Attorney General of New Mexico

GARY K. KING
Attorney General

ALBERT J. LAMA
Chief Deputy Attorney General

October 1, 2008

U.S. Environmental Protection Agency
Clerk of the Board, Environmental Appeals Board
Colorado Building
1341 G Street N.W., Suite 600
Washington, D.C. 20005

Re: *In re Desert Rock Energy Company, LLC*, PSD Appeal No. 08-03; 08-04; Docket No. AZP 04-01

Dear Clerk of the Board:

Pursuant to the extension of time granted by the Board in its August 21, 2008 Order, Petitioner, the State of New Mexico, files herewith an original and five copies of its Petition for Review and Supplemental Brief in the above-referenced matter. Petitioner filed its initial Petition for Review on August 15, 2008.

Petitioner also submits herewith two lengthy sets of attachments. First, it is our understanding that the Board would like copies of each document from the administrative record cited in our brief. Petitioner has therefore enclosed an original plus three copies of each such document, identified by numbered tabs. The numbers on the tabs correspond to the administrative record document number as referenced in the brief.

Second, Petitioner has enclosed an original and three copies of the exhibits to the brief that are not part of the administrative record. The exhibits are identified by lettered tabs. An index of the exhibits is included at the end of the brief.

Please feel free to contact me at (505) 827-6087 if you have any questions or would like any additional information.

Sincerely,

Seth T. Cohen
Assistant Attorney General

Enclosures

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

IN RE:	)	
	)	PSD Appeal Nos. 08-03 & 08-04
DESERT ROCK ENERGY COMPANY, LLC	)	
	)	
PSD Permit No. AZP 04-01	)	
	)	

STATE OF NEW MEXICO'S PETITION FOR REVIEW AND SUPPLEMENTAL BRIEF

GARY K. KING
ATTORNEY GENERAL
STATE OF NEW MEXICO
Seth T. Cohen
Assistant Attorney General
P.O. Drawer 1508
Santa Fe, New Mexico 87504-1508
Phone: (505) 827-6087
scohen@nmag.gov

Leslie Barnhart
Eric Ames
Special Assistant Attorneys General
New Mexico Environment Department
P.O. Box 26110
Santa Fe, New Mexico 87502-6110
Phone: (505) 827-0293
leslie.barnhart@state.nm.us
eric.ames@state.nm.us

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INTRODUCTION

Pursuant to 40 C.F.R. §124.19(a), the State of New Mexico ("Petitioner" or "New Mexico") petitions for review of the Prevention of Significant Deterioration ("PSD") Permit No. AZP 04-01 ("the Permit"), which was issued to Desert Rock Energy Company, LLC ("Permittee") by Region IX of the United States Environmental Protection Agency ("EPA") on July 31, 2008. A copy of the Permit was attached as Exhibit 1 to Petitioner's initial Petition for Review that was filed on August 15, 2008. The Permit authorizes construction of the Desert Rock Energy Facility ("Desert Rock"), a 1,500 MW coal-fired power plant, approximately 25 miles southwest of Farmington, New Mexico. Because Desert Rock will be located within the Navajo Indian Reservation, and the Navajo Nation does not have an EPA-approved tribal NSR permitting program under the Clean Air Act ("Act" or "CAA"), the EPA is the agency responsible for issuing the Permit.

Petitioner contends that EPA failed to take procedural steps, make findings, and conduct analyses required by the Act. EPA's issuance of the Permit was clearly erroneous and implicates important policy issues that the Environmental Appeals Board ("Board" or "EAB") should review. Accordingly, Petitioner requests that the Board grant the Petition for Review and remand the Permit to EPA.

THRESHOLD PROCEDURAL REQUIREMENTS

Petitioner satisfies the threshold requirements for filing a petition for review under Part 124. Petitioner has standing to petition for review of the Permit under 40 CFR §124.19(a) because it participated in the public comment period on the Permit. *See* Administrative Record

No. ("AR") 67, AR 57.9, AR 105, AR 58 at 0013-0021. [1] Furthermore, as is set forth below, each issue raised by Petitioner herein was either raised with EPA during the public comment period, concerns changes to the Permit made after the close of the public comment period, or is a new issue arising after the period for public comments that was not reasonably ascertainable during the public comment period. The Board therefore has jurisdiction to hear Petitioner's request for review.

ISSUES PRESENTED FOR REVIEW

1. Whether EPA's failure to complete a consultation with the U.S. Fish and Wildlife Service ("USFWS") pursuant to Section 7 of the Endangered Species Act ("ESA") prior to issuance of the final permit constitutes a clearly erroneous finding of fact or conclusion of law, or presents an important policy consideration that the Board should review and reverse.

2. Whether EPA's failure to consider Integrated Gasification Combined Cycle ("IGCC") technology in the BACT analysis constitutes a clearly erroneous finding of fact or conclusion of law, or presents an important policy consideration that the Board should review and reverse.

3. Whether EPA's failure to consider emissions reduction technologies for carbon dioxide (CO2) as part of the BACT analysis or collateral impacts analysis, was a clearly erroneous finding of fact or conclusion of law, or presents an important policy consideration that the Board should review and reverse.

4. Whether EPA's issuance of the Permit without conducting a Maximum Achievable Control Technology ("MACT") determination for hazardous air pollutions under Section 112 of

[1] Materials cited by Petitioner from the administrative record ("AR") for this Permit are referenced using the EPA's AR document number, and are attached hereto, for the convenience of the Board, organized numerically by AR document number.

the Clean Air Act constitutes a clearly erroneous finding of fact or conclusion of law, or presents an important policy consideration that the Board should review and reverse.

5. Whether EPA's conclusion that Desert Rock would not "cause or contribute" to non-attainment of the national ambient air quality standard ("NAAQS") for ozone was based on a clearly erroneous finding of fact or conclusion of law, or presents an important policy consideration that the Board should review and reverse.

6. Whether EPA's failure to conduct modeling and Best Achievable Control Technology ("BACT") analysis for particulate matter with an aerodynamic diameter of less than 2.5 microns ("PM2.5") constitutes a clearly erroneous finding of fact or conclusion of law, or presents an important policy consideration that the Board should review and reverse.

7. Whether EPA's failure to consider the Federal Land Manager's ("FLM") conclusion that Desert Rock would have an adverse impact on visibility constitutes a clearly erroneous finding of fact or conclusion of law, or presents an important policy consideration that the Board should review and reverse.

STATEMENT OF FACTS

The Permittee filed its application for a PSD permit on February 22, 2004 and filed a revised application on May 7, 2004. The Permittee proposes to construct a supercritical pulverized coal-fired power plant with two primary boiler units of 750 MW (gross) and 683 MW (net) each, with a total capacity of 1,500 MW (gross). The two boilers will have a heat input capacity of 6,800 MMBtu/hr and will burn up to 382 tons per hour of coal.

Desert Rock will be located on Navajo Nation land, approximately 25 miles south of the San Juan Generating Station (1,800 MW) and 15 miles south of the Four Corners Power Plant

(2,200 MW, also on the Navajo Nation). The Navajo Generating Station (2,200 MW) also lies within the Navajo Nation, 160 miles west of the proposed facility.

The Four Corners Region contains extraordinary cultural, archaeological, and natural resources. Desert Rock is surrounded by lands that are home to the Hopi, Ute Mountain Ute, Southern Ute, and Jicarilla Apache tribes, as well as nineteen Native American Pueblos. The major population centers of Albuquerque and Santa Fe lie approximately 150 miles southeast of the facility. The San Juan River, a major tributary of the Colorado River, runs 17 miles north of the proposed facility, while numerous national parks and monuments, national wildlife refuges, national forests, and wilderness areas are located in the region, including Mesa Verde National Park, Canyonlands of the Ancients National Monument, and the Weminuche Wilderness in the San Juan Mountains. *See* Ex. L attached hereto, EPA Map of Region.[2]

EPA determined that the permit application was administratively complete on May 21, 2004. Due to concerns raised by the FLM at the National Park Service and the State of New Mexico regarding inadequate modeling and impacts analysis, the Permittee conducted further modeling between 2004 and 2006. Ultimately, the FLM determined that Desert Rock would adversely impact visibility in Class I areas, but chose to enter into a "mitigation agreement" with the Permittee instead of recommending denial of the Permit.

On July 27, 2006, EPA notified the Permittee of its intent to take public comment on EPA's proposal to issue a construction permit granting conditional approval to construct for Desert Rock. EPA also informed the Permittee that the project triggered Section 7 of the ESA and that it would proceed with issuance of a final permit "upon conclusion of consultation, review of USFWS's Biological Opinion, and our determination that issuance of the permit will

[2] Documents not included in the administrative record for this Permit are attached as exhibits hereto and are designated by letter (e.g. "Ex. L").

be consistent with the ESA requirements." AR 47, at 2. EPA held public hearings on the permit application on October 3 and 4, 2006. During 2007, EPA and the Permittee continued to review the permit emission limits.

