative." Endangered Species Consultation Handbook, U.S. Fish and Wildlife Service and National Marine Fisheries Service, March 1998, at 2-7 (avail. at <www.fws.gov>). The FWS itself thus explicitly recognizes the ability of federal agencies to proceed with activities that are not irreversible or irretrievable, or, at a minimum, that do not foreclose reasonable and prudent alternatives, without violating the Section 7(d) prohibition.

In this case, EPA has clearly retained such discretion through imposition of Condition II.A. That Condition not only prevents on-the-ground construction of the project pending completion of ESA compliance – thus necessarily avoiding any interim impacts on listed species or their habitat – but it also retains EPA discretion over the permit to address any later-identified ESA concerns. EPA has thus explicitly preserved

the status quo – both in terms of preventing any actual disturbances of the action area as well as retaining relevant federal agency authority – putting issuance of the conditioned permit squarely within the range of activity allowed by Section 7(d) as interpreted by the FWS. Nonetheless, Petitioners essentially allege that no federal agency activity in furtherance of the action may proceed prior to conclusion of ESA consultation. *See, e.g.*, NGO Supp. at 281-82 (alleging that "agency actions that may affect listed species or critical habitat may not progress at all unless and until the agency assures, <u>through</u> <u>completion of the consultation process</u>, that the proposed action is not likely to cause jeopardy." (emphasis in original)). Petitioners' argument ignores the plain meaning of Section 7(d) as well as the relevant FWS guidance and thus raises no clear error in EPA's action.

> b. Relevant Case Law Supports EPA's Approach and Confirms that Non-Jeopardizing Activities that Preserve the Status Quo May Proceed Pending Conclusion of ESA Consultation

Courts have regularly interpreted Section 7(d) as allowing federal agency activities to proceed pending completion of consultation, so long as such activities do not violate the terms of Section 7(d). *See, e.g., Pacific Rivers Council v. Thomas*, 30 F. 3d 1050, 1056-57 (9<sup>th</sup> Cir. 1994) (recognizing that certain Forest Service activities in connection with timbering could be determined compliant with Section 7(d) following initiation of Section 7(a)(2) consultation and ordering district court, after initiation of consultation, to determine if certain ongoing activities may proceed consistent with Section 7(d); also citing 9<sup>th</sup> Circuit precedent – *Conner v. Burford*, 848 F.2d 1441 (9<sup>th</sup> Cir. 1988) – finding that "Section 7(d) clarifies the requirements of Section 7(a), ensuring that the status quo is maintained during the consultation process"); *North Slope Borough v. Andrus*, 642 F.2d 589, 609-11 (D.C. Cir. 1980) (finding that certain non-jeopardizing activities associated with oil and gas leasing can proceed in compliance with Section 7(d); federal agency retained full control over the project); *Bays Legal Fund v. Browner*, 828 F. Supp. 102 (D. Mass. 1993) (construction of sewer outflow under bay floor is consistent with section 7(d) where outflow construction does not preclude alternatives if outflow is ultimately deemed to jeopardize endangered species, rejecting argument that construction is prohibited because it "has the effect of foreclosing" alternatives).

As with the various activities discussed in the case law, Region 9's issuance of the DREF permit, as limited by Condition II.A, is the type of non-jeopardizing activity that preserves the status quo consistent with ESA Section 7(d). The permit prohibits construction while the ongoing ESA consultation proceeds – thus avoiding any harm, let alone jeopardy, to listed species – and protects the integrity of the ongoing consultation, consistent with the FWS guidance cited above, by retaining sufficient discretion and flexibility to modify the action should reasonable and prudent alternative measures be appropriate. In these circumstances, issuance of the permit creates no irreversible or irretrievable commitment of any kind, let alone a commitment that would foreclose any reasonable and prudent alternative measures.

