

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

In re: ) PSD Appeal Nos. 08-03 to 08-06  
 )  
Desert Rock Energy Company, ) Motion of National Parks Conservation  
LLC ) Association for Leave to File a Brief as  
PSD Permit No. AZP 04-01 ) *Amicus Curiae* in Support of the Petition  
 ) of the NGO Petitioners

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Pursuant to 40 C.F.R. § 124.19 and the Environmental Appeals Board Practice Manual, National Parks Conservation Association (“NPCA”) respectfully moves this Board for leave to file the accompanying brief as *amicus curiae* supporting the Petitions for Review. NPCA seeks to support the NGO Petitioners<sup>1</sup> in their assertion that EPA Region 9 erred in issuing PSD Permit Number AZP 04-01 to Desert Rock Energy Company, LLC on July 31, 2008. For the reasons stated by the NGO Petitioners and for the reasons stated in the accompanying brief (Region 9 should not have issued this permit because the permitted facility may cause or contribute to adverse impacts to visibility in class I areas), NPCA respectfully requests that the EAB remand the Desert Rock PSD permit, instructing the Region, at a minimum, not to issue the permit without an adequate mitigation plan.

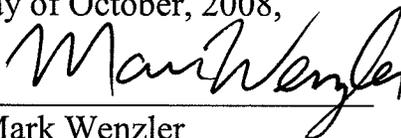
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<sup>1</sup> The NGO Petitioners are Dine Care, Environmental Defense Fund, Grand Canyon Trust, Natural Resources Defense Council, San Juan Citizens Alliance, Sierra Club, and WildEarth Guardians.

NPCA is a nonpartisan, nonprofit organization dedicated to protecting and enhancing America's National Park System for present and future generations. NPCA, established in 1919, today has approximately 350,000 members who care deeply about the well being of our national parks. One of NPCA's priorities is to protect air quality related values in our national parks, including visibility.

As *amicus curiae*, NPCA supports the Petitioners' position that the Federal Land Manger has found that the proposed facility will cause or contribute to adverse visibility impacts and that the mitigation plan contained in the permit fails to ensure that those adverse visibility impacts will not occur. Consequently, Region 9 exceeded its authority in issuing this PSD permit. We therefore respectfully request that the EAB review the enclosed *amicus* brief and consider it when issuing a decision in this matter.

Respectfully submitted this 2<sup>nd</sup> day of October, 2008,



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**INTRODUCTION**

As an organization dedicated to preserving and protecting our nation’s national parks, the National Parks Conservation Association (“NPCA”) is concerned about the permitting of any new facility that would adversely impact air quality in national parks.

More than 30 years ago Congress passed landmark amendments to the Clean Air Act, 91 Stat. 735 (1977), *codified in part at* 28 U.S.C. §§ 7470-92, meant to rid our national parks of harmful air pollution and leave them unimpaired for future generations. In spite of this congressional mandate, most of America’s national parks remain plagued by airborne hazards.

Some of the most inspiring views in America are found in our national parks. Unfortunately, polluted haze from coal-fired power plants and other sources has seriously dimmed these majestic vistas. Views from national parks in

the West should extend to 160-mile views on the clearest days, but those views can drop to 50 miles when air pollution levels are high.

Visibility is affected by the interaction of light with particles and gases in the atmosphere. These particles and gases can form haze that blocks scenic views altogether, and also makes distant horizons appear less colorful. The leading contributors to visibility impairment in the parks are sulfate and nitrate particles. According to the Energy Information Administration, there are 3,200 electric utility power plants in the United States, the majority of them fueled by coal.<sup>2</sup> Together, they represent the single largest industrial source of the major pollutants that impair visibility, emitting 67 percent of the nation's sulfur dioxide and 23 percent of our nitrogen oxides.<sup>3</sup>

Thus, NPCA supports the Petition for Review of the NGO Petitioners, particularly for the following reason: the National Park Service, the federal land manager for seventeen national park units within 300 km of the proposed plant site, has found that this facility, if constructed, may cause adverse impacts to

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<sup>2</sup> U.S. Energy Information Administration, Electric Power Monthly, May 2006, [http://www.eia.doe.gov/cneaf/electricity/epm/epm\\_sum.html](http://www.eia.doe.gov/cneaf/electricity/epm/epm_sum.html) .

