## Director's Protest Resolution Report

# SunZia Transmission Line Plan Amendment

January 23, 2015



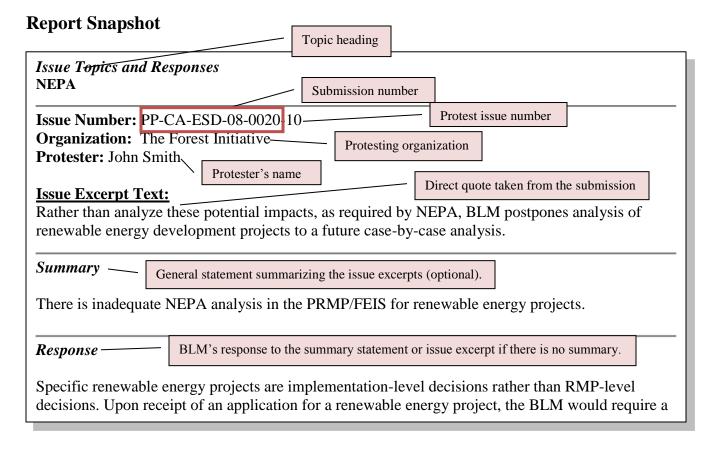
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## Reader's Guide

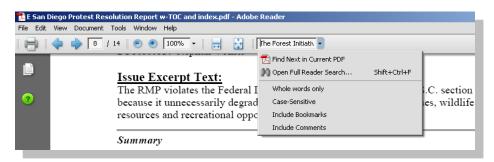
## How do I read the Report?

The Director's Protest Resolution Report is divided into sections, each with a topic heading, excerpts from individual protest letters, a summary statement (as necessary), and the Bureau of Land Management's (BLM) response to the summary statement.



## How do I find my Protest Issues and Responses?

- 1. Find your submission number on the protesting party index which is organized alphabetically by protester's last name.
- 2. In Adobe Reader search the report for your name, organization or submission number (do not include the protest issue number). Key word or topic searches may also be useful.



## List of Commonly Used Acronyms

ACEC	Area of Critical Environmental	IB	Information Bulletin
	Concern	$\mathbf{IM}$	Instruction Memorandum
BA	Biological Assessment	KOP	Key Observation Points
BLM	Bureau of Land Management	MOU	Memorandum of Understanding
<b>BMP</b>	Best Management Practice	<b>NEPA</b>	National Environmental Policy
BO	Biological Opinion		Act of 1969
CAA	Clean Air Act	NHPA	National Historic Preservation
CEQ	Council on Environmental		Act of 1966, as amended
	Quality	NOA	Notice of Availability
<b>CFR</b>	Code of Federal Regulations	NOI	Notice of Intent
COA	Condition of Approval	NRHP	National Register of Historic
CSP	Concentrated Solar Power		Places
CSU	Controlled Surface Use	NSO	No Surface Occupancy
<b>CWA</b>	Clean Water Act	OHV	Off-Highway Vehicle (has also
<b>DEIS</b>	Draft Environmental Impact		been referred to as ORV, Off
	Statement		Road Vehicles)
DM	Departmental Manual	POD	Plan of Development
	(Department of the Interior)	<b>PPA</b>	Power Purchase Agreement
DOI	Department of the Interior	<b>RFDS</b>	Reasonably Foreseeable
EA	Environmental Assessment		Development Scenario
EIR	Environmental Impact Report	<b>PRMPA</b>	Proposed Resource Management
EIS	Environmental Impact Statement		Plan Amendment
EO	Executive Order	ROD	Record of Decision
<b>EPA</b>	Environmental Protection	ROW	Right-of-Way
	Agency	SO	State Office (BLM)
<b>ESA</b>	Endangered Species Act	T&E	Threatened and Endangered
<b>FEIS</b>	Final Environmental Impact	USC	United States Code
	Statement	<b>USGS</b>	U.S. Geological Survey
<b>FLPMA</b>	Federal Land Policy and	<b>VRM</b>	Visual Resource Management
	Management Act of 1976	$\mathbf{W}\mathbf{A}$	Wilderness Area
FO	Field Office (BLM)	WSA	Wilderness Study Area
<b>FWS</b>	U.S. Fish and Wildlife Service	WSR	Wild and Scenic River(s)
GIS	Geographic Information Systems		

## Protesting Party Index

Protester	Organization	Submission Number	Determination
Joe Bill Nunn	Southwest Grazing Association	PP-NM-SunZia-13-01	Denied – Issues, Comments
Sue and Keith Waid	Waid Ranch	PP-NM-SunZia-13-02	Dismissed – Comments Only
Ernest and Ronda Thompson	Thompson Ranch	PP-NM-SunZia-13-03	Denied – Issues, Comments
Alex Daue; Helen O'Shea; Judy Calman	The Wilderness Society; Natural Resources Defense Council; and New Mexico Wilderness Alliance	PP-NM-SunZia-13-04	Denied – Issues, Comments
Curt and Susan Boyd	Boyd Ranch	PP-NM-SunZia-13-05	Denied – Issues, Comments
Andy Laurenzi	Archaeology Southwest	PP-NM-SunZia-13-06	Denied – Issues, Comments
Paul Krehbiel	New Mexico Tech, Langmuir Laboratory	PP-NM-SunZia-13-07	Denied – Issues, Comments
Kevin Tarbox	Willow Springs Properties	PP-NM-SunZia-13-08	Dismissed – Comments Only
Ann English	Cochise County Board of Supervisors	PP-NM-SunZia-13-09	Denied – Issues, Comments
Sandy Bahr; Jenny Neeley; Matt Clark; Paul Green; Randy Serraglio; Tricia Gerrodette; Carolyn Campbell; Norm 'Mick' Meader	Sierra Club - Grand Canyon (Arizona) Chapter; Sky Island Alliance; Defenders of Wildlife; Tucson Audubon; Center for Biological Diversity; Huachuca Audubon Society; Coalition for Sonoran Desert Protection; Cascabel Working Group	PP-NM-SunZia-13-10	Denied – Issues, Comments
William	Winkellman NRCD and	PP-NM-SunZia-13-11	Denied –

Dunn; Andrew	Redington NRCD		Issues, Comments
Smallhouse			
Peter Else	Friends of the Aravaipa	PP-NM-SunZia-13-12	Denied – Issues, Comments
Henry L. Parra	n/a	Late submission	Denied – Late submission
Morgan R. Nelson	New Mexico Environment Department	Late submission	Denied – Late submission
Elna Otter	n/a	E-mail submission, no hardcopy received	Denied – No hardcopy received

## Issue Topics and Responses

## **NEPA**

## **Public Comments**

Issue Number: PP-NM-SunZia-13-03-2

**Organization:** 

Protestor: Ernest and Ronda Thompson

## **Issue Excerpt Text:**

All prior comments on attached sheet #A. Which were submitted to U.S. Department of Interior addressing this issue were never answered or responded too in any form. We are still waiting for a reply and are legally entitled to a response under the project timeline for it to proceed.