Petitioners' citations to a selection of ESA cases generally misinterpret the relevant holdings with regard to implementation of Section 7(d). For example, Petitioners cite *Conner v. Burford*, 848 F.2d 1441 (9<sup>th</sup> Cir. 1988) for the proposition that, as Petitioners describe it, "agency actions . . . may not progress at all unless and until the agency assures, <u>through completion of the consultation process</u>, that the proposed action

is not likely to cause jeopardy." NGO Supp. at 281-82 (emphasis in original); see also NM Supp. at 15-16. In *Conner*, however, the posture of the ESA consultation (and thus the relevant legal principles at issue) was entirely distinguishable from the DREF permit. In that case, the court was presented with a fully completed ESA consultation and, in considering the merits of that consultation, found that certain relevant factors had not been considered. For instance, the consultation had only considered oil and gas lease sales, while failing to consider available information on post-lease extraction activities that were also effects of the action. Conner, 848 F.2d at 1453-56. In a footnote, the court rejected an argument that Section 7(d) could be read to allow FWS to ignore known impacts on endangered species from post-lease extraction activities where a lease stipulation was in place that "may" restrict such activities. Id. at 1455 n.34. The court reasoned that Section 7(d) did not create a new authority to proceed with such an incremental step consultation, notwithstanding the potentially protective lease stipulation. *Id.* Nowhere, however, did the court analyze the scope of federal agency activity that may proceed consistent with Section 7(d), pending conclusion of an ongoing appropriately comprehensive Section 7(a)(2) consultation, which is precisely the situation at issue with the DREF permit. BIA is currently engaged in an ongoing comprehensive consultation with FWS addressing all effects of the DREF project on listed species. The issue is whether issuance of the PSD permit – as limited by Condition II.A – is consistent with Section 7(d)'s prohibition against improper commitments of resources; not (as in *Conner*) whether the consultation appropriately addresses all aspects/effects of the action.

Petitioners also cite *Thomas v. Peterson*, 753 F.2d 754 (9<sup>th</sup> Cir. 1985) for the proposition that "only through full consultation can effects on listed species from agency

actions be fully evaluated and adverse effects be avoided." NGO Supp. at 282. *Thomas*, however, involved review of a federal agency's decision to proceed with construction of a road project without having complied with substantial aspects of ESA consultation: *i.e.*, the preparation of a biological assessment and proper consultation with FWS. At no point did the *Thomas* court interpret Section 7(d). Instead, the court held that an action agency's failure to prepare a biological assessment to support its conclusions invalidated any consultation that may be deemed to have occurred. Of course, this is entirely distinct from the DREF situation which includes a comprehensive biological assessment (with substantial input from FWS) and an ongoing full Section 7 consultation.

Petitioners' reliance on *Pacific Rivers Council v. Thomas*, 30 F.3d 1050 (9<sup>th</sup> Cir. 1994), is similarly misplaced. Petitioners cite this case as having "rejected claims that proceeding with agency action is acceptable as long as the agency believes the action will not result in an 'irretrievable and irreversible commitment of resources.'" NGO Supp. at 283. This statement, however, entirely mischaracterizes the facts and holding in *Pacific Rivers Council*. In fact, in *Pacific Rivers Council*, the Ninth Circuit, in relevant part, held simply that Section 7(d) does not apply unless and until consultation has been initiated, consistent with the plain statutory language. *Pacific Rivers Council*, 30 F.3d at 1052, 1056. The court also interpreted Section 7(d) (in a manner consistent with EPA's approach here) and directed the district court, once Section 7 consultation on the action was initiated, to conduct an activity-by-activity review of the proposed agency actions to determine "if the ongoing or announced activities can proceed <u>during</u> the consultation period." *Id.* at 1057 (emphasis added). *Pacific Rivers Council* thus entirely supports EPA's approach to the DREF permit. Consultation on the action has clearly been

initiated, and EPA's contention is that certain activity -i.e., issuance of the permit as limited by Condition II.A. – can proceed pending conclusion of the ESA process.