<sup>3</sup> U.S. General Accounting Office, "Air Pollution: Meeting Future Electricity Demand Will Increase Emissions of Some Harmful Substances," October 2002, <http://www.gao.gov/new.items/d0349.pdf> .

visibility at nine of those seventeen national park units that have been afforded “Class I” air quality status under the federal Clean Air Act: Canyonlands, Capitol Reef, Mesa Verde, Petrified Forest, Grand Canyon, Arches, Bandelier, Black Canyon of the Gunnison, and Capitol Reef.

In discussing the threat to visibility posed by Desert Rock in these areas, the Park Service stressed their extraordinary scenic qualities and panoramic views in these areas, explaining that they are very sensitive to even small amounts of air pollution. Although these areas enjoy some of the cleanest and clearest air in the country, visibility impairment has been well-documented. One Class I park vulnerable to the greatest impacts from Desert Rock is Mesa Verde. According to the NPS Air Resources website, “preserving visibility is an important means of enhancing visitor understanding of Ancestral Puebloan culture.” Air pollution forms a tangible barrier to experiencing the past, visually and emotionally. Some years ago the visiting public at Mesa Verde ranked air quality as one of the park’s most important features. Continued degradation of the park’s visual quality would greatly diminish the experience of park visitors

The Park Service made its finding contingent; that is, the finding was to remain in effect unless a “mitigation plan” developed by the applicant became a part of the final permit. In response, Region 9 made a mitigation plan part of the

permit, but that should not end the matter. Review of that plan shows that it will not necessarily ensure that even one pound of emissions of sulfur dioxide (“SO<sub>2</sub>”) or nitrogen oxides (“NO<sub>x</sub>”) will actually be reduced to offset emissions from Desert Rock. Accordingly, the permit, as issued, may allow the predicted, visibility-impairing emissions to occur unabated. In the face of these facts, this permit should not issue.

### **FACTUAL BACKGROUND**

The permitted facility, the Desert Rock Energy Project, would consist of two new, 750 MW, supercritical, pulverized coal (PC) boilers near the current Four Corners power plant on the Navajo Reservation near Farmington, New Mexico. *See* Desert Rock Energy Facility: Supplemental PSD Permit Application. Applicant: Steag Power, LLC (May 7, 2004) (“PSD Permit Application”) (AR 12) at 2-1. On July 27, 2006, Region 9 released a proposed PSD permit for Desert Rock. *See* Proposed PSD Permit (July 27, 2006) (AR 54). The comment period on the proposal closed November 13, 2006.

Before the comment period closed, the National Park Service sent a letter to Region 9 stating the following:

Over the past two years, the NPS has worked closely with representatives of Sithe, the U.S. EPA, the U.S. Forest Service, Dine Power Authority, and Navajo EPA to ensure that potential impacts of the proposed Desert Rock

Energy Facility on air quality and related values were carefully analyzed. ***When it became apparent that emissions from the facility could adversely impact visibility in several NPS Class I areas***, Sithe suggested mitigation measures that were intended to produce a net environmental improvement, notwithstanding construction and operation of the Desert Rock Energy Facility.

In that same letter, the Park Service also said:

The NPS has reviewed the PSD application and prepared preliminary technical findings with respect to the proposed project. ***Relevant portions of the document state that the proposed project may lead to adverse impacts to Class I areas*** in the absence of conditions and measures designed to mitigate these impacts.

See Letter from Verhey, NPS, to Johnson, EPA (Oct. 26, 2006) (AR-120.8), at 2. (emphasis added) (hereinafter “2006 NPS Letter”).

After the comment period closed, the Park Service sent a memorandum to the Bureau of Indian Affairs commenting on the Draft Environmental Impact Statement for the Desert Rock project. In this memorandum, the Park Service reiterated its adverse impact finding:

***Our PSD analysis, including review of the Regional Haze modeling results in Table K-33 essentially determined that the facility may cause an adverse impact on visibility in the absence of mitigation measures.*** The discussion on p. K-32 concludes that the “project’s impacts to visibility and regional haze are very minimal with only a marginally noticeable impact at Mesa Verde.” The Federal Land Manager, under the Clean Air Act, has responsibility to determine what constitutes an adverse impact in the context of new sources. ***The conclusion on p. K-32 is not consistent with the determination of the Federal Land Manager.***

As we indicate in our PSD comments, *and to address our adverse impact concerns*, Sithe proposed a package of mutually acceptable mitigation measures. Most noteworthy is Sithe's commitment to obtain emission reductions (sulfur dioxide and/or nitrogen oxides) within the region that will mitigate their contribution to regional visibility impairment. We expect this mitigation agreement to be enforceable.