**Issue Number:** PP-NM-SunZia-13-04-6 **Organization:** The Wilderness Society

**Protestor:** Alex Daue

## **Issue Excerpt Text:**

The Final POD will clearly contain a huge amount of information relating to the impacts and mitigation measures for SunZia, yet the BLM has provided no commitment to provide an opportunity for public review and comment on the Final POD prior to issuing a Notice to Proceed.

**Issue Number:** PP-NM-SunZia-13-05-4 **Organization:** Boyd Ranch LLC **Protestor:** Curt and Susan Boyd

#### **Issue Excerpt Text:**

Chapter I. Introduction: 1.1 Overview says that the

comments received by the BLM from agencies and the public are summarized in Chapter 5 and included in their entirety in Appendix J. No comments from "the public" and certainly not from the rural residents or ranchers whose concerns are being ignored are included in Appendix J. We filed comments and we received no acknowledgement from BLM.

Issue Number: PP-NM-SunZia-13-09-6

**Organization:** Cochise County board of Supervisors

**Protestor:** Ann English

#### **Issue Excerpt Text:**

BLM fails to address Fort Huachuca in its General Summary of Comments, choosing to instead focus only on White Sands Missile Range. Fort Huachuca was included in the italicized portion of the first paragraph of Chapter 5.5.3.2 on page 5-15 of the FEIS, but the general response fails to address the request to "Avoid building transmission lines in areas where military operations are conducted".

Also in the General Summary of Comments, the San Pedro River is included in the italicized portion of the first paragraph of Chapter 5.5.3.4 on page 5-16 of the FEIS, but is not addressed in any specific manner in the response although it is addressed in an additional issue on page 5-17 of the FEIS. In the second instance, the response fails to address the impacts from the long length of the Subroute that parallels the San Pedro River. It is not just the river crossing that was raised in these comments.

## **Summary:**

The BLM failed to respond to all public comments, including comments from rural residents and ranchers, the request to avoid interference with military operations near Fort Huachuca, and the impacts to the San Pedro River from the long length of the Subroute that parallels the River.

The BLM is not providing the public an opportunity to comment on the Plan of Development (POD).

## **Response:**

As part of the National Environmental Policy Act (NEPA) process, the BLM responds to all substantive public comments on Draft EIS documents, and the SunZia project is no exception. The BLM received many comments from a variety of stakeholders and responded to substantive comments in Appendix J of the Final Environmental Impact Statement (FEIS). Substantive comments are those that suggest the analysis is flawed in a specific way (for more information on how the BLM defines substantive comments, please see the BLM's NEPA web guide: http://www.blm.gov/wo/st/en/prog/planning/nepa/webguide/document\_pages/6\_9\_2\_1\_\_exampl es.html). A draft EIS document usually receives identical form-letter comments from many members of the public. In the case of form letter comments, the BLM responded only once to the issues raised, noting the form letter context (see, e.g., SunZia PRMPA/FEIS, Appendix J-571). Response to substantive comments submitted by Mr. Thompson can be found in Appendix J of the SunZia PRMPA/FEIS on page J-619. The comments provided on the draft EIS by Mr. Boyd were evaluated and determined to be non-substantive; Mr. Boyd has been identified on page J-750, however, as having commented on the draft EIS. The concerns raised by the Cochise County Board of supervisors in regards to Ft. Huachuca and the San Pedro River were noted, and all substantive components responded to on page J-146 of the SunZia Proposed Resource Management Plan Amendment (PRMPA)/FEIS.

There is no legal requirement for a public comment period on the POD. The BLM made the draft POD publicly available in conjunction with publishing the Draft Environmental Impact Statement (DEIS) (see SunZia DPA/DEIS 2-45) and posted it to the project website in June of 2012. The draft POD contains information regarding the project construction details, best management practices, and environmental issues to be avoided, minimized, and/or mitigated. A final POD will be issued and made available to the public should the project be approved that will include additional site-specific details including a second volume providing two series of maps depicting specific facility locations and associated localized resource issues that construction and operation of the project could effect.

## Purpose & Need

**Issue Number:** PP-NM-SunZia-13-12-15 **Organization:** Friends of the Aravaipa

**Protestor:** Peter Else

## **Issue Excerpt Text:**

The BLM's statement of purpose and need mainly referenced its role in considering an application for right-of-way in the context of Federal energy development policies. The BLM deferred to the applicant to describe the actual objectives of the proposed project (SunZia Project FEIS, p. E-2).

## **Summary:**

The BLM's statement of purpose and need in the SunZia project PRMPA/FEIS is incomplete because it only referenced its role in considering an application for Right-of-Way (ROW) in the context of Federal energy development policies and deferred to the applicant on the specific objectives for the project.

## **Response:**

The BLM's purpose and need for Federal action relating to the SunZia ROW application adequately reflects the regulatory requirements in Council on Environmental Quality's (CEQ) NEPA regulations (40 CFR 1502.13) and BLM's NEPA Handbook H-1790-1 at 35. As described in the FEIS, the BLM's purpose and need articulates that it is responding to SunZia's ROW application to construct, maintain, and decommission transmission lines on public lands between central New Mexico and central Arizona. SunZia PRMPA/FEIS, page 1-5. The BLM further describes Congress' directive in the Energy Policy Act of 2005 (EPAct) for Federal agencies, including the Department of the Interior (DOI), to advance "the need for transmission facilities, through agency directives, to (1) establish designated energy right-of-way corridors on federal land (sometimes now referred to as Section 368 corridors), via interagency collaboration; (2) ensure ongoing efforts to identify and designate additional corridors, as needed; (3) expedite applications to construct or modify transmission facilities; (4) identify areas of transmission congestion; and (5) amend relevant land use plans and resource management plans (RMP) to include new and existing energy right-of-way corridors" SunZia PRMPA/FEIS, page 1-5. Additionally, the BLM indicates that administrative and Department policy directives are aimed at upgrading infrastructure to carry renewable and traditional energy. Finally, the FEIS states that the BLM "must coordinate the land use inventory, planning, and management activities with other federal departments and agencies...in accordance with the FLPMA..." SunZia PRMPA/FEIS, page 1-6.