Petitioners also highlight *NRDC v. Houston*, 146 F. 3d 1118 (9<sup>th</sup> Cir. 1998), a case involving renewal of water contracts by the Bureau of Reclamation prior to the completion (and, in some instances, the initiation) of ESA consultation. Petitioners emphasize the court's analysis of savings provisions in the contracts that were alleged by certain of the defendants to preserve sufficient flexibility to address environmental concerns and thus avoid any irreversible or irretrievable commitment in violation of Section 7(d). *Id.* at 1127-28. In particular, Petitioners focus on the court's statement that: "We do not think that an agency should be permitted to skirt the procedural requirements of section 7(d) by including such a catchall savings clause in illegally executed contracts." *Id.* at 1128.; NGO Supp. at 285-86; CBD Pet. at 28. However, the savings provisions at issue in *NRDC* are entirely distinguishable from Condition II.A in the DREF permit. In fact, in the very next sentence of its decision, the court provided its holding that:

However, even if such a clause could preserve the contracts, Article 14 [the clause at issue] is inadequate to serve that purpose here because it limits conservation-based modifications to minor adjustments and prohibits an adjustment in the amount of water delivered. Because Article 14 does not permit a reduction in the quantity of water delivered, the reasonable and prudent alternative of reallocating contracted water from irrigation to conservation is foreclosed.

*Id.* at 1128. The court thus recognized that the sufficiency of the contract conditions in meeting the restrictions of Section 7(d) depends upon the specific terms at issue and the degree to which they avoid foreclosure of alternative measures that may be needed to comply with Section 7(a)(2). Under any reading, Region 9's approach to the DREF

permit is legally and factually distinguishable from the provisions at issue in *NRDC*. Condition II.A of the permit explicitly prohibits construction of the facility until ESA compliance is complete – thus avoiding any interim harm – and preserves full latitude for EPA to amend the permit or seek amendment of the permit application to appropriately address issues identified in the ESA consultation. Unlike the provisions in *NRDC*, Condition II.A thus explicitly preserves all available alternatives to protect listed species.

In sum, Petitioners have cited no case law holding that Section 7(d) prohibits any and all federal agency activity from proceeding pending conclusion of a properly initiated Section 7(a)(2) consultation; nor can they as any such decision would run contrary to the plain language of the statute (as interpreted by FWS). Similarly, they have identified no precedent invalidating an agency activity, such as Region 9's issuance of the DREF permit, that explicitly avoids interim harm to listed species and preserves agency authority to implement appropriate alternative measures.

### c. Region 9's Issuance of the Permit As Limited By Condition II.A Is Consistent With Relevant EAB Precedent

EPA's approach is also consistent with the EAB's decision in *In Re Indeck-Elwood*, PSD Appeal No. 03-04, slip op. at 110 (EAB, Sept. 27, 2006). As explained in detail in EPA's Response to Public Comment, the PSD and ESA processes are separate and need not be performed simultaneously. AR 120 at 171 (recognizing that the ESA and PSD processes are distinct and need not be entirely integrated). Although, as EPA and the EAB have recognized, completion of ESA compliance prior to issuance of a final PSD permit may provide certain advantages in ensuring compliance with Section 7(a)(2) and allowing the PSD process under the CAA to benefit, as appropriate, from information developed during ESA consultation, circumstances may exist warranting different approaches that still comply with Section 7(d). AR 120 at 170-72; *In Re Indeck-Elwood*, PSD Appeal No. 03-04, slip op. at 109-13 (EAB, Sept. 27, 2006). In this case, Region 9 implemented an appropriate process to ensure compliance with both CAA and ESA statutory requirements under an unusual circumstance. As noted above, the CAA contains statutory time limits requiring action on a complete PSD permit application within one year. Region 9 factored this requirement – which was the subject of litigation between EPA and the permit applicant and Navajo Nation – into its decision how to proceed in this case. Region 9 also considered both the likelihood of an appeal of the permit to the EAB (which has since ensued and delayed final effectiveness of the permit) as well as the applicability of other federal agency requirements to the project, including necessary approvals by BIA (the lead federal agency for ESA compliance), which had yet to occur. And of course, Region 9 then included Condition II.A to ensure interim protections and flexibility to address any listed species issues.