See Memorandum from Snyder, NPS, to Yazzie, BIA (August 6, 2007) (Appended to the Brief as Exhibit 1) (emphasis added).<sup>4</sup>

### *Review of the Modeling*

In its 2006 letter, the Park Service noted that the applicant's visibility modeling, which used the recommendations of the CALPUFF modeling system, and followed the recommendations of the Federal Land Managers' Air Quality Related Values Work Group ("FLAG,") predicted that Desert Rock would lead to visibility impairment (5% extinction) at the following locations:

<b>Arches</b>	Glen Canyon
Aztec Ruins	Grand Canyon
<b>Bandelier</b>	Hovenweep
<b>Black Canyon</b>	Hubbell Trading Post
<b>Canyonlands</b>	<b>Mesa Verde</b>
Capitol Reef	<b>Petrified Forest</b>
Chaco Culture	Yucca House
Currecanti	Zuni-Cibola. <sup>5</sup>
El Malpais	

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<sup>4</sup> The mitigation plan, discussed below, was never actually signed by the Park Service.

<sup>5</sup> See 2006 NPS Letter, at App. 7 (Areas in bold are mandatory class I areas).

The applicant's modeling also predicted that the proposed facility may lead 10% extinction Canyonlands, Capitol Reef, Mesa Verde, and Petrified Forest. *See* 2006 NPS Letter, at App. 7. To avoid the consequences of these modeling results, the applicant suggested what the Park Service called "deviations" from the first-level screening procedure, suggestions the Park Service rejected as "arbitrary adjustments." *Id* at App. 8.

At EPA's suggestion, the applicant then conducted modeling pursuant to EPA's BART guidance. That modeling predicted that the facility would lead to a 5% change in extinction on 27 days at Mesa Verde over a three-year period. *Id.* The Park Service then suggested to the applicant that it perform modeling "to assess the effects of local terrain and aqueous phase conversion of pollutants," but the applicant rejected this suggestion, so the Park Service did this modeling itself. *Id.* This modeling indicated a potential for airflow into Grand Canyon National Park following stagnation events, "resulting in significant visibility impacts." *Id.* at App. 8-9. Meanwhile, the applicant did some special "time period" modeling, and while it showed lower maximum visibility impacts at 5 Class I areas during one period and 15 Class I areas during another period, it also showed a 15% change in extinction at Bandelier National Monument. *Id.* at App. 9.

### *The Mitigation Plan*

The bottom line here is that every modeling exercise has shown that this plant will produce adverse visibility impacts at some nearby Class I area; hence the Park Service's finding of adverse impact. As mentioned above, the Park Service's adverse impact finding was in effect unless and until a mitigation plan that satisfied the Park Service was made an enforceable part of the permit; in other words, the imposition of the mitigation plan would supposedly obviate the Park Service's adverse impact finding. The idea behind the mitigation plan is that emissions of SO<sub>2</sub> or NO<sub>x</sub> could be reduced at nearby facilities, thereby reducing the impacts from Desert Rock.

The Park Service modeled what would happen if emissions at either the nearby Four Corners or San Juan plants were reduced by the amount of emission increases expected from the construction of Desert Rock. The modeling assumed either 1:1 offsets for SO<sub>2</sub> or 3:1 offsets for NO<sub>x</sub>, but the modeling also assumed that these reductions would be essentially simultaneous; in other words, the modeling assumed that the hourly emission rates from Four Corners or San Juan would be somehow reduced. This modeling shows that hourly reductions at Four Corners and San Juan achieve "small visibility improvements."

Given this modeling and the Park Service's decision to make its finding of adverse impact contingent on adoption of a mitigation plan, review of the mitigation plan is critical to review of this issue. The plan, *Memorandum of Understanding: Between the Navajo Nation Environmental Protection Agency and Desert Rock Energy Company, LLC, to develop an enforceable Voluntary Air Emissions Reduction Plan*, (AR-81), contains an Exhibit A, "Sulfur Dioxide Mitigation." This Exhibit has been made part of the final permit (Condition D.3), and it provides for two options. Under Option A, the applicant is supposed to develop or cause to be developed a capital investment project or projects that will result in real emission reductions at another coal-fired facility located within 300 km of the plant site. Under Option B, the applicant must obtain and retire up to \$3 million of acid rain allowances from facilities that are located within 300 km of the plant site. The vintage year of these allowances must correspond to the same year being mitigated, and the allowance acquisition must equal Desert Rock's SO<sub>2</sub> emissions for that year.

