

February 6, 2007

Dennis Winterringer, Leader  
Black Mesa Project EIS  
OSM Western Region  
P.O. Box 46667  
Denver, CO 80201-5733

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RE: Black Mesa Project Draft EIS Comments

Dear Mr. Winterringer:

The Grand Canyon Trust ("Trust") has reviewed the Black Mesa Project Draft Environmental Impact Statement ("DEIS") and respectfully submits the following comments.

#### **I. Statement of Purpose and Need**

The DEIS states that:

*The Black Mesa Project is composed of four actions, the purpose and need for which are to: (1) continue supplying coal from the Kayenta mining operation to the Navajo Generating Station near Page, Arizona; and (2) continue supplying coal from the Black Mesa mining operation to the Mohave Generating Station in Laughlin, Nevada (DEIS at 1-1).*

In essence, the Statement of Purpose and Need seeks to resume the operational structure for the Kayenta and Black Mesa mines and Navajo and Mohave Generating Stations that existed prior to the December 31, 2005 suspension of operations at the Mohave Generating Station ("Mohave").<sup>1</sup>

The Trust is concerned that the Statement of Purpose and Need, as currently drafted, may be "unreasonably narrow" under the National Environmental Policy Act ("NEPA").<sup>2</sup> The Statement of Purpose and Need as presented constrains the "range of reasonable alternatives" that must be considered in the DEIS to those that enable a continuation of mining in two distinct operations that supply coal, respectively, to two different coal-fired generating stations. The Statement of Purpose and Need does not explicitly recognize or appreciate the resource conflicts inherent in

<sup>1</sup> The DEIS describes that structure as follows: "Each mining operation and the generating station it supplies are dependent on one another. The Kayenta mining operation is the sole coal supplier for the Navajo Generating Station, and the Navajo Generating Station is its sole customer. Likewise, the Black Mesa mining operation is the sole coal supplier for the Mohave Generating Station, and Mohave Generating Station is its sole customer. Currently, the Kayenta mining operation continues to supply coal to the Navajo Generating Station while the Black Mesa mining operation is inactive until such time as the Mohave Generating Station resumes operations." DEIS at 1-5.

<sup>2</sup> See, e.g., Westlands Water District v. U.S. Dep't of Interior, 376 F.3d 853, 865 (9th Cir. 2004) (noting that "[t]he stated goal of a project necessarily dictates the range of 'reasonable' alternatives and an agency cannot define its objectives in unreasonably narrow terms"); id. at 867 (commenting that the Statement of Purpose and Need should not "improperly foreclose consideration" of reasonable alternatives).



the Black Mesa Project and the alternatives presented (which flow directly from the Statement of Purpose and Need) give short shrift to those concerns.

The Trust further believes that the Statement of Purpose and Need should explicitly address and account for Mohave's suspended operational status. Rather than asserting a need to "continue" supplying Black Mesa coal to Mohave Generating Station, the Statement of Purpose and Need should be framed in terms of Mohave's suspended operations and *potential* need for Black Mesa mine to "resume" (rather than "continue") supplying coal to Mohave.

The Statement of Purpose and Need should also acknowledge the contingent nature of a Mohave restart. As the DEIS itself notes, three of Mohave's four owners have announced that they "would not continue to pursue resumed operation of the power plant."<sup>3</sup> See DEIS at 1-1. There is no indication that a new group of partners has formed or is prepared to invest more than a billion dollars needed to re-open the plant, and the DEIS should inform the public and decisionmakers of this state of affairs when describing the purpose of and need for the Black Mesa Project.<sup>4</sup>

The Trust is also concerned about the Office of Surface Mining's ("OSM") reliance on a series of unreasonable assumptions which lead it to the erroneous conclusion that a Mohave restart is pending. For example, the DEIS asserts that the installation of pollution controls will be completed in less than three years' time. See DEIS at 1-5 (stating that "[a]t present, the Mohave Generating Station is not operating, pending installation of air-emissions-control equipment, which, for purposes of this EIS, is estimated to be completed by January 1, 2010"). OSM provides no support for this optimistic timeframe especially when, to date, no contracts have been issued for the design and installation of these pollution controls. It is likely to take more than three years to complete installation of the Mohave pollution control devices. For example, in negotiating the final consent decree at San Juan Generating Station, Public Service Company of New Mexico requested and was granted five years to install pollution controls similar to those needed for Mohave to reopen.<sup>5</sup> It took eight years for Salt River Project to install sulfur-dioxide scrubbers on Navajo Generating Station following a 1991 agreement, and the owners of Mohave Generating Station were given six years to install pollution controls under the consent decree filed in 1999.