In October of 2007, the Bureau of Indian Affairs ("BIA") submitted a request for formal consultation to the USFWS. AR 92. A month later, by letter of November 20, 2007, the Permittee's attorneys informed EPA that it should issue the permit without waiting for completion of the formal consultation with the USFWS. AR 93. On January 7, 2008, USFWS requested further information prior to initiating formal consultation and, ten days later, the Permittee filed a notice of intent to sue EPA to require action on the Permit. AR 94; AR 96.

On March 18, 2008, the Permittee filed a complaint against EPA in federal court requesting that EPA be compelled to issue the Permit. AR 98. On June 3, 2008, EPA and the Permittee entered into a stipulated Consent Decree requiring EPA to make a determination on the Permit by July 31, 2008. *See* AR 118. On July 31, 2008, EPA issued the Permit.

SUMMARY OF PSD REQUIREMENTS

Pursuant to 42 U.S.C. §7470, the purposes of the PSD permitting program are:

1. To protect public health and welfare from any actual or potential adverse effects from air pollution or from exposure to pollutants in other media which originated as emissions to the ambient air, notwithstanding attainment or maintenance of all national air quality standards;

2. To preserve, protect, and enhance the air quality in national parks, national wilderness areas, and national monuments, among other areas of special national or regional natural, recreational, scenic, or historic value;

3. To ensure economic development does not threaten the preservation of existing clean air resources;

4. To assure that emissions from any source in any State (or Tribal region) will not interfere with any portion of the plan to prevent significant deterioration of air quality in any other state (or region); and

5. To assure that any decision to permit increased air pollution is made only after careful evaluation of all the consequences of such a decision.

To fulfill these purposes, the PSD program prohibits the construction of a major emitting facility unless the owner or operator submits a permit application demonstrating that the facility's construction or operation emissions will not cause or contribute to air pollution in excess of any NAAQS or any other applicable emission standard or standard of performance under the Act. 42 U.S.C. §7475(a)(3). EPA describes the NAAQS as "maximum concentration 'ceilings' measured in terms of the total concentration of a pollutant in the atmosphere." U.S. EPA Office of Air Quality Planning & Standards, *New Source Review Manual* at C.3 (Oct. 1990) (Draft)(hereinafter, "NSR Manual"). EPA has established NAAQS for sulfur oxides (SO2), particulate matter (PM10 and PM2.5), nitrogen dioxide (NO2), carbon monoxide (CO), ozone (VOC), and lead. 40 C.F.R. §50.4-50.13. Desert Rock is a new major stationary source with the potential to emit more than 100 tons per year of SO2, PM10, PM2.5, NO2, CO, and VOC. AR 46, at 6. The facility will also emit lead, flourides and sulfuric acid mist exceeding significance thresholds. *Id.*

Pursuant to the Act, the Desert Rock application must comply with the following requirements: (1) analysis of air quality and visibility impacts on class I areas; (2) analysis of the facility's projected air quality impacts; and (3) analysis of impacts on soils and vegetation. 42 U.S.C. §7475(a)(5) & (6) and 40 CFR §52.21(o). Additionally, the Act requires incorporation of BACT limits "for each pollutant subject to regulation under this chapter emitted from, or which

results from, such facility." 42 U.S.C § 7475(a)(4). EPA has interpreted BACT as an "emission limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under [the] Act which would be emitted from any proposed major stationary source." 40 CFR §52.21(b)(12).

ARGUMENT

I. THE PERMIT SHOULD BE REMANDED BECAUSE EPA FAILED TO COMPLETE FORMAL CONSULTATION PURSUANT TO THE ENDANGERED SPECIES ACT.

EPA incorrectly determined that it could issue the final PSD permit for Desert Rock prior to completing—or even beginning—the required consultation with the United States Fish & Wildlife Service ("USFWS") pursuant to Section 7 of the Endangered Species Act ("ESA"). EPA's determination is clearly erroneous and implicates public policy concerns of sufficient importance to warrant review by the Board. 40 C.F.R. § 124.19(a)(1). This issue was preserved for appeal during the public comment period for the Permit. AR 66, pp. 83-85. The Permit should be remanded so that the ESA consultation can be completed, and its findings can be accommodated in the Permit.

A. The ESA Consultation Requirement

The ESA requires federal agencies to obtain expert analysis as to the impact of their proposed actions on endangered species. Specifically, Section 7 of the ESA directs each federal agency to consult with the Department of Interior to "insure that any action authorized, funded, or carried out by such agency ... is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species." 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14. Accordingly, the ESA establishes a two-step consultation process. First, the agency proposing the action prepares a

biological assessment ("BA") to determine whether the proposed action "reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species." 16 U.S.C. § 1536(c)(1); 50 C.F.R. §§ 402.02, 402.12(k)(1). If the agency determinates that the proposed action would have no such effect, it presents this finding to the USFWS and, if the USFWS concurs, the consultation is effectively complete. 50 C.F.R. § 402.14(b). If, however, the agency determines that the proposed action will have such an effect, it initiates formal consultation with the USFWS. 50 C.F.R. §402.14(a).

In a formal consultation, the USFWS prepares a biological opinion ("BO") to determine whether the proposed action is likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. 50 C.F.R. § 402.14(g)(4), (h)(3). If the USFWS finds that jeopardy will occur, it must identify any "reasonable and prudent alternatives" that the agency can take to avoid that consequence. 50 C.F.R. § 402.14(g)(5), (h)(3). If there are no such alternatives, the proposed action normally cannot be taken.

Whether the USFWS finds that the proposed action would not jeopardize any species, or finds that the jeopardy could be avoided through reasonable and prudent alternatives, it must issue an incidental take statement to address the loss of species that would result from the action. That statement must specify "reasonable and prudent measures" that are considered necessary to minimize the take of the species as well as binding "terms and conditions" imposing those measures and any other requirements necessary to mitigate and monitor harms to species. 50 C.F.R. § 402.14 (i)(1)(ii), (iv). The formal consultation must generally be completed in 90 days. 16 U.S.C. § 1536(b).

B. Background of ESA Consultation for Desert Rock

EPA correctly determined, in the course of its review of the Permit Application for Desert Rock, that the ESA consultation must be completed prior to issuance of the final Permit. In a July 27, 2006 letter to the Applicant and again in the Ambient Air Quality Impact Report issued with the draft Permit, EPA stated its intent to issue the permit only "upon conclusion of consultation, review of [the USFWS] Biological Opinion, and our determination that issuance of the permit will be consistent with the ESA requirements." AR 47, at 2, and AR 46, at 46.

On April 30, 2007, the Bureau of Indian Affairs ("BIA") submitted a BA for Desert Rock to the USFWS. AR 80. On July 2, 2007, the USFWS rejected the BA as inadequate and directed the BIA to perform additional analyses and provide additional information. AR 82. On October 25, 2007, the BIA submitted a revised BA to the USFWS. AR 92. On November 20, 2007, the Applicant's attorneys wrote the EPA urging them to issue the final permit before completion of the ESA consultation. AR 93. The November 20 letter urged EPA to include a permit condition requiring ESA consultation to be completed before construction could begin. *Id.* at 3. On January 7, 2008, FWS responded to BIA's October 27, 2007 submission of the BA, identifying still more flaws in the BA and directing BIA to provide further information before USFWS would initiate formal consultation. AR 94. Ten days later, the Applicant filed a notice of intent to sue EPA to compel action on the Permit. AR 96.

On March 18, 2008, the Applicant filed a complaint against EPA in federal court seeking to compel EPA to act on the permit. AR 98. On June 3, 2008, EPA and the Applicant proposed a Consent Decree requiring EPA to make a determination on the permit by July 31, 2008. *See* AR 118. On July 31, 2008, EPA issued the Desert Rock permit, including the permit condition proposed by the Applicant. AR 122, Condition II.A.

C. EPA Improperly Issued the Permit Prior to Completion of the ESA Consultation.

The ESA requires Federal agencies to "afford first priority to the declared national policy of saving endangered species . . . [The ESA reflects] a conscious decision by Congress to give endangered species priority over the 'primary missions' of federal agencies." *Tennessee Valley Authority v. Hill*, 437 U.S. 153, 185 (1978). In this instance, EPA has effectively relegated the ESA consultation to the status of an afterthought. Despite Board precedent to the contrary and its own prior determination regarding this Permit, and at the behest of the Applicant, EPA reversed course and issued the Permit before the ESA consultation had even begun.

EPA justifies this reversal in part on "the need to address the statutory timing requirements" for issuance of a PSD permit that were "raised in the pending Desert Rock litigation." AR 120, at 171 (RTC). Whatever the merits of the litigation or EPA's approach to that case, EPA cannot rely on this ground to evade its ESA mandate.

EPA also presents faulty legal arguments for its deferral of the ESA consultation. EPA's arguments lack merit and do not justify EPA's violation of the ESA consultation requirement.

1. EPA ignores crucial distinctions between *Indeck-Elwood* and the present case.

EPA relies heavily on this Board's *Indeck-Elwood* decision to justify deferring ESA consultation until after its issuance of the permit. *In re Indeck-Elwood, LLC,* 13 E.A.D.___, slip op. (EAB; Sept. 27, 2006); RTC at 170-72. The Board's decision in *Indeck-Elwood*, however, actually demonstrates that ESA consultations should be completed prior to the issuance of a PSD permit. In particular, the Board held:

> In the ordinary course, the issuance of a final PSD permit would appear to be the point at which the permitting agency has irretrievably committed itself with respect to the discrete act of permitting a given activity. Accordingly, to avoid violating this requirement, *the Agency should complete the ESA process prior to the issuance of the final permit*....This ensures 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.