Under Option B, however, nothing prevents the allowance sellers from purchasing allowances from outside the area or from a different vintage year to cover their own obligations. Consequently, the end result of the mitigation plan under Option B could be no net reduction in SO<sub>2</sub> or NO<sub>x</sub> in the area.

## **APPLICABLE LAW**

The Clean Air Act contains two provisions that are on-point on this issue.

Section 165(d)(2)(C)(ii) and (iii), 42 U.S.C. § 7475(d)(2)(C)(ii) and (iii), provide as follows:

(ii) In any case where the Federal Land Manager demonstrates to the satisfaction of the State that the emissions from such facility will have an adverse impact on the air quality-related values (including visibility) of such lands, notwithstanding the fact that the change in air quality resulting from emissions from such facility will not cause or contribute to concentrations which exceed the maximum allowable increases for a class I area, a permit shall not be issued.

(iii) In any case where the owner or operator of such facility demonstrates to the satisfaction of the Federal Land Manager, and the Federal Land Manager so certifies, that the emissions from such facility will have no adverse impact on the air quality-related values of such lands (including visibility), notwithstanding the fact that the change in air quality resulting from emissions from such facility will cause or contribute to concentrations which exceed the maximum allowable increases for class I areas, the State may issue a permit.

The applicable regulations, 40 C.F.R. § 52.21(p)(2) and (3) also contain two relevant provisions:

(3) Visibility analysis. 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. Where the Administrator finds that such an analysis does not demonstrate to the satisfaction of the Administrator that an adverse impact on visibility will result in the Federal Class I area, the Administrator must, in the notice of

public hearing on the permit application, either explain his decision or give notice as to where the explanation can be obtained.

(4) Denial -- impact on air quality related values. The Federal Land Manager of any such lands may demonstrate to the Administrator that the emissions from a proposed source or modification would have an adverse impact on the air quality-related values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Administrator concurs with such demonstration, then he shall not issue the permit.

Together, these regulatory and statutory provisions provide the following:

(1) if emissions from the proposed plant will cause or contribute to an exceedance of a Class I increment, then burden is on the applicant to demonstrate to the federal land manager that the facility will have no adverse impact on visibility, and if the federal land manager agrees and so certifies, then the permit can be issued; or

(2) if emissions from the proposed plant will *not* cause or contribute to an exceedance of a Class I increment, but the federal land manager demonstrates to EPA that the proposed source may have an adverse impact on visibility, then if EPA concurs with the federal land manager, EPA must not issue the permit.

## DISCUSSION

Under the first scenario laid out above, if emissions from a facility will cause or contribute to an exceedance of a Class I increment, then the burden is on the applicant to demonstrate to the federal land manager that its emissions will not cause an adverse visibility impact in any Class I area. Here, assuming, for the moment that this facility will lead to an exceedance of a Class I increment, then, absent the mitigation plan, the applicant never met its burden of proving to the federal land manager that this plant will not cause adverse visibility impacts.

The issue of whether this facility will cause or contribute to an exceedance of the Class I SO<sub>2</sub> increment at Mesa Verde has been thoroughly briefed by the NGO petitioners, so NPCA will not revisit the issue here. Even if this Board were to find that EPA was correct in concluding that Desert Rock will not cause or contribute to an exceedance of the SO<sub>2</sub> increment at Mesa Verde and does not need to share its extensive new modeling with the public, the second scenario would apply.

Under the second scenario, if the Park Service has demonstrated to EPA that Desert Rock may cause or contribute adverse visibility impacts in Class I areas and EPA agrees, then EPA may not issue the permit. Two issues arise under this second scenario. First, EPA maintains that the Park Service has not demonstrated

that adverse visibility impacts may occur. As explained below, that conclusion is arbitrary, capricious, and contrary to the weight of the evidence. Second, assuming that EPA has accepted the Park Service's finding of adverse impact, was it appropriate for EPA and the Park Service to set aside that finding based upon the mitigation plan. As explained below, clearly not.