In *Indeck*, the EAB recognized that the ESA and PSD processes are distinct, but sought to ensure that ESA compliance was accomplished in a timely manner that would not – by virtue of the status of the CAA permitting process – render ESA consultation meaningless. As the EAB noted, any process should ensure that: "if FWS recommends any changes to the permit during the consultation process or, alternatively, if EPA decides to add or amend permit conditions based on any information or findings that arise during the ESA consultation process, such changes may be implemented in the final PSD permit." *In Re Indeck-Elwood*, PSD Appeal No. 03-04, slip op. at 111 (EAB, Sept. 27, 2006); AR 120 at 172. In that case, EPA's ESA compliance was found timely by virtue

of completion of consultation (which did not result in any need to amend the permit) during the pendency of the EAB appeal. With regard to the DREF permit, Condition II.A similarly ensures that the ESA process will be both complete and meaningfully implemented prior to any irreversible or irretrievable activity. Simply put, the project cannot move forward with construction unless and until it is found compliant with ESA requirements and Condition II.A is thus satisfied.<sup>47</sup> Although this approach differs from what has been EPA's preferred practice of completing ESA consultations before issuance of a PSD permit (and the Board's recommendation in *Indeck* that EPA offices seek to complete consultation prior to issuing the draft permit), circumstances necessitated a different approach here to harmonize the ESA requirements and the CAA requirements to complete action on the PSD permit in a timely manner.

Petitioners' various allegations that EPA has already irreversibly and irretrievably committed staff resources to this permit, or that issuance of the permit somehow creates institutional inertia to avoid modifications, present no clear error in Region 9's approach. While it is true that a certain amount of EPA staff time and energy has been devoted to processing the permit application and developing and issuing the final permit, the commitment of those limited resources places no restriction on the implementation of any reasonable and prudent alternative measures that may be deemed appropriate following completion of ESA consultation. The expenditure of such resources is thus entirely consistent with Section 7(d). Similarly, Region 9 has ensured through Condition II.A that the project can only be constructed – and thus that the permitted activity can only be realized – following completion of ESA compliance, including implementation of any

<sup>&</sup>lt;sup>47</sup> EPA notes that, should the ESA process identify appropriate modifications of the permit, such changes would be implemented consistent with EPA's PSD permitting regulations, including any required public procedures and rights to appeal the amended action.

appropriate alternative measures to protect listed species. Nothing in the record suggests that Region 9 would not utilize the authority retained in Condition II.A to implement appropriate measures to satisfy Section 7(a)(2) requirements,<sup>48</sup> nor does the Condition in any way limit the available means to address such requirements.

In sum, EPA has appropriately designated BIA as lead federal agency for ESA Section 7(a)(2) consultation; BIA has initiated such consultation with FWS; and Region 9 has, consistent with ESA Section 7(d), conditioned its issuance of the permit to avoid any potential irreversible or irretrievable commitments of resources. Petitioners have failed to meet their substantial burden in demonstrating that EPA's action was clearly erroneous due to noncompliance with the ESA.

## B. Region 9's Decision to Issue the Final PSD Permit Before Completion of an Environmental Impact Statement Was Not Clearly Erroneous.