Id., slip op. at 111 (emphasis added). Without deviating from this fundamental premise, the Board found that the unique circumstances of *Indeck-Ellwood* led to the conclusion, "as a technical matter," that the ESA consultation in that case "met the minimum legal standards" of the ESA. *Id.* at 112. In other words, the Board did not endorse the approach taken in *Indeck-Elwood*, but rather recognized that, given the unique circumstances, it minimally passed muster. EPA has failed to demonstrate how this case fits *Indeck-Elwood's* highly unique circumstances. AR 120, at 170 (RTC).

First, in *Indeck-Elwood* the Board's determination that an ESA consultation completed after permit issuance "technical[ly]" satisfied the "minimum legal standard" was made with the benefit of hindsight. Specifically, because the Board ordered a stay of the entire EAB appellate process "pending the outcome of the ESA consultation process," the Board's review of the permit did not begin until the ESA consultation had been completed. slip op. at 20. All parties therefore knew the outcome and implications of the completed ESA consultation before Board began its review. As a practical matter, the EPA's issuance of the permit in *Indeck-Elwood* was of no real significance because the consultation still had to be completed prior to EAB review.

By contrast, in this case, EPA had no expectation that the ESA consultation would be completed before the Board begins its review of the permit. Indeed, the consultation has not yet even begun.

Moreover, this case differs from *Indeck-Elwood* because in that case "the consultation process concluded with the determination by Region 5 and the USFWS that the four listed species were not likely to be adversely affected by the construction and operation of the proposed power plant." *Indeck-Elwood*, slip op. at 20. As a result no "formal consultation" was required. The Board thus knew, at the time it considered the appeal, that the ESA consultation actually had no ramifications for the terms of the permit.

In this case, by contrast, the USFWS indicated in a January 2008 letter that "Desert Rock may affect [and is] likely to adversely affect" several animal and plant species and their habitat, including the endangered Colorado Pikeminnow, razorback sucker, southwestern willow flycatcher, Mancos milkvetch, and the critical habitat for the Colorado Pikeminnow and razorback sucker. AR 94. Desert Rock will also likely adversely affect the Mesa Verde Cactus. AR 92. As a result, a formal ESA consultation will be required for Desert Rock. The formal consultation will have ramifications for the Desert Rock permitting process. The USFWS will either make a jeopardy determination and require denial of the permit or "reasonable and prudent alternatives" to avoid jeopardy, or the USFWS will impose "reasonable and prudent measures" to minimize the incidental take of species. 50 C.F.R. § 402.14(g)(5), (h)(3), and (i)(1)(ii), (iv).

Because of these differences, EPA cannot properly rely on *Indeck-Ellwood* to justify its deferral of the ESA consultation in this case. The Board in *Indeck-Elwood* ruled on the very narrow question of whether the failure to complete an ESA consultation prior to the issuance of a PSD permit constituted a fatal procedural error when, at the time the Board commenced its review, the consultation had been completed and the Board already knew that the ESA consultation would not affect the permit. By contrast, EPA issued the Desert Rock permit and the

Board will conduct its review before formal consultation has even begun, and there has already been a determination that Desert Rock is likely to adversely affect protected species.

2. EPA based its action on an incorrect interpretation of an "irreversible or irretrievable commitment of resources."

Notwithstanding these significant differences between the present case and, EPA contends, relying on *Indeck-Elwood* that post-permit ESA consultations are permissible "so long as there is no irreversible or irretrievable commitment of resources." AR 120, at 170 (RTC). The ESA consultation requirement specifically prohibits "the Federal Agency and the permit or license applicant" from making any "irreversible or irretrievable commitment of resources...which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures" prior to completion of the ESA consultation. 16 U.S.C. § 1535 (d). As the Board stated in *Indeck-Elwood*, "[i]n the ordinary course, the issuance of a final PSD permit would appear to be the point at which the permitting agency has irretrievably committed itself with respect to the discrete act of permitting a given activity." slip op. at 111. Notwithstanding this precedent, EPA provides two arguments for why there has been no "irreversible or irretrievable commitment of resources" at Desert Rock. Neither argument can be appropriately applied to this case.[3]

a. EPA cannot rely on the filing of an appeal of its permitting decision to comply with the consultation requirement.

EPA cannot rely on the time allowed by an appeal to comply with the ESA. EPA asserts that because "it is highly likely that the permit will be appealed to the EAB," and an automatic stay would result, "there will likely be an opportunity for the ESA process to reach resolution

[3] EPA also asserts that pre-consultation issuance of the permit is justified because Desert Rock must also go through "NEPA process and ESA process" before it can be built. This argument ignores the fact that the consultation requirement attaches to EPA's action of issuing the Permit, not actual construction of the project. *See* 16 U.S.C. § 1535 (d) (prohibiting irretrievable agency action prior to consultation).

while the appeal is pending and before final agency action on the permit." AR 120, at 170 (RTC). In *Indeck-Elwood*, the Board made clear that this strategy is not lawful:

> ...an ESA compliance strategy that acknowledges ESA only in the event of an appeal is not a compliance strategy at all, in that it would tolerate an ESA violation whenever an appeal is not taken. Accordingly, we would expect that ESA consultation would ordinarily be completed, at the very latest, prior to issuance of the permit and, optimally, prior to the comment period on the permit, where the flexibility to address ESA concerns is the greatest.

Indeck-Elwood, slip op. at 114. Under *Indeck-Elwood,* EPA cannot rely on the possibility of an appeal to ensure adequate time for an ESA consultation. EPA therefore acted unlawfully in this instance to the extent the legal sufficiency of its permitting process is made contingent upon the filing of an appeal challenging the Permit.

b. The inclusion of Condition II.A in the Permit does not relieve EPA of its obligation to perform a timely ESA consultation.

EPA further claims that its inclusion of Permit Condition II.A, provides "additional protection to ensure that no 'irreversible or irretrievable commitment of resources'" takes place. AR 120, at 172 (RTC). Condition II.A states:

> 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 [ESA] with respect to the issuance of the permit.

Id. EPA also reserves the power to "reopen and amend the permit" or require an amended permit application if the ESA consultation so requires. *Id.*[4] Condition II.A establishes a precedent for EPA circumvention of the ESA. Even if the condition were lawful, it conflicts with the intent and purpose of the ESA and undermines the administrative efficiency of the permitting process, and should be rejected as a matter of policy. Case law suggests, however, that Condition II.A is not a lawful approach to ESA compliance.

[4] Notably, EPA does not reserve the right to revoke the permit if it is required to do so by the jeopardy determination, suggesting a predetermination of the outcome of the consultation.

Courts have looked unfavorably on federal agency attempts to use contract terms like Condition II.A to legitimize after-the-fact ESA consultations. In *NRDC v. Houston*, 146 F.3d 1118 (9th Cir. 1998), the Ninth Circuit held that the U.S. Bureau of Reclamation ("USBOR") could not use contract terms to evade the ESA requirement for a timely consultation. Prior to completion of the ESA consultation process, the USBOR had renewed water contracts containing a provision allowing for modification of the terms "pursuant to environmental review." *Id.* at 1127. The Ninth Circuit held that the execution of contracts constituted an "irreversible and irretrievable commitment of resources," even if the USBOR had included terms designed to avoid "foreclosing" the implementation of reasonable and prudent alternatives under Section 7(d) of the ESA. *Id.* at 1127-28. As the Court explained, "[w]e do not think that an agency should be permitted to skirt the procedural requirements of § 7(d) by including such a catchall savings clause in illegally executed contracts." *Id* at 1128.

Connor v. Burford, also indicates that an agency's retention of power to modify or even prevent private party actions that may harm species does not relieve that agency of its obligation to conduct a timely ESA consultation. 848 F.2d 1441 (9th Cir. 1988). In *Connor*, the Ninth Circuit considered oil and gas leases issued by the Bureau of Land Management ("BLM") without a biological opinion assessing the impact of post-leasing activities. *Id.* Citing a purported lack of information on the location and extent of oil and gas activities, the BLM obtained a Biological Opinion that considered impacts only at the leasing stage. To address post-leasing activities, BLM included lease stipulations that allowed BLM to examine the leased land:

> ...prior to [operators] undertaking any surface-disturbing activities to determine effects upon any plant or animal species, listed....as endangered or threatened, or their habitats. The findings of this examination may result in some restrictions to the operator's plans or even disallow use and occupancy that would be in violation of the Endangered Species Act...

Id. at 1455. The Court held that these provisions in the leases did not exempt the BLM from the "ESA's clear mandate that a comprehensive biological opinion...be completed before initiation of the agency action." *Id.*

These cases indicate that EPA unlawfully circumvented the ESA consultation requirement in this case when it deferred the ESA consultation based on Condition II.A.