As described in the FEIS, the BLM considered the applicant's objectives, which articulate a desire to line up with proposed renewable energy project and transmit renewable energy, but did not defer to or adopt such objectives. See SunZia PA/FEIS, pages 1-5 to 1-6.

#### Best Available Science

**Issue Number:** PP-NM-SunZia-13-11-4 **Organization:** Winkelman NRCD

**Protestor:** William Dunn

#### **Issue Excerpt Text:**

The FEIS did not consider relevant and repeatedly submitted evidence that contradicts the energy development forecast presented in the FEIS. The energy development forecast is critical to the stated purpose and need for the proposed project, the stated necessary transfer capacity of the proposed project, the analysis of alternatives to the proposed transmission project, the assessment of the proposed project's overall impact on greenhouse gas emissions, and the analysis of the cumulative effects of the proposed project.

**Issue Number:** PP-NM-SunZia-13-12-3 **Organization:** Friends of the Aravaipa

**Protestor:** Peter Else

#### **Issue Excerpt Text:**

The BLM failed to consider the HPX study's findings, and allowed the applicant and the contracted environmental firm to claim that an energy mix deemed unfeasible for transfer on EHV lines is the most probable scenario for development. The alleged intent of the applicant to facilitate 81 to 94% renewable energy development is irrelevant to the project's ultimate purpose. Market and regulatory factors determine economic feasibility on a merchant line, not intentions. While the FEIS includes disclaimers related to open access regulatory factors, it still has not addressed the economic feasibility of the energy development forecast presented in the FEIS.

## **Summary:**

The BLM did not consider evidence that contradicts the energy development forecast presented in the FEIS, such as the High Plains Express (HPX) Transmission Study.

## **Response:**

In developing its reasonably foreseeable development scenario, the BLM must analyze reasonably foreseeable future actions "for which there are existing decisions, funding, formal proposals, or which are highly probable, based on known opportunities and trends." BLM H-1790-1, page 59. As such, the BLM identified 30 reasonably foreseeable renewable energy projects. Of those 30 projects, 14 have identified production capacity, totaling 1,682 MW. SunZia PRMPA/FEIS, pages 4-296 to 4-297. The one conventional energy project identified as part of the reasonably foreseeable development analysis, the Bowie Power Plant, has 1,000 MW of identified production capacity. Table 1-2 identifies 7,685 MWs of existing transmission requests within the project area. The majority of those requests are from wind and solar development projects. SunZia PRMPA/FEIS, pages 1-9.

As part of preparing the energy development scenarios (EDS), the BLM did consider the High Plains Express (HPX) feasibility study and found that although it was not totally congruent with the EDSs developed for the SunZia project that it is not incompatible either, noting the "HPX report does not rule out the use of a higher percentage of renewable energy." SunZia PRMPA/FEIS, page J-288. The fact that the EDSs identify a higher probability of renewable energy sources utilizing the SunZia lines, if installed, does not invalidate the scenarios. Ultimately, all economic forecasts carry a significant amount of uncertainty. The BLM can only make decisions based on the best information available, and that information always has the potential to be incorrect. The current economic analysis of the project area, however, clearly indicates that the market for new transmission capacity is largely from renewable energy.

Further, the BLM recognizes in the FEIS that although the BLM is directed under the Renewable Energy Order (Secretarial Order 3285A) to make "the production, development, and delivery of renewable energy a top priority" (SunZia PRMPA/FEIS, page 1-6), "Federal Energy Regulatory Commission (FERC, or Commission) Order 888 provides that owners of transmission facilities make such services available on the open market. Transmission facility services are to be provided on a nondiscriminatory, comparable basis to others seeking similar services." SunZia PRMPA/FEIS, page 1-8.

## **Impact Analysis**

**Issue Number:** PP-NM-SunZia-13-07-4 **Organization:** New Mexico Tech., Langmuir

Laboratory

Protestor: Paul Krehbiel

#### **Issue Excerpt Text:**

Basically, due to the last minute addition and selection of the proposed routing, the impact of the line on the Langmuir operations was simply not addressed in the Draft EIS. While we are appreciative of the proposals by the SunZia power group in the final EIS to mitigate the VHF interference, the final EIS contains no further analyses to address our concerns or to assess the impacts.

**Issue Number:** PP-NM-SunZia-13-07-6 **Organization:** New Mexico Tech., Langmuir

Laboratory

Protestor: Paul Krehbiel

## **Issue Excerpt Text:**

Particular issues with the EIS and the SunZia proposal concern a) the actual, practical sources and levels of interference, b) whether the interference levels can be properly estimated from models and calculations, c) whether the proposed mitigation

measures can be properly tested and evaluated prior to installation and deployment, c) whether any problems could be fixed following deployment, and d) whether the line could or would be maintained in an interference-free state during future operations. These need to be addressed more than they have been so far.

**Issue Number:** PP-NM-SunZia-13-07-8 **Organization:** New Mexico Tech., Langmuir

Laboratory

Protestor: Paul Krehbiel

#### **Issue Excerpt Text:**

We briefly note that other important electrical measurements are routinely made at the laboratory that cover the full gamut of the electromagnetic spectrum up through the VHF and sometimes into the UHF band. These include 'fast' electric field waveforms (termed 'sferics') that produce the familiar 'static' heard on AM radio stations, and span the frequency range of about 1 kHz up to 10 or 20 MHz. The EIS and power group study evaluates the production of such radio interference only in terms of signal to noise ratios, with the noise levels being unspecified.