Turning to the first point (whether the Park Service has demonstrated adverse impacts), in its response to public comments, EPA states that: "the FLMs expressed some general concern about impacts of this project in the absence of mitigation, this did not constitute a finding of adverse impact under EPA regulations." *See* EPA, Responses to Public Comments on the Proposed PSD Permit (July 31, 2008) ("RTC") (AR 120) at 169. This statement by EPA is simply not supported by the record. As mentioned above, in its comments, the Park Service walked through all of the extant, legitimate visibility modeling and found that all of it predicts that Desert Rock will lead to visibility impairment in some Class I areas. 2006 NPS Letter, at App. 7-10.

Furthermore, the Park Service's statements regarding its conclusions leave little doubt that it made the requisite findings:

When it became apparent that emissions from the facility could adversely impact visibility in several NPS Class I areas, Sithe suggested mitigation measures . . . .

2006 NPS Letter, at 2.

Relevant portions of the document state that the proposed project may lead to adverse impacts to Class I areas . . . .

*Id.*

Our PSD analysis . . . essentially determined that the facility may cause an adverse impact on visibility in the absence of mitigation measures.

Memorandum from Snyder, NPS, to Yazzie, BIA (August 6, 2007) (Exhibit 1 hereto). The language used by the Park Service in these documents tracks the language necessary for “findings” included in the regulations. *See* 40 C.F.R. § 52.21(p)(3)(“The Administrator shall consider *any* analysis performed by the Federal land manager . . . 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.”)(emphasis added).

EPA then attempts to argue that the FLM’s demonstration regarding adverse visibility impacts can be disregarded as untimely, but this is a disingenuous argument. AR 120, at 143. First, EPA spent nearly two years between the proposed and final permit working on this matter and carefully examined the submissions from the Park Service. Furthermore, the applicable regulation

regarding the timing of FLM submissions, 40 C.F.R. § 52.21(p)(1), provides that EPA's notice to the FLM must contain "a copy of all information relevant to the permit application." In this instance, the FLM did not have all the "relevant" information until EPA produced the draft permit, and the FLM did comment within the specified public comment period on the draft permit. Accordingly, EPA's untimeliness argument must be rejected.

EPA then says that even if the FLM's communications were findings of adverse impacts, it says the FLM's provided "limited information." AR 120, at 43. The extensive nature of the Park Service's analysis of potential visibility impacts from Desert Rock belies the use of that phrase. 2006 NPS Letter, at App. 7-10.

Perhaps because Region 9 itself recognizes that the Park Service did indeed make a finding of adverse impact, the Region has incorporated Sithe's mitigation plan into the permit. Any suggestion, however, that the mitigation plan actually resolves the predicted visibility impairment from this facility is misplaced. First, the mitigation plan does not ensure that it will produce **any** real reductions. Option B only applies to Sithe, not to any other entity within the 300 km radius covered by the agreement. Accordingly, under Option B, although the applicant is required to obtain and retire acid rain allowances from nearby sources for the relevant year, absolutely nothing would prevent the sellers of those allowances

from obtaining out-of-area allowances to cover any acid rain obligations it may have. AR-81. Simply put, the allowance acquisition required by Option B could entail nothing more than a paper exercise.

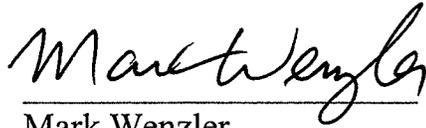
Furthermore, even if the mitigation plan will lead to real reductions in annual emissions within the plan's 300 km radius, reductions in annual emissions will not ensure mitigation of the predicted visibility impacts; only reductions in 24-hour emission rates would be relevant. The "offset modeling" described in the Park Service's comment letter, 2006 NPS Letter, at App. 9-10, assumed reduced 24-hour emission rates, and *only* at the San Juan and Four Corners facilities. The mitigation plan neither limits its application to these two facilities nor does it deliver reduced 24-hour emission rates. Rather, the plan only delivers (to the extent it produces any real reductions at all) reduced annual emission, all of which could be achieved through an extended planned outage. Thus, there is no guarantee based on modeling that the mitigation plan will alleviate the visibility impairment that the Desert Rock facility will produce.