3. An after-the-fact consultation gives rise to procedural defects.

Because a formal ESA consultation is required for Desert Rock, the EPA will have to either revoke the permit, incorporate reasonable and prudent alternatives to avoid jeopardizing species, or incorporate measures to minimize the incidental take of impacted species. *See* 50 C.F.R. § 402.14. The Board is now conducting review of a Permit that will not reflect such changes. This gives rise to a procedural deficiency in this permitting process.

Again, the present case must be distinguished form *Indeck-Elwood.* In *Indeck-Elwood,* the Board rejected the contention that the permit in that case was "procedurally defective" because of the absence of "ESA consultation materials" from the record. slip op. at 115. The Board determined that the ESA consultation process does not authorize public involvement and further held that that it lacked authority to review the substantive decisions made in the ESA consultation process. slip op. at 115, 118. As noted above, however, because the ESA consultation ended at the BA phase in *Indeck-Elwood,* the consultation had no implications for

any aspect of the PSD permitting decisions. Here, by contrast, the ESA consultation will necessarily have implications for the PSD permitting decisions. EPA's reasoning and decisions about the manner and extent to which the PSD permit must be modified to accommodate the determinations in the ESA consultation fall squarely within the purview of Board review.

Likewise, the materials that accompany such determinations must be included in the record for this Permit. Given the fact that a formal consultation must be completed, the absence such materials impairs public review of key aspects of the permitting decision. *See Indeck-Elwood,* slip op. at 112, 114 ("ESA-related information generated by Region 5 during consultation might have offered substantial additional record content on the question of vegetation impacts.")

The Desert Rock permit at Condition II.A does not adequately address this problem. It reserves to EPA "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 consultation process." AR 120, at 172 (RTC). This provision, however, establishes a fundamentally flawed process. If EPA reopens only a portion of the permit to comment, and appellate review, based on the outcome of the consultation, Petitioner will have been precluded from applying the ESA-related determinations to other aspects of the permit (e.g. review of the site-specific soils and vegetation analysis mandated by the Act at 42 U.S.C. § 7475(e)(3)). If, on the other hand, EPA reopens the entire permitting process at the conclusion of the ESA consultation, the parties are effectively forced to endure two appeals to the Board: this, pre-consultation review, and another full-fledged post-consultation review. This imposes on Petitioners an onerous burden and creates an untenable degree of administrative inefficiency.

The Board should remand this Permit so that the ESA consultation can be completed prior to permit issuance. A remand would correct EPA's unlawful circumvention of the ESA's requirements and avoids a procedurally defective permitting process.

II. EPA VIOLATED SECTION 165(a)(4) OF THE CAA BY FAILING TO CONSIDER INTEGRATED COMBINED CYCLE COAL GASIFICATION IN THE ANALYSIS OF BEST AVAILABLE CONTROL TECHNOLOGY.

EPA's failure to consider Integrated Combined Cycle Coal Gasification ("IGCC") in the analysis of Best Available Control Technology ("BACT") for the Desert Rock facility violates Section 165(a)(4) of the CAA. New Mexico preserved this issue in its October 12, 2006 comment letter on the draft permit. AR 67.

Section 165(a)(4) requires the EPA to consider production process and methods, including fuel cleaning and treatment, and innovative fuel combustion techniques, that would result in the maximum degree of pollution reduction. IGCC falls within the plain meaning of this language. The record reflects that the EPA recognized the need to address IGCC during the permit process, yet failed to do so, and now relies on post-hoc rationalization, makeweight legal arguments, and distorted interpretations of EPA policy and cases to justify its position. The EPA clearly erred in refusing to consider IGCC for this facility, and its refusal raises serious policy questions requiring the EAB's review.

A. Statutory Requirements

The EPA is obligated to consider IGGC in the BACT analysis. Section 165(a)(4) of the CAA requires EPA to establish BACT limits for new and modified major emitting sources. 42 U.S.C. §7475(a)(4). Section 169(3) of the CAA defines BACT as the maximum degree of pollution reduction achievable "through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel

combustion techniques...." 42 U.S.C. §7479(3). BACT is a technology-forcing standard which requires improvement in the control technologies at new and modified major emitting facilities.

The EPA has adopted guidance for applicants to implement the BACT review. Applicants must identify all available technologies to control emissions from their proposed facilities, and then provide a justification for dismissing each of them. *In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 171-172 (EAB 2000). A technology is available, and must be considered in the BACT review, if it "can be obtained by the applicant through commercial channels or is otherwise available within the common sense meaning of the term." *In re Maui Electric Company*, 8 E.A.D. 1, 6 (EAB 1998).

BACT includes coal gasification. The Congress added the reference to clean fuels and innovative fuel combustion techniques in Section 169(3) of the CAA specifically to ensure that IGCC was considered in the BACT review. The language was proposed by Senator Huddleston of Kentucky, who stated his intent to eliminate the possibility of misinterpreting the BACT provision to exclude IGCC:

> Mr. HUDDLESTON. Mr. President, the proposed provisions for application of best available control technology to all new major emission sources, although having the admirable intent of achieving consistently clean air through the required use of best controls, if not properly interpreted may deter the use of some of the most effective pollution controls. The definition in the committee bill of best available control technology indicates a consideration for various control strategies by including the phrase "through application of production processes and available methods, systems, and techniques, including fuel cleaning or treatment." And I believe it is likely that the concept of BACT is intended to include such technologies as low Btu gasification and fluidized bed combustion. But, this intention is not explicitly spelled out, and I am concerned that without clarification, the possibility of misinterpretation would remain. It is the purpose of this amendment to leave no doubt that in determining best available control technology, all actions taken by the fuel user are to be taken into account - be they the purchasing or production of fuels which may have been cleaned or up-graded through chemical treatment, gasification, or liquefaction; use of combustion systems such as fluidized bed combustion which specifically reduce emissions and/or post-combustion treatment of emissions with cleanup equipment like stack scrubbers....

95th Congress, 1st Session (Part 1 of 2), June 10, 1977, Clean Air Act Amendments of 1977, 123 Cong. Record S9421.

B. EPA's Response to Comments

For Desert Rock, the EPA refused to require the applicant to consider IGCC in the first step of the BACT review. The EPA grounded its decision on the conclusion that considering IGCC would "redefine the source."

> We are not persuaded to change our view that this alternative process would redefine the source proposed by the applicant and thus need not be listed as a potentially applicable control option at step 1 and evaluated further in the BACT analysis for this type of facility.

AR-120 at 13. According to the EPA, this interpretation is based on the statute.

> The policy is based on a reasonable interpretation of sections 165 and 169(3) of the CAA, which recognized that, although the permitting authority must take comment on and may consider alternatives to a proposed facility, the BACT analysis itself is done without changing the fundamental characteristic of the proposed facility.

AR-120 at 14. The EPA further asserts that this interpretation of the statute is supported by the legislative history, as well as the EPA's "long maintained policy" against utilizing the BACT requirement as a means to fundamentally redefine the basic design or scope of a proposed project." The EPA's position is clearly erroneous and warrants review by this Board. The EPA misinterprets the CAA and stretches this Board's precedent so far that it drains all meaning from the BACT requirement.

C. EPA's Refusal to Consider IGCC in the BACT Analysis is Clearly Erroneous and Bad Policy.

The EPA's refusal to consider IGCC in the BACT analysis is contrary to the plain meaning of the statute, and relies on a mischaracterization of legislative history and an erroneous determination that IGCC would "redefine the source." To the contrary, as the Board's analysis in

In re Prairie State Generating Company, LLC makes clear, EPA would not "redefine the source" by considering IGCC in the BACT analysis. *In re Prairie State Generating Co.*, PSD Appeal No. 05-05, slip op. (EAB August 24, 2006), 13 E.A.D. ___.

1. Section 165(a)(2) of the CAA does not excuse EPA from considering IGCC as BACT.

The EPA first claims that it is not obligated to consider IGCC under Section 165(a)(4) because IGCC constitutes an "alternative" that should be reviewed under Section 165(a)(2). AR-120 at 14-15. Nothing in Section 165(a)(2) supports an inference that the technology-forcing standard in Section 165(a)(4) excludes the consideration of innovative fuel combustion techniques.[6] Section 165(a)(2) is a public process requirement which allows members of the public to comment on alternatives to the proposed facility. By contrast, Section 165(a)(4) requires a PSD applicant to comply with the BACT requirement.

2. EPA mischaracterizes the legislative history.

The EPA next turns to Section 169(3), arguing that the legislative history actually does not require IGCC to be considered in the BACT review. First, it asserts that Sen. Huddleston's real intent in proposing the "innovative fuel combustion process" language was "to leave no doubt that 'all actions taken by the fuel user are to be taken into account.'" AR 120 at 17. Despite the clarity of Sen. Huddleston's explanation, EPA contends that his real purpose was "to make sure that, when a fuel user was proposing an innovative fuel combustion technique, such as coal gasification, that such actions by the fuel user would be taken into account and credited in the

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[6] The EPA's argument is a classic bait-and-switch. On one hand, the EPA claims that IGCC must be evaluated under Section 165(a)(2), not Section 165(a)(4). On the other hand, the EPA disclaims any obligation to evaluate IGCC as an alternative under Section 165(a)(2), because the obligation to evaluate IGCC falls on the person - in this case, the member of the public - who suggests the alternative. Response at 220-221. As a result, the EPA avoids evaluating IGCC in any context.

determination of BACT for the proposed facility." According to the EPA, Sen. Huddleston actually intended to agree with "a subsequent Congress" in reaching this conclusion.