## **Summary**:

The FEIS does not analyze the specific impacts of the proposed transmission line route on several components of New Mexico Tech research. The FEIS and power group study evaluates the production of such radio interference only in terms of signal to noise ratios, with the noise levels being unspecified.

## **Response:**

The FEIS did not address specific impacts to the Langmuir operations, because the BLM found that the mitigation measures committed to by the applicant would minimize effects, so as to "be free of visible corona and radio interference voltages." SunZia PRMPA/FEIS, page J-643. Standard Mitigation Measures 16 and 22 are the applicable applicant-committed mitigation measures for the minimization of these effects. SunZia PRMPA/FEIS, pages 2-91 to 2-92. Standard Mitigation Measure 16 states that the project owners will investigate and mitigate potential radio or television interference, and Standard Mitigation Measure 22 states that transmission line materials will be designed and tested to minimize corona. In addition, the response to New Mexico Tech's comment on the Draft RMPA/EIS discusses additional mitigation measures to minimize impacts, including the design and manufacturer/laboratory testing of hardware assemblies and spacer dampers. The proponent has also committed to coordinate such testing during the project design with Langmuir, and evaluate other reasonable and feasible means of minimizing corona effects as part of the Plan of Development, such as, utilizing alternative phase conductor materials (i.e., use of specular phase conductors rather than non-specular phase conductors) along a limited designated length of the project's alignment in the area of Langmuir's testing activities, relocation of compromised measurement stations, and, adding a fourth phase conductor to the planned three-bundled phase conductor groupings, if necessary. This latter mitigation effort increases the area over which corona voltage is distributed, thereby reducing its amplitude and lowering its signature on measuring instruments utilized by Langmuir. The Protestor is correct that any actual impacts would not actually be known until the line is constructed and is operated for a period of time that includes seasonal thunderstorm activity in the testing area of Langmuir. However, mitigation measures listed above would continue to be commitments during the operations phase of the transmission line.

In addition, the New Mexico Tech protest also states that many of the measurement stations for lightning electric field change sensors associated with the Langmuir studies are located along the proposed path of the line, and have been permitted on BLM public land. However, a review of permits in the affected area provides no evidence that these measurement stations would be directly impacted by the project. Four sites are located in positions varying in distance from 1000 feet (one measurement station) to five miles from the project alignment. Although these operations have not been addressed specifically in the FEIS; the potential for electromagnetic interference from visible corona effects is addressed generally, and mitigation measures have been proposed to minimize potential impacts to Langmuir's lightning and thunderstorm datagathering activities.

## **Cumulative Effects**

**Issue Number:** PP-NM-SunZia-13-10-39 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

#### **Issue Excerpt Text:**

The FEIS should have analyzed potential cumulative effects of energy development that would be enabled by the construction of SunZia.

**Issue Number:** PP-NM-SunZia-13-10-50 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

### **Issue Excerpt Text:**

The FEIS fails to adequately address cumulative impacts from wind farms, utility-scale solar, natural gas, and other energy development that SunZia would facilitate. These include cumulative impacts to special status species and their habitats, cultural resources, air quality, water quality, and. Activities and designations include, but are not limited to, the Bowie Power Station, a 1,000 megawatt electric generation facility planned for southeastern Arizona near the community of Bowie in Cochise County; the BLM-proposed Afton Solar Energy Zone (BLM Solar Final PEIS): the National Renewable Energy Laboratory (NREL)-identified Western Renewable Energy Zone Qualified Resource Areas (produced by Black & Veatch under subcontract with NREL for the Western Governors Association); and BLM proposed Renewable Energy Development Areas (preferred alternative) in the DEIS for the Arizona BLM's Restoration Design Energy Project (RDEP). The proposed Southline Transmission Project, a 34Skilovolt (kV) and 230-kV high voltage electric transmission line and substations was not considered in the DEIS cumulative impacts analysis. The proposed routes for Southline are in close proximity to SunZia's proposed alternatives between Willcox, Arizona and Deming, New Mexico. Therefore, this region in particular deserves detailed cumulative impacts analysis for both of the proposed transmission projects, to include biological (e.g., habitat fragmentation, disturbance, avian impacts, etc.) and cultural resource impacts. The cumulative

impacts map in the FEIS (Figure 4-1, 4-277) only delineates the southern proposed route of Southline; however, during scoping for this project, a northern route, parallel to 1-10 and much closer to SunZia's proposed routes is being evaluated.

**Issue Number:** PP-NM-SunZia-13-10-52 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

## **Issue Excerpt Text:**

The cumulative impacts analysis only considered a subset of actions that have or may occur in the area. As noted in Section 4.17.2 (FEIS pg. 4-272), the analysis only included "linear projects such as roads, transmission lines, and pipelines; and large area developments such as military installations, planned area developments, substations, conventional and fossil-fueled power plants, and renewable energy developments." It also only includes actions that are "similar in kind and effect as the proposed action, or have considerable impact to environmental resources to which the proposed action's effects will cumulatively contribute." (FEIS pg. 4-272). Smaller development projects and other actions, such as groundwater pumping, recreational use, etc., were not included. Even though some of these projects and actions may have relatively small effects on their own, collectively, all such actions can have a significant impact, especially in light of the potential effects of this project. The BLM must include a thorough analysis of all proposed projects and actions in this area.

**Issue Number:** PP-NM-SunZia-13-10-53 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

## **Issue Excerpt Text:**

Related to this, the BLM does not provide any consideration to other stressors, such as climate change and drought. As the U.S. Forest Service discusses in detail, "the issues of global climate

change and cumulative impacts are closely related." Such stressors are reasonably foreseeable and may have very significant impacts on the resources discussed in the FEIS. By not incorporating factors such as climate change into the cumulative impacts analysis, the BLM has significantly underestimated the impacts of this project.

**Issue Number:** PP-NM-SunZia-13-10-54 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

#### **Issue Excerpt Text:**

The BLM also significantly underestimates cumulative impacts by not including future projects that are currently speculative or for which details are unknown (FEIS pg. 4-274) and by reducing the impact timeframe to 10 years, even though the project duration is expected to be 50 years (FEIS pg. 4-275). This short timeframe may be suitable for

updating plans, as the DEIS notes, but it should not be used for determining if a project with such longreaching effects should move forward.