Given the current owners' lack of support for a Mohave restart, and given that Mohave has not yet installed or made plans to install the requisite pollution control devices needed to resume operations, the mining of coal from Black Mesa serves no immediate need or pending purpose. See DEIS at 1-6 (stating that "the Black Mesa mining operation is not producing coal, nor is coal being delivered from the Black Mesa mining operation to the Mohave Generating Station").

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<sup>3</sup> In fact, Salt River Project – the fourth and final Mohave owner – today issued a press release announcing that it, too, is "ending efforts to return the plant to service." Scott Harelson, *News Release: SRP Ceases Effort to Restart Mohave Generating Station* (Feb. 6, 2007).

<sup>4</sup> "Salt River this week announced that it is looking for partners willing to help it restore Mohave to service. Restoration would cost about \$1.1 billion including \$500,000 for pollution-reduction equipment." John G. Edwards, *Mohave Proposal Gets Mixed Reaction*, LAS VEGAS REV.-J., Sept. 30, 2006, available at [http://www.reviewjournal.com/lvrj\\_home/2006/Sep-30-Sat-2006/business/9942182.html](http://www.reviewjournal.com/lvrj_home/2006/Sep-30-Sat-2006/business/9942182.html).

<sup>5</sup> *Grand Canyon Trust v. Pub. Serv. Co. of N.M.*, No. CV-02-552 (D.N.M. May 10, 2005) (entering of consent decree).

Even if Black Mesa had customer alternatives that would warrant a resumption of mining (which it does not),<sup>6</sup> the Statement of Purpose and Need as currently drafted (i.e. to “*continue* supplying coal from the Black Mesa mining operation *to the Mohave Generating Station*”) would not support a resumption of mining at the Black Mesa mine. DEIS at 1-5 (emphasis added). Thus, insofar as the DEIS states that a Purpose and Need of the Black Mesa Project is to “*continue* supplying coal from the Black Mesa min[e] ... *to the Mohave Generating Station*,” the Statement of Purpose and Need is misleading and inaccurate. DEIS at 1-5 (emphasis added).

For the foregoing reasons, the Trust does not believe there is a need to conduct an environmental impact analysis concerning the Black Mesa mining operation at the present time. In the absence of a viable proposal and business partnership with a commitment to re-open Mohave Generating Station, there is no need to squander limited public resources on an expensive EIS in response to groundless speculation about the resumption of Mohave’s operations.

## II. “Reasonable Range of Alternatives”

Even if the Statement of Purpose and Need is deemed adequate for the purposes of the Black Mesa Project, the Trust submits that the DEIS is flawed because it does not present decisionmakers and the public with a range of reasonable alternatives. The CEQ regulations implementing NEPA require that an agency “[r]igorously explore and objectively evaluate all reasonable alternatives[.]” 40 C.F.R. § 1502.14(a). While an agency “need not consider an infinite range of alternatives,”<sup>7</sup> it must “set forth [] those alternatives necessary to permit a ‘reasoned choice.’”<sup>8</sup>

The Trust does not believe that the OSM sets forth a sufficient range of reasonable alternatives in the DEIS. The similarity between and among the alternatives presented in the DEIS and the exclusion of several viable but unexamined alternatives defy NEPA’s mandate that an EIS present decisionmakers and the public with an adequate “range” of alternatives; this failure prevents those groups from making an informed analysis and “reasoned choice.”

### a. Reasoned Choice

The DEIS develops two action alternatives that are structured around a proposed Life of Mine (LOM) revision that Peabody filed with the OSM on February 17, 2004. DEIS at ES-4. Peabody’s proposed LOM revision provides the primary decision options that define the two action alternatives and the no action alternative:

*The primary decision options available to OSM are (1) approval of the LOM revision, (2) conditional approval of the LOM revisions without approval of the Black Mesa mining operation, and (3) disapproval of the LOM revision (DEIS at ES-6).*

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<sup>6</sup> See DEIS at 1-6 (stating that “Peabody has not indicated that any new customers, and the attendant increased production, are being considered at this time”).

<sup>7</sup> Westlands Water District, 376 F.3d at 868.