The EPA relies on a distortion of the legislative history to justify its refusal to consider IGCC in the BACT analysis. Sen. Huddleston's explanation could not have been clearer:

> And I believe it is likely that the concept of BACT is intended to include such technologies as low Btu gasification and fluidized bed combustion. But, this intention is not explicitly spelled out, and I am concerned that without clarification, the possibility of misinterpretation would remain.

123 Cong. Record S9421, *op. cit.* The EPA quotes Sen. Huddleston out of context to justify its position. The actual statement, however, is repeated below, with the EPA's quotation in italics for comparative purposes:

> It is the purpose of this amendment to leave no doubt that in determining best available control technology, *all actions taken by the fuel user are to be taken into account* - be they the purchasing or production of fuels which may have been cleaned or up-graded through chemical treatment, gasification, or liquefaction; use of combustion systems such as fluidized bed combustion which specifically reduce emissions and/or post-combustion treatment of emissions with cleanup equipment like stack scrubbers.

123 Cong. Record S9421, *op. cit.* The only reasonable interpretation of this statement is that Sen. Huddleston intended for these actions to be taken into account when considering BACT, not, as the EPA suggests, to be excluded from BACT unless the applicant proposes it.

The EPA further errs by relying on a Senate report issued thirteen years after he proposed the amendment to Section 169(3). That report, of course, concerned the decision by a subsequent Congress to add different language to Section 169(3), and cannot be used to recast the earlier expression of Congressional intent. *Oscar Mayer & Co. v. Evans*, 441 U.S. 750, 758 (1979)(whatever evidence concerning Congress' intent in enacting a certain provision might be provided by a committee report written eleven years later was plainly insufficient to overcome clear and convincing evidence concerning congressional intent at the time of the enactment);

Consumer Product Safety Commission v. GTE Sylvania, 447 U.S. 102, 117-118 (1980)("the views of a subsequent Congress form a hazardous basis for inferring the intent of an earlier one."). "Subsequent legislative history will rarely override a reasonable interpretation of a statute that can be gleaned from its language and legislative history prior to its enactment." *Id.* at 118 n.13

The EPA's creative interpretation of legislative history would turn the BACT definition on its head, removing from its scope any innovative fuel combustion technique that the applicant itself does not propose. It is hard to imagine how the BACT requirement could survive such reinterpretation, let alone be squared with the legislative history and legal precedent. Indeed, EPA's reading conflicts directly with Sen. Huddleston's intent to avoid such misinterpretations.

3. EPA's reliance on the definition of "facility" is misplaced.

The EPA's final attempt at statutory reinterpretation involves the terms "proposed facility" and "such facility" in Sections 165(a)(4) and 169(3). According to the EPA, this language means "the specific facility proposed by the applicant, which has certain inherent design characteristics." AR 120 at 15.[7] Once again, the EPA reads language into the statute without citing any basis. In fact, Section 165(a)(4) requires a proposed facility to comply with Section 169(3), which in turn applies to "major emitting facility". Section 169(1) defines "major emitting facility" by reference to the facility type or size. The EPA defines "major emitting facility" by reference to Standard Industrial Code ("SIC") or, more recently, the North American Industry Classification Code ("NAICC"), and the Desert Rock application itself identifies the

[7] The EPA also tries to create ambiguity to justify its conclusion. The following scramble illustrates this technique: "Considering these provisions together, the Act requires that we conduct the BACT analysis on a 'case-by-case' basis on the 'proposed facility' while concurrently considering the 'application of production process and available methods, systems and techniques' that could alter the proposed facility. The statute does not provide clear direction on how EPA is to reconcile these concepts and simultaneously consider the particulars of the facility." AR 120 at 16. It would be a sad day if this passage represented the EPA's understanding of the CAA.

proposed facility by reference to the SIC and NAICC codes, *see infra.* In sum, Sections 165(a)(4) and 169(3) focus on the source type, not the specific facility proposed by the applicant.

4. EPA does not "redefine the source" by considering IGCC.

Lacking a statutory basis for refusing to consider IGGC in the BACT review, the EPA turns to the concept of "redefining the source". The EPA attempts to give this concept a much broader reading than previously sanctioned by the Board. In fact, the Board's precedent requires the consideration of IGCC for this facility.

In relying on the "redefining the source" concept, the EPA stretches the concept beyond this Board's precedent.[8] The cases upholding this concept create a narrow exception to the BACT requirement. This Board first endorsed the concept in *Pennsauken*, when it rejected an argument that the EPA must consider the use of existing power plants as BACT for a proposed municipal waste combuster. *In re Pennsauken County, New Jersey, Resource Recovery Facility*, 2 E.A.D. 667 (EAB 1988). As the Board explained in *Hibbing*,

> In *Pennsauken*, the petitioner was urging EPA to reject the proposed source (a municipal waste combuster) in favor of using existing power plants...In other words, the petitioner was seeking to substitute power plants (having as a fundamental purpose the generation of electricity) for a muncipal waste combuster (having as a fundamental purpose the disposal of municipal waste.

In re Hibbing Taconite Company, 2 E.A.D. 838, n.12 (EAB 1988).

Although the Board in *Hibbing* did not consider this issue because it had not been raised below, it observed that the touchstone for analysis was the applicant's "product or purpose", not the applicant's preferred design:

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[8] At times, it is difficult to ascertain the true scope of the EPA's argument. At one point, it argues for the discretion to decide whether a proposed technology would require redefining the source, AR 120 at 18-19, but elsewhere suggests that it does not need to consider any technology unless proposed by the applicant, AR 120 at 17.

> [O]ne argument that could be made is that the Region, by requiring the burning of natural gas to be an alternative to be considered in the BACT analysis, is seeking to 'redefine the source.' Traditionally, EPA has not required a PSD applicant to redefine the fundamental scope of its project.", EPA regulations define major stationary sources by reference to "their product or purpose, (e.g., 'steel mill', 'municipal incinerator', 'taconite ore processing plant', etc.), not by fuel choice. Hibbing will continue to manufacture the same product (i.e., taconite pellets) regardless of whether it burns natural gas or petroleum coke.")

Id. The Board reaffirmed this principle in *Knauf* when it cautioned that the applicant cannot "circumvent the purpose of BACT, which is to promote the use of the best control technologies as widely as possible", by limiting the BACT review to the proprietary plant process and design desired by the applicant. *In re Knauf Fiber Glass, GMBH*, 8 E.A.D. 121, 140 (EAB 1999).

The Board's recent decision in *Prairie State* confirms that the "redefining the source" policy requires—rather than prohibits—the EPA from considering IGCC in the BACT review for Desert Rock. In *Prairie State*, the Board upheld the Illinois EPA's ("IEPA") decision not to consider a different coal supply as BACT for a mine-mouth coal-fired power plant. *In re Prairie State Generating Co.*, PSD Appeal No. 05-05, slip op. (EAB August 24, 2006), 13 E.A.D. ___. The Board found that the "primary objective" of the proposed plant was to use coal from a co-located mine. In fact, the plant and mine were considered a single source. As a result, the Board agreed that the IEPA would have to "redefine the fundamental purpose or basic design" of the facility to accommodate shipped-in coal. slip op. at 36-37.

In reaching this conclusion, the Board was careful to circumscribe the narrow scope of the "redefining the source" concept. The Board cautioned that the agency must evaluate "how the *permit applicant*, in proposing the facility, defines the goals, objectives, purposes, or basic design for the proposed facility." slip op. at 30 (emphasis added); Slip.Op. at 28 ("the statute contemplates that the permit issuer looks to how the permit applicant defines the proposed facility's purpose or basic design in its application, at least where that purpose or design is

objectively discernible, as it is here."); slip op. at 29 ("the permit applicant initiates the process and, in doing so, we conclude, defines the proposed facility's end, object, aim, or purpose - that is the facility's basic design").

In conducting this evaluation, the Board directed the EPA to take a "hard look" at the applicant's statement of purpose to ensure that no there is no "potential to circumvent the purpose of BACT, which is to promote use of the best control technologies as widely as possible." Slip op. at 34. The applicant should not be allowed to manipulate the definition of the facility as a mechanism to avoid BACT review analysis.

Applying these principles, the Board affirmed the IEPA's decision to require the applicant to consider IGCC in the BACT review. [9] Prairie State's objective, as stated in the permit application, was the "development of an electric power generating plant that would be co-located and co-permitted with a 30-year supply of fuel." Slip op. at 36. The Board agreed with the IEPA[10] that the applicant's purpose was broad enough to include IGCC in the BACT review:

> In the present case, we are satisfied that IEPA took a sufficiently hard look at Prairie State's proposed Facility design to determine whether further emissions reductions would be achievable through inherently lower-polluting processes or methods while still achieving Prairie State's purpose or basic design for the Facility. In particular, IEPA specifically required Prairie State to submit a detailed analysis of Integrated Gasification Combined Cycle ("IGCC") as a method for controlling emissions from Prairie State's proposed Facility...Notably, IGCC is not simply an add-on emission control technology, but instead would have required a completely redesigned 'power block...[Illinios EPA's] demand that

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[9] Requiring power plants to consider IGCC in the BACT review has long been an established practice in the states. Before *Prairie State*, IEPA required Indeck-Elwood, LLC to consider IGCC, while Georgia (Longleaf Energy Station), Montana (Roundup Power Plant), and New Mexico (Mustang Generating Station) have required applicants to consider IGCC during the BACT process. AR 66 at 24-27. The Board should follow its decision in *Prairie State*, to avoid undermining those states that are working to protect the public health and environment consistent with the plain language of the CAA.