**Issue Number:** PP-NM-SunZia-13-10-57 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

### **Issue Excerpt Text:**

The FEIS also fails to adequately evaluate the cumulative impacts related to the introduction and spread of non-native invasive plants or potential increases in woody vegetation associated with fire suppression. The FEIS fails to evaluate the cumulative impacts and potential changes to fire frequency, fire regimes, and fire management associated with the proposed transmission line. Fire-adapted grasslands may be converted to more woody vegetation with fire exclusion and suppression associated with protecting the transmission line.

## **Summary:**

The BLM underestimated the cumulative impacts by not incorporating factors such as climate change and drought into the cumulative impacts analysis, by not including future projects that would be enabled by the construction of SunZia, small development projects, and by reducing the impact timeframe to 10 years, even though the project duration is expected to be 50 years.

The BLM did not adequately analyze cumulative impacts related to wildfire.

#### **Response:**

The FEIS addresses numerous projects, past, present, and future that could contribute to cumulative effects along with the proposed SunZia project (see SunZia PRMPA/FEIS, Table 4-35). As stated in the response to comments document, "[t]he cumulative impact analysis in Section 4.17 fully evaluates potential cumulative impacts associated with development that was identified in the Past, Present and Reasonably Foreseeable Future. It is acknowledged that development of energy resources that could interconnect with the project may occur within proximity to the proposed substations, as described in the energy development scenarios." SunZia PRMPA/FEIS, Appendix J-204. The BLM acknowledged "that there are numerous small projects that could contribute to larger collective impacts, although it is not possible to

identify these individual projects." SunZia PRMPA/FEIS, Appendix J-205. The proposed project would, if implemented as planned, facilitate limited development within the region, and the cumulative effects of those facilitated developments that are reasonably foreseeable are all that can, and should, be analyzed in the environmental review for the proposed project. In developing the cumulative effects analysis, the BLM is "not required to speculate about future actions." NEPA Handbook, H-1790-1, page 59.

The BLM does address the potential effects of the proposed project on climate change, but notes that "[b]ecause GHG [greenhouse gas] emissions from proposed projects contribute to climate change on a global scale, project-specific impacts of GHG emissions on the local environment cannot be quantified. As a global pollutant, it is also important to consider GHG emissions with a broad view. While the proposed project would emit GHGs during construction and a much smaller amount of GHGs during operation, the proposed transmission lines would also allow for the transport of power generated by renewable energy projects to western power markets and load centers" SunZia PRMPA/FEIS, page 4-309. "With respect to climate change, renewable energy such as wind and solar have limited GHG emissions, as compared with a conventional fossil fuel-fired generating facility. The renewable energy facilities that the project is designed to serve could potentially replace a portion of the market demand currently served by older, fossil fuel-fired power plants, or displace a portion of future demand that might otherwise be served by facilities with higher GHG emissions." SunZia PRMPA/FEIS, page 4-310.

The FEIS acknowledged that while "the major air pollution impacts resulting from the [proposed] project would occur during the construction phase of the transmission line and substations...impacts would be localized and temporary." SunZia PRMPA/FEIS, page 4-310. The FEIS further points out that "[o]ne objective associated with the national goal of facilitating development of renewable energy is to replace a portion of market demand served by existing or new fossil-fueled power plants" and that "[t]he project's objective, in part, is to achieve the national goal" SunZia PRMPA/FEIS, page 4-310.

Drought conditions in the Southwestern Region of the United States are naturally re-occurring climatic events, the specific reasons for which are not fully understood. Scientists have identified numerous long-term drought events in the Greater Southwest that occurred over the past several millennia, brought on, in part, by oceanic and atmospheric circulation anomalies far removed from the region. Given the more global-scale influences contributing to notable drought conditions in the region, the relatively short-term notable GHG emissions during proposed project construction, and the potential major reduction in GHG emissions foreseen in switching to renewable energy generation in the region, it is unlikely that the relatively small-scale proposed project would have a significant effect on regional drought conditions.

The FEIS adequately analyzed cumulative impacts related to wildfire (see section 4.17.4.7). As stated in the FEIS, "the proposed Project would contribute minor, additive increases in the fire risk during construction and operation, and indirectly through the potential for vegetation change and by increasing access for recreational users. The potential contribution of any single factor to future fire risk cannot be assessed, but ongoing and future actions will continue to create an environment where multiple human-caused fires are expected to occur annually within the study area." SunZia PRMPA/FEIS, page 4-328.

In regards to non-native and invasive plants, the FEIS explains that "[s]ome indirect effects of construction can result in off-site effects that are greater than the additive effects of habitat loss within a construction area. Initially, invasion of noxious weeds and other non-native plants tend to concentrate around areas of recently disturbed ground, expanding outward into undisturbed habitat under favorable conditions. Each additional ground disturbing activity provides a new potential foothold for invasive plants, and could allow effects to extend rapidly beyond the initial area of disturbance." SunZia PRMPA/FEIS, page 4-322. The FEIS further states that [d]isturbed ground enhances the establishment of non-native plants, often those that alter the fire regime." SunZia PRMPA/FEIS, page 4-329.

In regards to fire suppression, the FEIS states that "A single transmission line may not preclude the use of fire, depending on site-specific conditions. However, multiple transmission lines can create large corridors where suppression cannot occur due to the hazard to firefighters, unless the lines are de-energized. This may raise the risk that a controlled fire in that area would expand beyond desired boundaries, or increase beyond the desired intensity... The proposed Project, when considered with past, present, and reasonably foreseeable future actions, would contribute to the trend of an expanding WUI and the creation of a complex landscape where fire use by land managers is becoming increasingly difficult." SunZia PRMPA/FEIS, page 4-329.

## **Mitigation**

**Issue Number:** PP-NM-SunZia-13-11-6 **Organization:** Winkelman NRCD

**Protestor:** William Dunn

#### **Issue Excerpt Text:**

The FEIS did not include specific mitigation measures to address many of the most significant impacts cited by the NRCDs and others. With only boiler-plate "avoid-and-minimize" mitigation measures cited in the FEIS and preliminary Plan of Development (POD), it is premature to approve the RMP amendments before an assessment of the proposed project's post-mitigation impacts has taken place. This protest will consider the NEPA definition of mitigation.