Petitioners have failed to demonstrate any clear error in Region 9's determination that it could issue the PSD Permit before the Bureau of Indian Affairs (BIA) completed the NEPA EIS and in Region 9's coordination with the NEPA evaluation by BIA. Region 9's Response to Comments shows that its PSD permitting action has been coordinated with the NEPA review to the extent practicable and reasonable. AR 120 at 167-68

Region 9 followed the Agency's established position that PSD permitting is statutorily exempted from the National Environmental Policy Act (NEPA) under the Energy Supply and Environmental Coordination Act of 1974 (ESECA Section 7 (c)(1)) and that a permitting authority may issue a PSD permit before completion of NEPA

<sup>&</sup>lt;sup>48</sup> Indeed, EPA's substantive compliance with ESA requirements would be subject to review at the appropriate time following completion of the consultation and any appropriate implementation through the authority retained in Condition II.A.

requirements triggered by some other aspect of the same project. AR 120 at 167-168. As noted in the Response to Comments, many PSD permits are issued without any NEPA review at all. The NEPA review associated with the DREF project was triggered by oversight of a lease agreement by the Bureau of Indian Affairs (BIA), but not by Region 9's PSD permit. AR 120 at 167.

Although 40 C.F.R. § 52.21(s) requires Region 9 to coordinate PSD permit review with the NEPA review to the extent practical and reasonable, the Board has expressly held that "this regulation does not require a State to refrain from issuing a PSD permit until the NEPA review process is complete." In Re Hadson Power Buena Vista LLC, 4 E.A.D. 258, 299 (EAB 1992). Region 9 cited and followed the Board's clear interpretation of section 52.21(s) in the record for the Desert Rock permit. AR 120 at 168. As the Board explained in the *Hadson* case, "coordination is all that is required of the PSD permitting authority, and only to the extent feasible and reasonable." *Id.* The record shows that Region 9 met this standard and coordinated with the BIA by providing them with information regarding the PSD permit and the Region's air quality analysis. AR 120 at 168. The Board's holding in Hadson remains the Agency's interpretation, as it was followed in a more recent decision by the Board. See In Re: Prairie State Generating Co., 12 E.A.D. 176 (EAB 2005) (permitting authority sufficiently coordinates by concluding NEPA review does not pertain to the portions of the facility subject to PSD).

# C. Region 9 Complied With Its General Obligations Under the Environmental Justice Executive Order

The first of the NGO Petitioners' objections claims that EPA has not complied with its general obligations under the Environmental Justice Executive Order 12898. This issue was fully addressed in the Response to Comments. AR 120 at 162-63. To summarize the response, Region 9 relied on well-established policy for implementing environmental justice that has been developed over several years and used in several instances. Id.; see generally, In Re Knauf Fiber Glass, GmbH, 9 E.A.D 1, 15-16 (EAB 2000) (upholding Agency finding that facility "will not have disproportionately high and adverse human health or environmental effects on a low income or minority population" based on finding of attainment of relevant NAAQS); AES Puerto Rico, LP, 8 E.A.D. 324, 351 (1999) (affirming environmental justice analysis based on reasoning that NAAQS are health based and protect sensitive populations). Additionally, Region 9 relied on prior experience gained in the somewhat analogous circumstances of investigating complaints filed with EPA under Title VI of the Civil Rights Act of 1964 (specifically, approaches used in deciding a complaint regarding Select Steel in the State of Michigan). See EPA File No. 5R-98-R5 (Select Steel Complaint). Generally speaking, EPA views the goal of environmental justice as set forth in Executive Order 12898, which, consistent with and to extent permitted by existing law, is designed to help ensure that agency actions do not have disproportionately high and adverse human health or environmental effects on minority or low income populations. EPA's commitment to environmental justice consists of two main components: 1) meaningful involvement, and 2) fair treatment. Region 9 satisfied both components here. To meet the obligation of meaningful involvement, Region 9 conducted the most extensive outreach process it has ever used for

proposing to issue a PSD permit. This process informed the public about the permitting process and the proposed DREF permit, and allowed a significant amount of time for interested parties to prepare comments. Region 9 provided the commenters with the flexibility to submit their comments in a variety of ways. Through this enhanced outreach and public comment process, Region 9 proactively sought and facilitated the involvement of affected communities in the decision making process. The adequacy of Region 9's public outreach on the proposed PSD permit is demonstrated by the fact that it received more than one thousand comments. Of this total, 61 people offered oral comments at the public hearings, and many of those people also submitted written comments. The Region's extensive outreach and public comment process (see AR 120 at Section II.A, AR 44 and AR 48-53), which goes substantially beyond the regulatory requirements for public notice and public hearings at 40 C.F.R. Part 124, fully implements EPA's environmental justice commitment to ensure that affected communities are meaningfully involved in environmental decisions.