[10] "The IEPA explained that [given this purpose] "IGCC is a 'production process' that can be used to produce electricity from coal, that 'IGCC is a technically feasible production process', and that IEPA 'has determined that IGCC qualifies as an alternative emission control technique that must be fully addressed in the BACT demonstration for the proposed plant." Slip op. at 35 n.30.

> Prairie State provide a detailed analysis of IGCC, which [the agency] noted has the promise to achieve greater reductions, demonstrates that [the agency's] application of the policy against redefining the design of the source through application of BACT did not treat 'very few' design changes as consistent with the proposed Facility's basic design...To the contrary, [the agency;s] consideration of IGCC demonstrates that [it] gave due regard to Prairie State's objective in submitting a permit application for the proposed Facility, namely development of an electric power generating plant that would be co-located and co-permitted with a 30-year supply of fuel, and then explored every potential add-on technology and potentially lower-emitting production processes or methods consistent with that basic design to determine the maximum emissions reductions achievable at the Facility.

Slip op. at 35-36. This holding confirms that when the applicant defines its purpose as constructing an electric power generating plant to use a specific supply of fuel, IGCC must be considered in the BACT review. See also Slip op. at 33 ("The NSR Manual also states that where 'a given production process or emissions unit can be made to be inherently less polluting[,], the ability of design considerations to make the process inherently less polluting *must be considered* as a control alternative for the source.")(internal quotations omitted and emphasis in original).

In upholding the Board, the Seventh Circuit echoed the Board's cautionary approach to the "redefining the source" policy. *Sierra Club v. EPA*, 499 F.3d 653 (7th Cir. 2007). Calling it a "borderline case", the court agreed that requiring the consideration of shipped-in coal would be a fundamental change in the purpose of the facility. However, the court warned that its decision should not be read to allow the "redefining the source" policy to trump the BACT requirement. *Id.* at 656-657 (stating that the issue was not burning cleaner fuel, which fell within the scope of BACT, but repurposing the facility from a mine-mouth plant).

These decisions highlight that the "redefining the source" policy should focus on the business purpose articulated by the applicant, not the applicant's preferred operating scenario. Here, there is no evidence that the EPA examined the applicant's purpose for the proposed

facility.[11] Instead, the EPA took the applicant's preferred operating scenario - supercritical pulverized coal-fired boilers - to be the purpose. AR 120 at 19 (the applicant's "basic design [is] the equipment Sithe proposes to install.")

The applicant and project sponsor's statements reflect that Desert Rock, like the facility in *Prairie State*, is defined broadly enough to require consideration of IGCC. According to the application submitted by Steag Power, LLC, the purpose of the project, like the purpose of the *Prairie State* facility, is to construct a mine-mouth coal-fired power plant:

> Dine Power Authority (DPA), a Navajo Nation Enterprise, has contracted with Steag Power, LLC (Steag) to develop an electric power generation facility on Navajo Nation trust land.. The Desert Rock Energy Facility, the 'Project', will further support the Navajo Nation by utilizing the Navajo Nation coal reserves from the nearby mine operated by BHP Billiton. Staeg and DPA have a shared vision to develop an environmentally friendly project that efficiently uses the Navajo resources and brings substantial benefits to the Navajo Nation and surrounding communities.

AR 6.1 at 1-1. The DPA, the project sponsor, also identified the project purpose as building a coal-fired power plant using Navajo coal: "DPA began discussions with energy companies in the US and abroad to develop a coal-fired electric generation facility on Navajo Nation trust lands, using Navajo coal, Navajo water, and Navajo labor." AR 67.[12] According to the DPA, this purpose can be satisfied by any facility meeting the following parameters:

> a highly efficient coal-fired electric power plant with proven air pollution control technology, a power plant design that significantly reduces water consumption in a region where water resources are scarce, and an agreement to develop a project with DPA that respects and protects the property rights, environmental concerns, sovereign objectives and economic interests of the Navajo people.

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[11] The EPA also failed to address Region IX's original decision to require the applicant to consider IGCC. AR 66 at 23; AR 28. When the applicant refused to consider IGCC, the Region acquiesced for reasons not explained in the record.

[12] DPA wrote a second letter to EPA on the same date that stating "DPA's purpose is to develop utility-scale energy projects for the benefit of the Navajo people." AR 67 at 1 (DPA Letter from Steven Begay, November 13, 2006).

Id.

Clearly, the applicant understood that this business purpose could be achieved in several ways. Indeed, Steag explicitly acknowledged that IGCC would be a valid process for satisfying the project purpose and design:

> Four technologies may be considered for a new large coal fueled power plant as listed below:
>
> - pulverized coal combustion (sub-critical steam production)
> - pulverized coal combustion (supercritical steam production)
> - circulating fluidized bed (CFB) Combustion
> - Integrated Gasification Combined Cycle (IGCC)

AR 6.1 at 2-2. According to Steag, whether IGCC or another technology would be selected depended on the evaluation of several variables:

> The choice of technology for a specific project is affected by many variables including, but not limited to, project location, the size of the project, fuel cost and source or sources, land or space availability, the developer's experience with a technology, electricity markets, and many other factors.

Id. Clearly, the applicant understands that the business purpose of the project is to construct a mine-mouth coal-fired power plant, and the actual method of generating electricity is not specified by the agreement with the Navajo Nation. The applicant may "favor" supercritical pulverized boilers, but it acknowledged that other options, including IGCC, could satisfy the project objective.

Given the applicant's clear statement of purpose, which is virtually identical to the purpose in *Prairie State*, the EPA commits clear error by failing to consider IGCC in the BACT review. The EPA's post-hoc conclusion violates the Board's mandate to take a "hard look" at "how the permit applicant, in proposing the facility, defines the goals, objectives, purposes, or

basic design for the proposed facility." *Prairie State, op. cit.* at 34. The agency should be working to ensure that the permit applicant cannot manipulate the facility definition to avoid BACT review, not engage in such conduct itself. The Board should reject the EPA's decision and remand the permit for consideration of IGCC in the BACT analysis for Desert Rock.

III. THE PERMIT SHOULD BE REMANDED BECAUSE IT LACKS A BACT LIMIT AND EMISSION CONTROLS FOR CARBON DIOXIDE.

The Act requires EPA to conduct a BACT analysis and set an emission limit for "any regulated pollutant" before issuing the PSD permit. CO2 is a regulated pollutant under the Act. Failure to conduct modeling and a BACT analysis for CO2 violates the requirements of the Act and constitutes a clear legal error. It also raises an important policy question of whether EPA may allow a source to avoid setting an emission limit for CO2.

In public testimony on the proposed permit, NMED commented that EPA failed to consider CO2 emissions from Desert Rock in its BACT analysis. AR 58 at 13-22. NMED urged EPA to consider the impacts of CO2 emissions and use of available control technologies in issuing the final air quality permit. *Id.* Other public comments also discussed the need for a CO2 BACT analysis, noting that "EPA must conduct a BACT analysis and set BACT emission limitations for carbon dioxide in any permit that it issues for the Desert Rock Energy Facility." AR 57 at 7.

A. Statutory Requirements

Section 165(a)(4) of the Act, 42 U.S.C. §7475, prohibits the construction of a major emitting facility unless "the proposed facility is subject to the best available control technology for each pollutant subject to regulation under this chapter emitted from, or which results from,

such facility."[13] Pursuant to Section 169(1) of the Act, 42 U.S.C. §7479(1), "major emitting facility" includes any stationary source of air pollutants which emits, or has the potential to emit, one hundreds tons per year or more of any air pollutant.

According to the EPA's Ambient Air Quality Impact Report, Desert Rock is a proposed fossil fuel-fired steam electric plant of more than 250 MMBTU/hr heat input. AR 46 at 4. Therefore, Desert Rock falls within one of the 28 source categories that are subject to the PSD requirements of the Act. Because Desert Rock will emit more than 100 tons per year of several regulated air pollutants, it must install and operate BACT emission controls to minimize the emission of these pollutants. *Id.* at 2.[14]

Section 165(a)(4) of the Clean Air Act requires a BACT analysis "for each pollutant subject to regulation" under the Act. The Supreme Court definitively ruled in *Massachusetts v. EPA*, ___ U.S. ___, 127 S.Ct. 1438 (2007), that carbon dioxide is a "pollutant" under the Act. Moreover, CO2 has been regulated under the Act. Since 1993, coal-fired power plants have been required to monitor and report carbon dioxide emissions pursuant to regulations adopted under Section 821 and enforceable under Section 412(e) of the Act. Therefore, CO2 is a "pollutant subject to regulation" under Section 165(a)(4) of the Act. Because CO2 is a "pollutant subject to regulation" under the Act, and Desert Rock facility will be a major emitting facility for CO2, Desert Rock must be subjected to a BACT analysis and emission controls for CO2.