Specific mitigation measures addressing the permanent disturbance of 2,871 acres are not identified. This is of grave concern to the NRCDs. Disturbance to arid lands can be irreversible. The unique conditions of the Sonoran Desert, and, especially, of the riparian corridor of the San Pedro

River, are not protected by generic "Best Management Practices," or by unspecified mitigation

measures that the FEIS does not disclose.

**Issue Number:** PP-NM-SunZia-13-12-13 **Organization:** Friends of the Aravaipa

**Protestor:** Peter Else

#### **Issue Excerpt Text:**

However, the mitigation provisions in the FEIS and in the preliminary Plan of Development (POD) only provide best management practices to avoid or minimize impacts to soil, water, vegetation, threatened species, endangered species, cultural resources, visual resources, existing land uses, and future land uses. This permanent disturbance of 2,871 acres, and any remaining impacts to a whole range of resources after minimization takes place, have been left unmitigated in the FEIS.

## **Summary:**

The FEIS does not provide adequate mitigation measures to address permanent impacts.

## **Response:**

As disclosed in the FEIS, the preferred alternative would allow permanent disturbance to 2,859 acres. SunZia PRMPA/FEIS, page 2-111. The preferred alternative was selected to maximize the use of existing utility corridors and infrastructure and minimize impacts to sensitive resources, river crossings, residential and commercial areas, and military operations. SunZia PRMPA/FEIS, pages 2-106 to 2-109.

The NEPA regulations require that all relevant, reasonable mitigation measures be identified and discussed in an EIS in sufficient detail that the effects of the measures can be disclosed and analyzed in the NEPA document. The BLM has complied with NEPA and provides standard and selective mitigation measures to address the range of impacts of the proposal in the SunZia PRMPA/FEIS. Standard mitigation measures are listed in Table 2.10 (SunZia PRMPA/FEIS, page 2-91), and apply to the project as a whole. The standard mitigation measures include best management practices, as well as specific environmental policies, planning guidelines, and regulatory requirements. SunZia PRMPA/FEIS, page 2-88.

Where warranted, selective mitigation measures were also developed to "reduce potential impacts in specific locations. These measures would be modified as appropriate, to reduce impacts associated with specific resource concerns (e.g., cultural, biological, visual) associated with the selected route, and included prior to Project construction in the Final POD." SunZia PRMPA/FEIS, page 2-88. Selective mitigation measures are listed in Table 2.11. SunZia PRMPA/FEIS, page 2-95.

## Consistency with Local Plans and Policies

**Issue Number:** PP-NM-SunZia-13-11-2 **Organization:** Winkelman NRCD

**Protestor:** William Dunn

#### **Issue Excerpt Text:**

The specific interests of the NRCDs are defined by Arizona legislation, which establishes a broad mandate for the NRCDs to protect the natural resources and property values within their districts. In fulfilling their mandate, the NRCDs have prepared local plans and policies some of which have been acknowledged in the FEIS but there was no effort to

make the action consistent or to explain why it was not possible to make it consistent. Neither were there acknowledgements in numerous meetings with BLM staff and officials, who are required to coordinate BLM actions with the plans and policies of the NRCDs. The BLM also had entered into a Memorandum of Understanding (MOU) with the Winkelman district formalizing the coordination requirement. BLM failed to coordinate and the Preferred Alternative transmission line route has major conflicts with the NRCDs adopted plans and policies which the FEIS does not address and remain

unresolved.

**Issue Number:** PP-NM-SunZia-13-11-8 **Organization:** Winkelman NRCD

Protestor: William Dunn

**Issue Excerpt Text:** 

Route proposals in the FEIS are not consistent with

local plans and policies of the Winkelman and Redington NRCDs. The NRCDs have been attempting to coordinate with the BLM regarding the SunZia project since early in the scoping period (DEIS comment #3-1606). We have met with the oversight agency repeatedly. We have submitted written comments and written information on at least 10 occasions.

## **Summary:**

The BLM failed to coordinate with the Winkelman and Redington National Resource Conservation Districts (NRCD); the preferred alternative is not consistent with local plans and policies.

## **Response:**

The BLM did coordinate with the Redington and Winkelman NRCDs during the EIS process, including the review of scientific data, plans, and policies, and participation in seven meetings with the NRCDs. SunZia PRMPA/FEIS, page 1-18. Meeting dates held during scoping are listed in Chapter 5, section 5.2.4, Table 5-4; additional meetings were held on June 14 and July 11, 2011 and December 18, 2012. SunZia PRMPA/FEIS, page 5-8. The BLM also reviewed general and comprehensive plans for potentially affected cities, counties, or other jurisdictions to identify relevant policies and projected or future land uses, including the Redington NRCD Plan (2010) and the Land Management Plan of the Winkelman NRCD (revised 2010). The NRCDs were invited and declined to participate as a cooperating agency. SunZia PRMPA/FEIS, page 5-8.

As stated in the FEIS, "construction of a new transmission line project would not be consistent with either the Redington or Winkelman NRCD policy of opposing construction of any new major energy corridors. However, construction and maintenance of the Project would be implemented to the extent possible to address the objectives, concerns, and recommendations stated in the Redington NRCD and Winkelman NRCD plans." SunZia PRMPA/FEIS, page 1-18.

## Air Resources

Issue Number: PP-NM-SunZia-13-10-5

Organization: Sierra Club - Grand Canyon (Arizona) Chapter

Protestor: Sandy Bahr

## **Issue Excerpt Text:**

We submitted comments on the draft EIS questioning the BLM assertion that the proposed action would have no significant impacts to air quality resulting from the construction and operation of the transmission line and concrete batch plants. We pointed out that BLM failed to address the larger air quality issue that there would be adverse air quality impacts associated with an increase in fossil fuel-generated electricity associated with the SunZia Project. We commented that if the SunZia Project would encourage development of natural gas-fired power plants like the Bowie Generating Station, the likely result will be increased nitrogen oxide emissions, toxic air emissions, and other pollutants. We urged BLM to address this issue in the FEIS/RMPA. BLM did not provide a substantive response to this issue in its responsiveness summary nor does the FEIS/RMPA provide an analysis of the potential for adverse air quality impacts as a result of implementation of the proposed action.