<sup>8</sup> State of California v. Block, 690 F.2d 753, 767 (9th Cir. 1982) (internal citation omitted).

First, the Trust finds that the alternatives presented are so functionally similar as to preclude decisionmakers from making a “reasoned choice” among the alternatives. For example, Alternatives A and B both rely on a revised LOM permit to expand the permit area to encompass the “Black Mesa Complex” as their fundamental proposed action. The primary decision option considered in this EIS is to revise the LOM operating permit; however, there is no functional difference between the two action alternatives because both propose to expand the LOM. Likewise, the only perceptible difference between Alternative B and the no action alternative is that, under the no action alternative, the un-mined coal resources of the Black Mesa mining operation would not be incorporated in the expanded permit area. Lastly, and perhaps most critically, both action alternatives and the no action alternative continue to use N-aquifer water for the purposes of mining within the Black Mesa Complex. See discussion *infra* Part IV.

*b. Viable but Unexamined Alternatives*

Second, the Trust finds the DEIS inadequate because there exist numerous “viable but unexamined alternatives.”<sup>9</sup> The Trust believes there are at least two “viable but unexamined alternatives” that exist that would both achieve OSM’s objectives and address the resource conflicts and uses described below. See discussion *infra* Part IV.

For example, OSM should consider an alternative that revises the LOM permit to include the Black Mesa mining operation in the Black Mesa Complex and that would allow coal from the 18,984 acres associated with the Black Mesa mining operation to be mined for use at Navajo Generating Station. Such an alternative would be a reasonable way to extend the length of operations at Navajo Generating Station to beyond 2026, when the supply of coal from the Kayenta mining operation is forecast to end. Such an alternative would also extend employment opportunities at the mine and the plant and provide additional coal royalties to the Navajo Nation and Hopi Tribe.

Another viable alternative would be one that ceases to use N-aquifer water for the purpose of mining coal from the Black Mesa Complex. OSM should consider an alternative that sets a reasonable date for ending the use of N-aquifer water; this water could be replaced with another source such as water from Lake Powell, which could be delivered to Black Mesa by means of the rail line that currently travels between Page and Black Mesa.

**III. Alternatives Analysis – 40 C.F.R. § 1502.14**

The Trust further believes that the DEIS as currently drafted does not satisfy the regulatory requirements found at 40 C.F.R. § 1502.14. Those regulations require an agency to present “the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public.” 40 C.F.R. § 1502.14. The agency must “[d]evote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.” 40 C.F.R. § 1502.14(b).

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<sup>9</sup> See *Westlands Water District*, 376 F.3d at 868 (stating that “[t]he existence of a *viable but unexamined* alternative renders an environmental impact statement inadequate”), citing *Morongo Band of Mission Indians v. Fed. Aviation Admin.*, 161 F.3d 569, 575 (9th Cir. 1998).

The Trust finds that the Alternatives analysis in the DEIS fails to meet the above requirements. In reviewing the matrix of impacts to multiple resources, there is very little variation from one alternative to the next, suggesting that either there is an insufficient range of alternatives or an inadequate analysis of impacts (or both).

In addition, the impacts analysis is inconsistent and attention to detail disparate among the various alternatives, preventing decisionmakers and the public from evaluating the comparative merits of Alternatives A, B, and C. For example, the summary of hydrological impacts for the Black Mesa Complex indicates that impacts under alternative A are “Negligible.”<sup>10</sup> For alternatives B and C, the impacts are listed respectively as “Similar to Alternative A” and “Same as Alternative B.” This analysis suggests that (1) there is no appreciable hydrological impact from strip mining, and (2) hydrological impacts do not vary in relation to the size of the area mined. Such an analysis is not only implausible but is utterly unhelpful to the decisionmakers and to the members of the general public who are trying to discern the costs and benefits of the various alternatives.

#### IV. UNRESOLVED RESOURCE USE CONFLICTS

##### a. N-Aquifer

One of NEPA's two primary goals is “insuring the agency has fully contemplated the environmental effects of its action[.]”<sup>11</sup> To foster that contemplation process, NEPA requires that federal agencies “[s]tudy, develop, and describe appropriate alternatives to recommend courses of action in any proposal which involves *unresolved conflicts concerning alternative uses of available resources*.”<sup>12</sup>

The Trust is concerned that OSM has failed to appropriately consider in the DEIS the unresolved conflicts surrounding the Black Mesa Project, specifically conflicts concerning the use of N-aquifer water for coal slurry and mine-related purposes. Alternatives A and B will exacerbate resource conflicts by consolidating mining operations under a single permit that will allow the continued use of N-aquifer groundwater. Similarly, the no action Alternative C will continue to allow the use of N-aquifer water at the Kayenta mining operation.