B. EPA's Response to Comments

[13] EPA's implementing regulations similarly state that BACT is required for "any pollutant that otherwise is subject to regulation under the Act." 40 C.F.R. §52.21(b)(50)(iv).

[14] Desert Rock will have the potential to emit approximately 11.2 million metric tons per year of CO2. In combination with the Four Corner Power Plant and San Juan Generating Station, both located within thirty miles of Desert Rock, these three coal-fired power plants will emit more than 38 million metric tons per year of CO2 in the San Juan Basin. (CO2 emissions data for Four Corners Power Plant and San Juan Generating Station from USEPA Clean Air Markets Database, June 20, 2008.)

EPA acknowledges that "the Clean Air Act and EPA's regulations require PSD permits to contain emissions limitations for each pollutant subject to regulation under the Act. CAA §165(a)(4); 40 C.F.R. §52.21(b)(12)." AR 120 at 25-27. EPA also acknowledges that BACT is required "for each regulated NSR pollutant that [a major source] would have the potential to emit in significant amounts." 40 C.F.R. 52.21(j)(2); 40 C.F.R. 52.21(b)(50). *Id.* Finally, EPA agrees that the definition of "regulated NSR pollutant" includes "any pollutant that is otherwise subject to regulation under the Act", in addition to pollutants subject to the NAAQS, NSPS, and Title IV. 40 CFR 52.21(b)(50)(i)-(iv). *Id.*

Despite these admissions, the EPA contends that it does not have the authority to impose limitations on emissions of CO2 in PSD permits. AR 120 at 25-27. First, it claims that the Supreme Court's decision in *Massachusetts v. EPA* does not require the Agency to set CO2 emission limits in PSD permits. *Id.* EPA next claims that the term "subject to regulation under the Act" does not include CO2 because EPA has not established a NAAQS or NSPS for CO2, classified CO2 as a Title IV substance, or otherwise regulated CO2 under any other provision of the Act. *Id.* Finally, in response to late-filed comments, EPA argues that Section 821 of the 1990 Clean Air Act amendments "requires only that certain sources monitor and report carbon dioxide emissions and that EPA make such emissions data publicly available." AR 121 at 11. EPA states that because Section 821 and the implementing regulations in Part 75 "do not establish emissions control requirements on carbon dioxide", they do not satisfy the phrase "subject to regulation under the Act." *Id.*[15]

[15] The EPA erroneously asserts that Desert Rock's impact will be mitigated by the Navajo Nation's participation in the Western Climate Initiative ("WCI"). AR 121 at 24-25. The WCI partner jurisdictions include the American states of New Mexico, Arizona, California, Oregon, Washington, Montana, and Utah, and the Canadian provinces of British Columbia, Manitoba, Quebec, and Ontario. Six other American states, one Canadian province, and six Mexican states are official observers. The Navajo Nation has never participated in the WCI.

C. The EPA's Refusal to Establish a BACT Limit for CO2 is Clearly Erroneous and Bad Policy.

EPA's refusal to require a CO2 BACT analysis for Desert Rock hinges on its argument that the phrase "subject to regulation under the Act" refers only to those pollutants "that are presently subject to a statutory or regulatory provision that requires actual control of emissions of that pollutant." *Id.* Neither the Act nor the regulations define this phrase to include only those pollutants for which EPA has established "emission control requirements." This argument, which has already been rejected in a recent state court case, is currently being reviewed by the EAB in *In re Deseret Power Electric Cooperative*, PSD Appeal No. 07-03.

Nothing in the Act supports the EPA's interpretation of Section 165(a)(4). CO2 has been a regulated pollutant under the Act since 1993, when EPA adopted the regulations implementing Section 821. These regulations codify requirements to monitor, record, and report CO2 emissions from coal-fired power plants, among other sources, and are enforceable under Section 412(e) of the Act. The Petitioners in the *Deseret* case recently filed a supplemental brief addressing this issue, as well as providing evidence that EPA has enforced Section 821 on numerous occasions. *Response of Petitioner Sierra Club to EPA's Supplemental Brief, Deseret*, PSD Appeal No. 07-03. New Mexico attaches hereto and incorporates by reference the arguments and evidence presented in that brief. Ex. Y.

The EPA also improperly qualifies the statute by adding the requirement that PSD applies only to those pollutants "that require[] actual control of emissions of that pollutant." These words appear nowhere in the statute. The EPA has no authority to amend the statute to add this restriction. *Sierra Club v. EPA,* 536 F.3d 673, 680 (D.C. Cir. 2008)(J. Kavanaugh dissenting) (The plain meaning of the text controls; courts should not strain to find ambiguity in clarity;

courts must ensure that agencies comply with the plain statutory text and not bypass *Chevron*). The EPA is obligated to comply with the plain meaning of the statute.

EPA's reasoning has been considered and rejected by at least one court. On June 30, 2008, a Georgia state court held, in a lawsuit challenging a decision by Georgia's environmental agency to permit a coal-fired power plant, that carbon dioxide must be evaluated under the BACT provision in Section 165(a)(4) of the Act. Exhibit V, *Friends of the Chattahoochee, Inc, and Sierra Club v. Couch and Longleaf Energy Associates, LLC*, Docket No. 2008CV146398, at 9 (GA Sup. Ct. 2008). The court specifically rejected the argument long advanced by EPA that carbon dioxide is not a pollutant subject to regulation under the Clean Air Act because it is not capped or controlled by a specific emission requirement. *Id. at* 7. The court then barred Georgia from issuing the PSD permit until it conducted a BACT analysis for CO2. *Id.* at 9.

As previously noted, this Board is considering this issue in the *Deseret* case. On November 21, 2007, the EAB issued an order recognizing the "national significance" of the issue, and on May 29, 2008, it ordered the EPA to further brief the issue. The new briefing will focus on two issues: (1) EPA's claim that the carbon dioxide requirements in section 821 of the 1990 Clean Air Act Amendments, and EPA's regulations in 40 C.F.R. §75.10(a)(3) which were adopted to implement section 821, are not enforceable under the Clean Air Act; and (2) whether section 165(a) of the Act requires a facility with the potential to emit certain amounts of carbon dioxide to obtain a PSD permit.

The Board in the present case denied a request by other petitioners to stay consideration of the CO2 issue pending the resolution of *Deseret*. Whether in conjunction with the impending *Deseret* decision or separate from it, Petitioner requests, for the reasons stated above, that the

Board remand this Permit for EPA to conduct a BACT analysis for Desert Rock's CO2 emissions.

IV. EPA VIOLATED SECTION 165(a)(3) OF THE CAA BY ISSUING THE PERMIT BEFORE COMPLETING THE CASE-BY-CASE MACT DETERMINATION.

EPA's decision to issue the permit before it completed the determination of Maximum Achievable Technology Standard ("MACT") for hazardous air pollutants violated Section 165(a)(3) of the Act. 42 U.S.C. §7475(a)(3). The Petitioner preserved this issue in its June 19, 2008 letter to EPA. AR 102.[16]

Section 165(a)(3) requires the owner or operator of a proposed PSD source to demonstrate "as required pursuant to section 110(j) of the Act, that emissions from construction or operation of such facility will not cause, or contribute to air pollution in excess of...any other applicable emission standard or standards of performance under [the Act]." One of these applicable emission standards or standards of performance is Section 112(g) of the Act, which requires a case-by-case MACT determination for hazardous air pollutants. 42 U.S.C. §7412(g)(2)(B). EPA failed to complete this determination before issuing the permit, yet in the response to comments, stated only that it would not be "appropriate" to include limits on HAPS emissions in the PSD permit. EPA's failure to conduct the MACT determination before issuing the permit and its failure to address the issue in its Response to Comments constitute clear error and raise an important policy consideration. The EAB should remand the permit for EPA to make this determination, incorporate any necessary permit changes, and reissue the proposed permit for public comment.

A. Statutory Requirements

[16] This issue was also raised in other public comments. *See* Citizen Group Letter to EPA, June 17, 2008, AR 62 at 15.

EPA's obligation to make a MACT determination is beyond dispute. Pursuant to Section 112(c) of the CAA, EPA listed coal-fired power plants as a major source category for hazardous air pollutants ("HAPs") in 2000. Ex. M, 65 Fed. Reg. 79825 (Dec. 20, 2000). As a result, the Act requires the EPA to "promulgate regulations establishing emission standards." 42 U.S.C. §7412(d)(1). These standards must reflect the "maximum degree of reduction in emissions that is deemed achievable" (or "MACT"). 42 U.S.C. §7412(d)(3).

Despite this unambiguous requirement, EPA did not adopt HAPs emission standards for coal-fired power plants. Instead, it issued a rule purporting to "delist" coal-fired power plants. 70 Fed. Reg. 15994 (Mar. 29, 2005). Earlier this year, the D.C. Circuit Court of Appeals rejected EPA's delisting attempt and vacated the rule. *New Jersey v. EPA*, D.C. Cir. Case No. 05-1097 (February 8, 2008).