## **Summary:**

The BLM failed to analyze the likely fossil fuel power plant development associated with the creation of the SunZia project and its accompanying impact on air quality.

## **Response:**

As part of its analysis, the BLM analyzed reasonably foreseeable development projects, including the Bowie Power Station. SunZia PRMPA/FEIS, pages 4-341 to 4-342. The BLM further analyzed the potential cumulative effects to air quality from the Bowie Power Station's operation emissions and SunZia's construction emissions based on the Bowie Power Station's permit application. The analysis concluded that "When added to a representative background concentration, all combined impacts would be within ambient standard limitations." SunZia PRMPA/FEIS, page 4-307. The BLM did not identify any other future fossil fuel generating power plants in its reasonably foreseeable development analysis. That analysis of future and reasonably foreseeable future actions was based on projects or proposed developments "that have been identified either in a plan or through public records searches, conversations with local officials, and general research." SunZia PRMPA/FEIS, page 4-275. The BLM is not required to speculate about future actions, but instead must analyze reasonably foreseeable future actions "for which there are existing decisions, funding, formal proposals, or which are highly probable, based on known opportunities and trends." BLM H-1790-1, page 59. The protesting party has provided no direct evidence of plans, funding, proposals, or trend information that indicate that other fossil fuel generating plants should be considered in the reasonably foreseeable development analysis.

The BLM responded to the comments submitted by the protesting party that "If this line spurs development of the Bowie Generating Station and other power plants, it will increase nitrogen oxide emissions, toxic air emissions, and other pollutants" by noting that "The development of

future transmission line projects that facilitate transport of power from renewable energy projects to market could result in a net decrease of GHG emissions." Also, "Fossil-fuel plants with lower-emission technologies, or other new generation technologies, may also contribute to reductions in air pollutants..." SunZia PRMPA/FEIS, page J-167. Thus without specific project proposals, it is speculative to assume what kind of air quality impact any future power plant development might have since any potential increase in air emissions could be offset by reductions from renewable energy development or from new emissions controlling technologies.

## **Cultural Resources**

**Issue Number:** PP-NM-SunZia-13-06-11 **Organization:** Archaeology Southwest

**Protestor:** Andy Laurenzi

#### **Issue Excerpt Text:**

As stated previously 43 CFR 800.1(c) requires that consultation be initiated early on so that a broad range of alternatives should be considered during the planning process. 43 CFR 800.5(a) requires that "the agency shall apply the criteria of adverse effect to identified historic properties within the area of potential effects". No determination of adverse effect was considered by the BLM for any of the alternatives under consideration, including the preferred alternative during project planning. 43 CFR 800.5 (3) is explicit in providing for phased application of criteria specifically "where alternatives under consideration are corridors (emphasis added)...".

**Issue Number:** PP-NM-SunZia-13-06-14 **Organization:** Archaeology Southwest

Protestor: Andy Laurenzi

#### **Issue Excerpt Text:**

Archaeology Southwest believes that BLM's failure to consider minor alignment modifications to the preferred alternative during the formal Section 106 consultation process was a violation of the intent of the law to consider "any views concerning such effects which have been provided by consulting parties and the public" as stated in 43 CFR 800.5 (a).

**Issue Number:** PP-NM-SunZia-13-06-16 **Organization:** Archaeology Southwest

**Protestor:** Andy Laurenzi

#### **Issue Excerpt Text:**

Archaeology Southwest and National Trust for Historic Preservation scoping comments and comments to the DEIS requested that potential indirect adverse effects associated with new and improved Project roads be considered. We made similar comments to the draft PA during the formal consultation process. We described the nature of this indirect effect and provided information derived from several studies conducted by ourselves and other parties regarding the nature of the effect. Similar concerns regarding new roads were raised by the Zuni Tribe in their consultation meeting of August 28, 2012, a summary of which is included in Chapter 3.8.4.

BLM's response to our DEIS comment letter (response 2407 4-bl, indicates that the PA "identifies measures for addressing potential indirect and cumulative adverse effects to such vulnerable sites". In this circumstance "vulnerable sites" refers to historic sites that could experience increased vandalism including looting due to the nature of the sites, the environmental context and enhanced accessibility from new or improved access routes associated with the construction, operations and maintenance of transmission line. This response does not adequately consider the issue in that our comments were made in the context of the DEIS and the NEPA process. BLM's response suggests that because these effects are included within the context of the PA they have been considered. However as exhaustively described above, the PA considers adverse effects associated with actual Plan of Development within the approved ROW not in the

design and development of alternatives including the preferred alternative.

Notwithstanding the inadequacy of the BLM response to the issue raised by Archaeology Southwest and the National Trust for Historic Preservation, BLM's response appears to be in error as our review of Appendix M indicates that no explicit reference is made in the draft final PA to new and improved access routes in Stipulations Section 1.A.2 of the PA on Indirect Effects nor is an Area of Potential Effect for new and improved roads defined (although new and improved roads are given as examples in the Indirect and Cumulative Effects definitions in the Definitions section of the PA). Lastly no assessment methodology is provided in 1.B that specifies the information that will be considered in assessing potential adverse effects to historic properties that can be associated with new or improved access roads. Despite their comments to the contrary BLM has failed to include the indirect effects of new and improved roads as outlined in Appendix M to the FEIS. The failure to consider the indirect effects of roads on historic properties in the context of the PA (the sole subject of formal consultation discussions indicates that BLM is in violation of 43 CFR 800.5 (al (1) which requires BLM to assess any adverse effect of an undertaking that directly or indirectly could alter the characteristics of an historic property.)

**Issue Number:** PP-NM-SunZia-13-06-2 **Organization:** Archaeology Southwest

**Protestor:** Andy Laurenzi

#### **Issue Excerpt Text:**

The BLM failed to initiate consultation early on in the planning process thereby failing to ensure that the Section 706 consultation process was able to consider a broad range of alternatives during the SunZia Southwest Transmission Line Project planning process. BLM's failure to consult is a violation of the National Historic Preservation Act which requires that historic properties be identified and that ways are sought to avoid, minimize and mitigate the potential adverse effects on historic properties.