Region 9 also provided these communities with fair treatment by ensuring that they are adequately protected from environmental harms. The Region ensured that an air quality impact analysis was performed as required under the PSD application process and that the analysis demonstrated no violations of applicable NAAQS for the DREF project. As explained in the Response to Comments, the level of the NAAQS is set low enough to protect public health, including sensitive individuals, with a margin of safety. *See AES Puerto Rico, LP*, 8 E.A.D. at 351. Numerous health studies and comments from experts and the public are used in determining that the NAAQS level is protective of public health. After the level of the NAAQS is set, compliance with the NAAQS is used to

assess health impacts. Thus, a modeled impact demonstrating that a source does not cause or contribute to a violation of the NAAQS also demonstrates that public health is protected with an adequate margin of safety. AR 120 at 122. Region 9 carried out air quality impact analyses for the criteria pollutants. These analyses demonstrated that DREF's impacts would be below the (SILs) set in 40 C.F.R. § 51.165(b)(2) for all these pollutants except SO<sub>2</sub> and PM<sub>10</sub>. AR 120 at 122.

For SO<sub>2</sub> and PM<sub>10</sub>, Region 9 required a cumulative impact analysis for each pollutant modeled that exceeded the SILs, including other area pollution sources as well as ambient background concentrations and fugitive dust. AR 120 at 123. The analyses showed that total cumulative impacts were well below the NAAQS for these pollutants.

In addition, DREF submitted on July 12, 2006, a data presentation analyzing the demographics and economy in the area of the DREF, as well as estimating emissions impacts. DREF prepared the presentation because of EJ issues raised and identified in the NEPA scoping process. *See* AR 77.

Both the air quality impacts analysis and DREF's data presentation established that the permitted activities will satisfy the fundamental principles of health protection consistent with environmental justice. EPA used an analogous analytical approach, and found adequate protection of human health in its decision on a Title VI complaint regarding the Michigan Department of Environmental Quality's permit for the proposed Select Steel Facility (Complaint File No. 5R-98-R5). The Select Steel complaint did not involve Environmental Justice Executive Order 12898, but raised issues of adverse health impacts, allegedly in violation of Title VI of the Civil Rights Act. In assessing the allegation in Select Steel's complaint regarding air quality impacts, EPA analyzed

airborne pollutants covered by a national ambient air quality standard (NAAQS). The Select Steel decision properly recognized that the NAAQS are health-based standards that have been set at a level presumptively sufficient to protect public health and allow for an adequate margin of safety for the population within the area. EPA relied on the fact that the NAAQS were met (and no contradictory evidence was uncovered to rebut the presumption, as a basis for its finding that affected populations suffered no adverse effects, and thus there was no disparate impact within the meaning of Title VI. This approach was included in EPA's "Draft Revised Guidance for Investigating Title VI Administrative Complaints Challenging Permits" (65 Fed. Reg. 39680, June 27, 2000). It is true that one focus of a Title VI analysis, whether there are adverse impacts, is not necessarily the same as the EJ standard of no "disproportionately high and adverse human health or environmental effects." But the overarching principle EPA relied on in Select Steel, that emission levels that attain the NAAQS presumptively protect public health with an adequate margin of safety, see CAA § 109(b) and therefore, do not have sufficient adverse effects for a violation under Title VI, also supports the conclusion that for purposes of EJ such levels presumptively have no disproportionately high and adverse human health or environmental effects. See In Re Knauf Fiber Glass GmbH, 9 E.A.D at 15-16; AES Puerto Rico, 8 E.A.D. at 351 (1999).