As a result of the *New Jersey* vacatur, and in the absence of a MACT standard for coal-fired power plants, EPA must conduct a "case-by-case" MACT determination for Desert Rock. 42 U.S.C. § 7412(g)(2)(B)("Where no applicable emission limitations have been established by the Administrator," EPA must make a case-by-case determination whether a proposed major source would meet the "maximum achievable control technology emission limitation" for hazardous air pollutants.) EPA must make this determination for each HAP to be emitted by Desert Rock. *National Lime Assoc. v. EPA*, 233 F.3d 625, 633-34 (D.C. Cir. 2000). Desert Rock will emit approximately 166 tons per year of hydrogen chloride and 13.3 tons per year of hydrogen fluoride, as well as substantial amounts of mercury, arsenic, lead, and dioxins. AR 12 at p. 5-3.

The CAA requires EPA to complete this case-by-case MACT determination before it issues a PSD permit. Section 165(a)(3) states:

> No major emitting facility...may be constructed in any area to which this part applies unless...
>
> (3) the owner or operator of such facility demonstrates, as required pursuant to section 110(j) of the Act, that emissions from construction or operation of such facility will not cause, or contribute to air pollution in excess of...
>
> (C) any other applicable emission standard or standards of performance under [the Act].

Section 110(j) of the Act provides:

> *As a condition for issuance of any permit required under this subchapter*, the owner or operator of each new...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 emission 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...and operation of such source will be in compliance with all other requirements of [the Act].

(emphasis added).

These provisions are crystal clear: EPA shall not issue a PSD permit until the owner or operator demonstrates that it will comply with applicable performance standards. In Section 110(j), a permit required under "this subchapter" includes PSD permits under Part C of the CAA.

When read together, as they must be, Section 165(a)(3) and 110(j) require a proposed PSD source to obtain a permit before commencing construction and, as a condition of getting that permit, to demonstrate compliance with all applicable performance standards. For Desert Rock, the applicable performance standard for hazardous air pollutants is established by Section 112(g) of the Act. Despite this unambiguous language, EPA did not complete the case-by-case MACT[determination required by section 112(g). In fact, EPA did not even begin the MACT determination before the permit was issued.

B. EPA's Response to Comments

In the Response to Comments, the EPA acknowledges its obligation to make the MACT determination before Desert Rock can be constructed. *See* Response to Late Filed Comments at 21 ("EPA agrees with the commenter that a case-by-case MACT determination must be completed pursuant to Section 112(g) of the CAA and the implementing regulations under 40 CFR Part 63 before the Permittee may begin actual construction of the Desert Rock facility.") The permit itself does not contain a condition prohibiting construction before the EPA makes the MACT determination, although the preamble - which is unenforceable - states the Permittee must comply with all other applicable provisions of the CAA, which might be construed as a reference to Section 112(g) of the CAA. Finally, EPA recently sent a letter to the Permittee stating that MACT must be completed before construction can be commenced. *See* Ex. N, (Administrative Record for MACT determination: EPA-R09-OAR-2008-0674-002[1], EPA September 5, 2008 Letter).

While the EPA is correct that Desert Rock cannot begin construction until the MACT determination is completed, it ignores that the CAA actually requires the MACT determination to be completed *before it issues the PSD permit. See* CAA Sections 165(a)(3) & 110(j). Instead, EPA points to Section 112(b)(6) of the CAA, and argues that it would be "inappropriate" to include HAPs limits in the PSD permit. *See* AR 120, RTC at 35 ("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 permit. Emissions of mercury and other HAPs will be addressed through another regulatory program under 40 CFR Part 63, which provides various vehicles for making the case-by-case MACT determination."); AR 121, RTLFC at 21 (citing MACT regulations implementing the case-by-case determination

process); *Id.* at 61 ("EPA does not have the authority to add permit terms in a PSD permit to regulate mercury emissions.").

EPA never addresses the fact that the unambiguous language of Section 165(a)(3) requires the EPA to make the MACT determination before issuing the PSD permit. In this regard, the law is plain on its face: Sections 165(a)(3) and 110(j) require the EPA to make the MACT determination before issuing the PSD permit. Nothing in Section 112(b)(6) undermines this conclusion. Section 112(b)(6) says only that the PSD provisions "shall not apply to pollutants listed under this section." The EAB has made it clear this section means that hazardous air pollutants are not subject to PSD review, *In re Knauf Fiber Glass, GMBH*, 8 E.A.D. 121, 162-163 (EAB 1999), but this finding has no bearing on the EPA's obligation to conduct the MACT determination before issuing the permit. Petitioner is not asking the EPA to write PSD limits for hazardous air pollutants, only that the EPA make the MACT determination before issuing the PSD permit as required by Sections 165(a)(3) and 110(j).

To the extent that EPA suggests that ambiguity requires its interpretation of the provisions, or that there is a conflict between the provisions by which Section 112(b)(6) trumps Sections 165(a)(3) and 110(j), it is wrong as a matter of statutory construction. First, the plain meaning of the provisions is clear: Section 165(a)(3) and 110(j) require the EPA to make the MACT determination before issuing the PSD permit; Section 112(b)(6) merely prohibits the EPA from subjecting hazardous air pollutants to PSD review. There is no ambiguity - and EPA cites none - that requires the agency's interpretative gloss. Second, these sections can be easily harmonized to give each provision its plain meaning. Although EPA cannot subject hazardous air pollutants to PSD review, it also cannot lawfully issue the PSD permit until it completes the

MACT determination. EPA lacks the authority to read Sections 165(a)(3) and 110(j) out of the statute because the timing of its obligation is not convenient.[17]

The Congress had good reasons to require the EPA to make the MACT determination before issuing the PSD permit. It is entirely conceivable that the MACT determination would require an applicant to redesign portions of its facility to account for changes that affect the PSD pollutant emission limitations. Requiring the EPA to reconcile these potential conflicts before issuing the PSD permit ensures an internally consistent and functional permit, and conserves administrative and public resources. For example, Section 165(a)(4) of the Act requires the EPA to establish BACT limits for nitrogen oxides. However, the MACT for some hazardous air pollutants, such as benzene, might require combustion improvements to the Desert Rock's boilers, which in turn, might cause an increase in NOx emissions. By completing the MACT determination before issuing the PSD permit, the EPA could avoid the necessity of revising the PSD emission limits and reopening the permit for public comment. Of course, the issues for the Desert Rock permit could be more significant, since the MACT determination is case-by-case, rather than based on known criteria.

Moreover, the EPA appears to have prejudged whether it must provide the public with an opportunity to comment on the MACT determination or its effect on the PSD permit. The EPA opines that its "present understanding" of the potential MACT determination "gives us no basis to believe that HAP controls will affect the controls selected as BACT", even though the Permittee has not submitted a shred of paper regarding the MACT determination, and the EPA has not conducted any independent analysis of its own. AR 121, RTLFC at 22. Until a few

[17] The EPA cannot rely on its MACT regulations to achieve a different result. First, the regulations cannot authorize the agency to take an action that violates the plain meaning of the CAA. Second, nothing in the regulations authorize the result advanced by the EPA. The regulations provide alternative methods of conducting the MACT determination, but nowhere authorize the issuance of a PSD permit before the MACT determination is completed.

months ago, the EPA did not even contemplate a MACT determination for Desert Rock, and was instead relying on the unlawful rule vacated by the D.C. Circuit. Now EPA faces a case-by-case determination that has not even begun. The EPA also improperly conditions public notice and comment on whether "the MACT produces unanticipated consequences with PSD permit conditions." *Id.* EPA's apparent thumb on the scale suggests that it has predetermined the outcome of an analysis that has not even been completed.

The Act requires that the EPA complete the MACT determination before issuing the PSD permit. The EPA provided no justification for violating this requirement. Complying with Section 165(a)(3) might have slowed the EPA's rush to issue the Desert Rock permit, but its decision to disregard this obligation was clearly erroneous and must be reversed.

V. THE PERMIT MUST BE REMANDED FOR RECONSIDERATION OF DESERT ROCK'S OZONE IMPACTS.

A. Introduction

EPA's determination that Desert Rock would not cause or contribute to a violation of the ozone National Ambient Air Quality Standard (NAAQS) was clearly erroneous. EPA erred by failing to require or perform reliable data collection and analysis regarding ozone impacts as well as by arbitrarily relying on outdated and inaccurate ozone modeling in the face of current and significantly different data. This issue was preserved for appeal in comments raised by Petitioner as well as in comments submitted by other organizations and is therefore subject to review pursuant to 40 C.F.R. § 124.19(a)(1). *See* AR 66, at 52-4; AR 66(a)(AMI report); [18] AR 66(b)(Milford report); AR 57.9; AR 67, at 2.

[18] The November 13, 2006 comment letter from NGOs designated as AR 66 included voluminous attachments which are in the record for this permit, though they are not individually identified by number. Two of those attachments were expert reports that addressed ozone impacts. Those reports are included in the attached set of record materials and are designated as AR 66 (a) (the October 5, 2006 report by AMI Environmental) and AR 66(b) (the October 25, 2006 report by Dr. Jana Milford.)