##### i. In General

Under Alternative A, groundwater from the N-aquifer will continue to be used for mining purposes even with supplemental C-aquifer pumping. Existing N-aquifer wells will be maintained with as much as 6,000 acre feet per year being used if the C-aquifer system fails, and up to 2,000 acre feet would be used annually for several uses including mining operations and domestic use (regardless of whether the C-aquifer system fails). DEIS at ES-9. Similarly, N-

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<sup>10</sup> See DEIS at ES-24, Table ES-3, “Water Resources (Hydrology).”

<sup>11</sup> League of Wilderness Defenders-Blue Mountains Biodiversity Project v. Forsgren 184 F. Supp. 2d 1058 (D. Or. 2002).

<sup>12</sup> 42 U.S.C. § 4332(2)(E) (emphasis added).



aquifer water will continue to be used for mining purposes in Alternatives B and C. Given that the N-aquifer will continue to be used for mining under all of the alternatives as presented, the DEIS should explicitly address unresolved conflicts over N-aquifer water.

ii. Tribal Interests

The DEIS should consider, in particular, unresolved N-aquifer conflicts related to tribal interests. As noted in the DEIS:

*The Black Mesa mining operation is conducted in accordance with OSM's Initial Program under an administrative delay of OSM's permanent Indian Lands Program permitting decision instituted in 1990 by the Secretary of Interior. The administrative delay was imposed because of concerns of the Hopi Tribe and Navajo Nation regarding the use of N-aquifer water for coal slurry and mine-related purposes (DEIS at ES-4).*

Given the history of Hopi and Navajo concern over the use of N-aquifer water, the OSM should explicitly address unresolved conflicts over this resource in the DEIS. Rather than discussing such concerns and conflicts, however, OSM proffers Alternatives A and B, each of which would issue a revised LOM permit rescinding the administrative delay on the permit for the Black Mesa mining operation. This rescission would eliminate the ability of the Navajo Nation and Hopi Tribe to use the delay of the LOM permit to negotiate an end to Peabody's use of N-aquifer water for coal slurry and mine-related purposes. In essence, the Navajo and Hopi would lose an important decision made at their request by the Secretary of the Interior to delay the issuance of a LOM permit to the Black Mesa mining operations because of their objection to using N-aquifer water for coal-slurry and mine-related purposes.

b. *C-Aquifer*

The DEIS fails to discuss alternatives for how the Black Mesa Project will mitigate impacts to Clear Creek, Chevelon Creek, and Blue Springs, or to species listed under the Endangered Species Act ("ESA").

Hydrologic modeling by the Bureau of Reclamation shows that impacts to drainages into Clear Creek and Chevelon Creek will accompany groundwater pumping from the C-aquifer at the levels specified in the DEIS. Both Clear Creek and Chevelon Creek contain habitat for listed ESA species, including the threatened spinedace. While the DEIS recognizes that such species are likely to be impacted, it does not address how impacts to ESA-listed species or habitat will be mitigated and how compliance with the ESA will be achieved.

The DEIS further fails to address possible impacts to Blue Springs from the anticipated groundwater pumping from the C- and N-aquifers for the Black Mesa Project. Hydrologists project possible diminishment of spring flows from groundwater pumping in the Red Gap Ranch area. Blue Springs is the most significant perennial source of water into the Little Colorado River; the Little Colorado River is the only spawning ground in the lower basin of the Colorado

River for the endangered humpback chub. The DEIS fails to discuss how it will mitigate impacts to the humpback chub and conserve its habitat.