#### D. Region 9 Responded to Comments on Specific Issues Regarding Environmental Justice

The NGO Petitioners also argue that Region 9's Response to specific issues regarding environmental justice was inadequate. During the comment period on the PSD permit, the Region received over 750 separate comments regarding EJ and related issues. Region 9 also considered EJ issues raised by the public in the NEPA scoping process. See AR 120 at 155. In their Petition, the NGO Petitioners largely repeat the comments they submitted on the proposed DREF permit with respect to the following issues: 1) mercury and fish consumption, 2) inadequate public health services on tribal lands, 3) impacts on grazing and 4) access to water.

NGO Petitioners, however, fail to identify clear error in the Response to Comments on these issues. While Petitioners may disagree with Region 9's conclusions or prefer that Region 9 have conducted a more detailed analysis in response to their comments, the Petition does not demonstrate that Region 9 failed to consider comments on these issues or that Region 9's responses did not address the matter raised by the comment. Petitioners do not demonstrate that the responses are contradicted by the record or that the Region's responses are not reasoned. Petitioners preference for a more thorough or detailed response does not necessarily render the responses substantively erroneous.

Region 9 explained in its Response to Comments that EPA does not have the authority to add permit terms addressing mercury emissions. AR 120 at 161. Petitioners do not demonstrate that this response was clearly erroneous. Because the HAPs listed in section 112(b)(1) of the Clean Air Act, including mercury, are excluded from the PSD provisions of part C, it is not appropriate to include limits for those emissions in this PSD permit. Emissions of mercury and other HAPs are addressed through another regulatory program under 40 C.F.R. Part 63, which provides various vehicles for making the case-by-case MACT determination.

With respect to environmental justice concerns regarding public health services and physical infrastructure, as noted in Region 9's Response to Comments, this issue is beyond the scope of consideration for the PSD permit, and is addressed in Chapter 3 and Chapter 4 of the NEPA Draft Environmental Impact Statement. See AR 120 at 161. The NGO Petition contends that Region 9 misunderstood the comment, stating:

Local residents' observations about the inadequacy of health care resources and physical infrastructure (such as road) on Navajo Tribal Land were specifically intended to convey the concern that *any* air-related health impacts (such respiratory distress caused by exposure to PM emissions or ground level ozone) would have unusually severe adverse consequences because of the unavailability of health care (especially emergency). Thus, according to commenters, pollutant increases in this region would be associated with more serious health outcomes than EPA might otherwise anticipate for a project of this nature.

NGO Supp. at 268-269. However, while the Petitioners are concerned about the consequences of air-related health impacts, they have not shown whether or to what degree this plant would cause such impacts. As previously discussed, the air quality impact analysis showed that this plant would not cause a violation of the applicable NAAQS, which are protective of public health. Further, the commenters offer no evidence to support their contention that any such impacts would have "unusually severe" adverse consequences. The contention, therefore, is speculative, and unsupported speculation is not sufficient to show clear error on EPA's part.

In terms of water resource consumption and access, as explained in the Response to Comments, this issue is outside the scope of the PSD permitting process. Region 9 also identified specific sections of the NEPA DEIS where this issue was being addressed. The Petitioners assert that this response was inadequate because the issue of depleted water resources should be the subject of a collateral impacts assessment and because this

issue was presented by commenters as justification for a no-build alternative. NGO Supp. at 267-268. Regarding the collateral impacts argument, as EPA explained in its Response to Comments, the Agency's longstanding interpretation is that "the primary purpose of the collateral impacts clause is to temper the stringency of the technology requirements whenever one or more of the specified collateral impacts – energy, environmental, and economic – renders use of the most effective technique inappropriate." In Re Columbia Gulf Transmission Co., 2 E.A.D. 824, 826 (Adm'r 1989). Accordingly, the environmental impacts analysis "is generally couched in terms of discussing which available technology, among several [considered for the source], produces less adverse collateral effects, and, if it does, whether that justifies its utilization even if the technology is otherwise less stringent" in controlling the regulated pollutant. In Re Old Dominion Electric Cooperative, 3 E.A.D. 779, 792 (Adm'r 1992). AR 120 at 29. The Petitioners neither address the Region's response nor provide a legal basis for their assertion that the collateral impacts assessment should instead be used to perform some unspecified optimization process to minimize the impacts of the facility on a particular resource.