Given the inadequacy of the mitigation plan and the Park Service's finding that this facility may lead to visibility impairment of nearby Class I areas, the Region erred by issuing this permit.

## CONCLUSION

For the reasons set forth above, this permit should be remanded with instructions that the Region should issue the permit only if it develops an adequate, model-supported mitigation plan.

Respectfully submitted this 2<sup>nd</sup> day of October, 2008,



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## CERTIFICATE OF SERVICE

I hereby certify that on this day, October 2, 2008, the original of the foregoing document has been hand delivered this day to:

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

I further certify that on this day, October 2, 2008, a copy of the foregoing documents were submitted through the Board's electronic submission system.

I further certify that on this day, October 2, 2008, a copy of the foregoing documents have been sent this day by regular mail to the following:

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# Exhibit

1



## United States Department of the Interior

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DES-07/0023

### MEMORANDUM

August 6, 2007

**To:** Harrilene Yazzie, Regional NEPA Coordinator, Bureau of Indian Affairs, Navajo Regional Office, P.O. Box 1060, Gallup, NM 87305

**From:** Michael D. Snyder, Director, Intermountain Region, National Park Service

**Subject:** National Park Service comments on the Draft Environmental Impact Statement for the Desert Rock Energy Project and the Navajo Mine Extension Project, Colorado

We are responding to your request to review and provide comments on the Draft Environmental Impact Statement (DEIS) for the Desert Rock Energy Project and the Navajo Mine Extension Project. Thank you for the opportunity to provide input on a proposal that poses numerous impacts to National Park Service (NPS) units in the Four Corners area. Our comments address air quality issues in the DEIS primarily, but also include visual resources.

There are 27 units of the National Park System within 300 km of the proposed plant site; nine of those units are mandatory Class I areas. Under the Clean Air Act, we have an affirmative responsibility to protect the visibility and other air quality related values of these NPS-administered Class I areas from the adverse impacts of air pollution. In addition, under the NPS Organic Act, we are charged with the responsibility to protect the resources of all of our units (both Class I and Class II).

In 2006, NPS provided comments on the permit application and draft Air Permit through the Department of the Interior, Office of the Assistant Secretary, to the U.S. Environmental Protection Agency (EPA), for the Sithe - Desert Rock Energy Facility proposal. The final Air Permit (Prevention of Significant Deterioration-PSD, and part of the Clean Air Act) has not been granted by the EPA as of this date. We reiterate and attach our comments on the PSD permit application and draft permit for the Desert Rock Energy Facility. Our technical conclusions and recommendations from that submittal are as follows:

- Clean Coal Technologies such as IGCC could substantially reduce annual SO<sub>2</sub>, NO<sub>x</sub>, PM<sub>10</sub>, and CO<sub>2</sub> emissions, and warrant consideration by Sithe.
- Sithe should investigate the application of innovative technologies, such as that proposed by Peabody/Mustang power generating facility, to reduce SO<sub>2</sub> emissions.
- Sithe's cumulative analyses of increment consumption and visibility impacts are incomplete and underestimate impacts.



- Desert Rock’s impacts on visibility and deposition exceed NPS significance thresholds and fall into the range of impacts for which adverse impact findings have been made in other cases (Longview Power in West Virginia and Greene Energy in Pennsylvania).
- The Environmental Protection Agency (EPA) should incorporate the “Mitigation Measures” described in our comments, and in the PSD Appendix D, in any final permit. There are precedents for such actions, most recently Longview and Greene power plant facilities.

Some issues we raised in our PSD comments have not been subsequently addressed, including the concerns with the increment consumption analysis.

Our PSD analysis, including review of the Regional Haze modeling results in Table K-33 essentially determined that the facility may cause an adverse impact on visibility in the absence of mitigation measures. The discussion on p. K-32 concludes that the "project's impacts to visibility and regional haze are very minimal with only a marginally noticeable impact at Mesa Verde." The Federal Land Manager, under the Clean Air Act, has responsibility to determine what constitutes an adverse impact in the context of new sources. The conclusion on p. K-32 is not consistent with the determination of the Federal Land Manager.

As we indicate in our PSD comments, and to address our adverse impact concerns, Sithe proposed a package of mutually acceptable mitigation measures. Most noteworthy is Sithe’s commitment to obtain emission reductions (sulfur dioxide and/or nitrogen oxides) within the region that will mitigate their contribution to regional visibility impairment. We expect this mitigation agreement to be enforceable through conditions in the final PSD permit and/or some other instrument.