## V. CUMULATIVE IMPACTS

### a. C-Aquifer

The DEIS fails to analyze the cumulative impacts of regional water withdrawals from the C-aquifer. For example, the city of Flagstaff intends to draw 10,000 acre-feet per year from the C-aquifer to meet its future water demand needs, yet the DEIS does not consider this withdrawal and the attending negative, cumulative impacts to water quantity and quality in the C-aquifer.<sup>13</sup>

Nor does the EIS consider the cumulative impacts of withdrawals from the C-aquifer to drainages into the Little Colorado River, Clear Creek, and Chevelon Creek. The No-Action Alternative analysis makes an astounding rationalization for this omission: “[P]roject-related groundwater pumping is not expected to contribute to *appreciable* long-term cumulative impacts on lower Chevelon Creek, because the cumulative effects from regional pumping essentially would eliminate all flow by 2060, even if the project were not constructed.” (DEIS at ES-20) (emphasis added). Simply because others may contribute to depletion of the C-aquifer by 2060 does not excuse OSM from analyzing the contribution of the Black Mesa Project to that depletion. OSM may not blame others for its contribution to what is – by OSM’s own admission – a serious impact on the C-aquifer and its hydrologic drainages including the Little Colorado River, Clear Creek, and Chevelon Creek.

### b. N-Aquifer

The DEIS also fails to analyze the cumulative impacts of regional water withdrawals from the N-aquifer. Regional water withdrawals will undoubtedly have an impact on the N-aquifer. For example, OSM’s own monitoring program shows that, since mining operations began at Black Mesa and Kayenta, some wells’ water levels have dropped by 100 feet and seven local springs’ flows have decreased by 30 percent.

### c. Greenhouse Gas & Mercury Emissions

Finally, the DEIS fails to analyze the cumulative impacts of greenhouse gas and mercury emissions from Mohave and Navajo Generating Stations. Coal deposits mined from the Black Mesa and Kayenta operations and burned at Mohave and Navajo Generating Stations are major sources of greenhouse gas (including carbon dioxide) and mercury pollution in the Southwest. Prior to its suspension, Mohave Generating Station emitted nearly 10 million tons of carbon dioxide and approximately 240 pounds of mercury into the atmosphere every year. Navajo

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<sup>13</sup> See City of Flagstaff, *Resolution No. 2007 – A Resolution Stating the Position of the City of Flagstaff in Response to the Black Mesa Project Draft Environmental Impact Statement* (2007), at Section 5 (stating “[t]hat the City of Flagstaff formally requests that its projected future water requirements of a minimum of 10,000 acre-feet per year and its dependency on the C-Aquifer water for the health and safety needs of the Flagstaff citizens be expressly included in the hydrologic modeling used in the preparation of a revised Draft Environmental Impact Statement and expressly included in the discussion within the revisions”).

Generating Station produces almost 20 million tons of carbon dioxide and 330 pounds of mercury annually.<sup>14</sup> Yet nowhere does the DEIS discuss how the Black Mesa Project is contributing to atmospheric loading of carbon dioxide and mercury in the Southwest.


Such a discussion is critical since carbon dioxide and mercury are contributing to global warming and neurological disorders in children, respectively.<sup>15</sup> Both substances are under consideration for regulation by the Environmental Protection Agency; such regulation is foreseeable in the near future and should be considered as part of a comprehensive cumulative impacts analysis by OSM.

## VI. CONCLUSION

The Trust believes that the above deficiencies in the DEIS frustrate informed public discourse about the cumulative impacts of the proposed Black Mesa Project, prevent decision-makers from considering an adequate range of alternatives and making an informed choice among alternatives, and thus violate the mandates of NEPA. We request that OSM remedy the deficiencies described before making any decisions about or proceeding with the Black Mesa Project.

Thank you for considering our comments.

Sincerely,



Roger Clark  
Air and Energy Director



Kristin Carden  
Staff Attorney

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<sup>14</sup> Paul J. Miller & Chris Van Atten, *North American Power Plant Emissions*, Comm'n for Env'tl. Cooperation of North America Report (2004), available at [http://www.cec.org/files/pdf/POLLUTANTS/PowerPlant\\_AirEmission\\_en.pdf](http://www.cec.org/files/pdf/POLLUTANTS/PowerPlant_AirEmission_en.pdf).

<sup>15</sup> On February 1, 2007, the Intergovernmental Panel on Climate Change (IPCC), made up of more than 2,500 scientists from over 130 nations, said it is "very likely" -- or more than 90 percent probable -- that human activity, such as the burning of fossil fuels, has caused the Earth's temperature to rise. See Intergovernmental Panel on Climate Change, *Working Group I Fourth Assessment Report Summary for Policymakers* (2007), available at <http://ipcc-wg1.ucar.edu/>. For more information on mercury pollution and neurological disorders, see National Research Council, *Toxicological Effects of Methylmercury*, Washington, DC: National Academy Press (2000).