Petitioners' argument regarding the no-build alternative fails because it is not preserved. The public comments regarding impacts on water resources expressed only general concerns and, as explained in the Response to Comments, none of those comments explicitly cited water resource impacts as the basis for including a no-build option in an analysis of alternatives that would be conducted under Section 165(a)(2) of the Act. Moreover, the Petitioners have failed to cite to any specific comments in their

petition. This issue has thus not been preserved for review. Therefore, review should be denied.

#### CONCLUSION

WHEREFORE, for the reasons set forth above, Region 9 requests that the Board

deny the Petitions for Review.

Date: January 8, 2008

Respectfully submitted,

Ann Lyons Office of Regional Counsel EPA Region 9 75 Hawthorne St. San Francisco, CA 94105 Telephone: (415) 972-3883 Facsimile: (415) 947-3570 Email: Lyons.Ann@epa.gov

5 ore

Brian L. Doster Elliott Zenick Air and Radiation Law Office Office of General Counsel Environmental Protection Agency 1200 Pennsylvania Ave. N.W. Washington, DC 20460 Telephone: (202) 564-7606 Facsimile: (202) 564-5603 Email: Doster.Brian@epa.gov

#### **CERTIFICATE OF SERVICE**

I hereby certify that a copy of the Response to Petitions for Review, Supplemental Briefs, and Amicus Brief and a CD with electronic copies of Administrative Record documents cited in the Response were served on the following persons by U.S. Mail and electronic mail (PDF of Response Brief only):

Seth T. Cohen Assistant Attorney General P.O. Drawer 1508 Sante Fe, NM 87504-1508 E-mail: scohen@nmag.gov

Leslie Barnhart Eric Ames Special Assistant Attorneys General New Mexico Environment Department P.O. Box 26110 Santa Fe, NM 87502-6110 E-mail: leslie.barnhart@state.nm.us

Nicholas F. Persampieri Earthjustice 1400 Glenarm Place, #300 Denver, CO 80202 E-mail: npersampieri@earthjustice.org

John Barth P.O. Box 409 Hygiene, CO 80533 E-mail: barthlaw@aol.com

Patrice Simms Natural Resources Defense Council 1200 New York Ave. NW, Suite 400 Washington, DC 20005 E-mail: psimms@nrdc.org

Kevin Lynch Environmental Defense Fund 2334 N. Broadway Boulder, CO 80304 E-mail: klynch@edf.org

January 8, 2009

Ann Brewster Weeks Clean Air Task Force 18 Tremont St., Suite 530 Boston, MA 02108 E-mail: aweeks@catf.us

Jeffrey R. Holmstead Richard Alonso Bracewell & Giuliani LLP 2000 K St. NW Washington, DC 20006 E-mail: jeff.holmstead@bgllp.com richard.alonso@bgllp.com

Amy R. Atwood Center for Biological Diversity P.O. Box 11374 Portland, Oregon 97211-0374 E-mail: atwood@biologicaldiversity.org

Leslie Glustrom 4492 Burr Place Boulder, CO 80303 E-mail: lglustrom@gmail.com

Mark Wenzler National Parks Conservation Association 1300 19th Street NW. Suite 300 Washington, DC 20036 E-mail: mwenzler@npca.org

Douglas C. McCort Ater Wynne 222 SW Columbia, Suite 1800 Portland, OR 97201-6618 E-mail: dcm@aterwynne.com

m

Ann Lyons