Two pollutants of concern that are not addressed in the draft PSD permit are mercury and carbon dioxide. On p. 4-12, the DEIS should state the basis for its conclusion that "... only a small percentage of elemental mercury vapor would settle out within 25 km from the plant." The issue of local deposition of mercury is relatively controversial and should be examined in greater detail. Regarding carbon dioxide, while appendix K provides an expected quantification of CO2 due to operation of the plant (12.7 million tons per year), and there is a very general discussion on global climate change on p. 5-12, there is no discussion regarding the effects of CO2 from the Desert Rock Energy Facility nor any discussion of mitigation strategies.

The DEIS should strengthen the discussion, evaluation and mitigation of construction and plant operation dust, given the high winds and typical ground surface of the proposed site. The region already experiences visibility impacts due to dust, so every effort must be made to avoid compounding those impacts.

### Visual Resources

The DEIS has chosen a very “close-in” radius of potential viewing sites where the proposed facility might be affecting visual resources. In numerous portions of the Visual Resources section, general mention is made of “*the landscapes are vast and expansive, permitting extensive views of undisturbed land*” (Section 3.7.4). The particular methodology considered for the Draft EIS analysis understates the visual distance that one should consider in the Four Corners area. Several automobile driving trips between Farmington NM and Ship Rock NM should have piqued the consultants’ curiosity about the very striking and dramatic visual impact of the two existing power plants in the area. The existing power plants have shorter exhaust stacks, but are visually intrusive into a predominantly natural and agricultural landscape at extensive distances. The DEIS should broaden its view.

NPS has considered the portion of the proposed facility that would be visible from sensitive sites within any of its resources in the Four Corners area. Because of the great distance involved from these NPS parks, it was assumed that the nearly 1,000 foot tall stack at the proposed facility would be the structure evaluated. The cooling towers, while larger in areal size, are only 540 feet tall. A visual analysis was made in the Four Corners area of where the stack would be visible from. While extensive areas (10-15 miles distant) surrounding the proposed facility would see the stack, concentrated areas in the Chuska Mountains on the NM-Arizona border, and mesas and ridges far into Colorado would also see large portions of the stack.

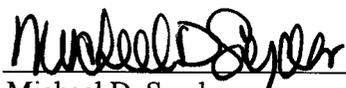
To evaluate the potential significance of the stack in an observer's view, we additionally determined the areas where a smaller-500 foot tall stack might be visible from; thus effectively identifying those areas where at least 500 feet of the stack would be visible.

Mesa Verde NP highly values its views from trails, roads, and overlooks outward to distinct near and far locations. Air Quality Related Values (AQRVs) of the park include visibility as the most sensitive AQRV (rated ahead of vegetation, wildlife, or cultural resource AQRVs). Ship Rock, a tall natural geologic feature of Northern New Mexico is seen in bright clarity from the Far View Visitor Center nearly 45% of the time and is 45 miles South. The nearly 1,000 foot stack, would be about 60 miles South from the Far View Visitor Center and more than 500 feet of it would be visible from this and numerous areas of the park.

The appearance and operation of a new industrial stack visible from within a large portion of Mesa Verde NP represents a potentially significant impact of the proposed facility to the park, and should be studied and evaluated within this DEIS. The DEIS should also describe and evaluate the impacts of the additional visibility of smoke (and condensed water vapor), as well as night-lighted safety warning lights, visible under variable lighting and moisture conditions.

In Section 4.7.2.2.6 of the DEIS there is a list of mitigation options that would help in minimizing the visual effect of the facility. It is unclear in the DEIS whether these will be utilized at the Desert Rock Energy Project. The DEIS should describe a suitable plan of application of these or some subset of mitigations to alleviate visibility impacts from the most sensitive resources. We would be willing to assist you in optimizing choices for these mitigations.

Again, we appreciate the opportunity to provide these comments and look forward to working with you as this project progresses. If you have any questions regarding these comments, please contact John Reber, Physical Scientist, National Park Service, at (303) 969-2418.

  
Michael D. Snyder  
Director, Intermountain Region

8/7/07  
Date

Attachment: Letter from NPS to EPA dated October 26, 2006 regarding the PSD permit application

cc:

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