**Issue Number:** PP-NM-SunZia-13-06-4 **Organization:** Archaeology Southwest

**Protestor:** Andy Laurenzi

## **Issue Excerpt Text:**

BLM significantly limited the scope of the section 106 consultation process to the development of a PA designed to consider unresolved adverse effects associated with the construction and operations and maintenance phase of the project. As a result BLM failed to formally consult on any element of the planning related to the SunZia Southwest Transmission Line Project. BLM's failure to consult during these phases of the SunZia Southwest Transmission line Project violated the purpose of the Section 106 consultation process, 43 CFR 800.1 (a), to seek through consultation among the agency official and other parties at the early stages of project planning (emphasis added) to accomplish the goal to identify historic properties potentially affected by the undertaking, assess its effects and seek ways to avoid, minimize or mitigate any adverse effects on historic properties.

**Issue Number:** PP-NM-SunZia-13-06-6 **Organization:** Archaeology Southwest

**Protestor:** Andy Laurenzi

#### **Issue Excerpt Text:**

43 CR 800A (a) (1) requires that BLM document the areas of potential effect among the various alternatives and route segments. This was not accomplished during any phase of the consultation process. 43 800A (b) (2) provides for a phased identification and evaluation "Where alternatives under consideration consist of corridors (emphasis added) or large land areas, ... " The specific reference to "corridors" indicates that the regulations contemplated evaluation of areas of potential effect for linear facilities such as the SunZia Southwest Transmission Line Project. This section continues: "The process should establish the likely presence of historic properties within the area of potential effects for each alternative ... taking into account the number of alternatives (emphasis added) under consideration, ...". The language indicates that the identification and evaluation phase would occur for each of multiple alternatives. BLM failed to consider the area of potential effect for any project alternatives, including the preferred alternative during the planning phases of the project.

**Issue Number:** PP-NM-SunZia-13-06-7 **Organization:** Archaeology Southwest

Protestor: Andy Laurenzi

#### **Issue Excerpt Text:**

43 CFR 800.4 (cl (1) requires that BLM apply National Register criteria to historic properties within the area of potential effect and to determine the eligibility of the historic properties for listing on the National Register. No such evaluation was conducted by BLM for any historic properties identified as part of project planning.

**Issue Number:** PP-NM-SunZia-13-06-9 **Organization:** Archaeology Southwest

Protestor: Andy Laurenzi

#### **Issue Excerpt Text:**

BLM's failure to respond to our request for this information is in violation 43 CFR 800.11(c) 11) which indicates that the authority to withhold information must meet one of three criteria, none of which were met in these circumstances. 43 CFR 800.11 (c) (2) also requires that any decision to withhold information must have the concurrence of the ACHP. Such concurrence was not sought by BLM in its decision to restrict the availability of this information.

Issue Number: PP-NM-SunZia-13-09-3

**Organization:** Cochise County board of Supervisors

**Protestor:** Ann English

#### **Issue Excerpt Text:**

With regards to cultural (archeological) resources, on page 2-106 of the FEIS, BLM acknowledges that Subroute 4B would have the least potential impact to known cultural resources. Table 4-19 on page 4-125 describes site density and a projection of potential sites for the subroutes. It notes that five times as much surveying has been completed for Subroute 4C2c as has been completed for Subroute 4B. The greater survey data available for Subroute 4C2c results in greater certainty and more accurate estimates of potential sites along that subroute. In general, surveys along Subroute 4B have been focused on areas of most likely sites which results in greater site density per survey length and a strong potential to overestimate site densities for areas along Subroute 4B.

In its evaluation of impacts to paleontological resources, on page 4-53 of the FEIS, BLM states that Subroute 4B is the third least paleontologically sensitive subroute in Group 4 while Subroute 4C2c is the second highest in Route Group 4.

## **Summary:**

The BLM failed to follow various laws and regulations relating to the management of cultural, paleontological, and historic resources as part of this planning process.

#### **Response:**

The BLM has complied with, or is in the process of complying with, the procedural requirements of Section 106 of the National Historic Preservation Act (NHPA) and other applicable cultural resource laws as it relates to the proposed ROW grant application and the proposed land use plan amendments. The BLM initiated the Section 106 process for the SunZia project shortly after the BLM published the Notice of Intent in the Federal Register in May 2009. SunZia PRMPA/FEIS, page 5-10. The BLM identified and contacted most of the consulting parties during this time, including the appropriate State and Tribal Historic Preservation Officers (SHPOs and THPOs, respectively), other agencies, tribes and other parties pursuant to 36 CFR 800.1(c). SunZia PRMPA/FEIS, page 5-10. The BLM conducted consultations with many of these parties,

including the protestor, starting in 2009. SunZia PRMPA/FEIS, pages 5-10 to 5-12. The BLM and the SHPO consider these informal meetings and/or conversations, in addition to formal meetings, to be consultation; the information provided through these early consultations was used in alternative selection and analysis. The first formal consultation meeting took place in October, 2012. SunZia PRMPA/FEIS, pages 5-11 to 5-12.

Contrary to the protestor's claim and as articulated in Section 5.4.2 of the FEIS, the BLM did not limit consultation to the development of the Programmatic Agreement (PA). Instead, the BLM began the process of identifying historic properties with the initiation of tribal consultation and the gathering of Class I data for the various alternatives in 2009 pursuant to the Section 106 regulations, 36 CFR 800.4. In fact, the protestor, Archaeology Southwest, provided the BLM with information about culturally sensitive locations to support the identification effort, beginning in 2009. For example, Archaeology Southwest "provided information on Priority Conservation Areas (PCAs) (see Figure M 8-1, Map Volume), which represent areas of cultural resources identified by Archaeology Southwest, in partnership with the National Trust for Historic Preservation, as cultural resource conservation priorities in the San Pedro River basin and adjacent areas." SunZia PRMPA/FEIS, pages 3-147. This inventory revealed numerous large data gaps and the decision was made to conduct targeted sample inventories of areas known to be culturally sensitive (stream and river crossings) and where alternatives crossed known historic trails. SunZia PRMPA/FEIS, page 3-183. The BLM used the information obtained from these inventories in the selection and analysis of alternatives. SunZia PRMPA/FEIS, page 5-11.

These inventories also revealed that there would be adverse effects to known historic properties such as El Camino Real National Historic Trail and probably to other known historic properties and historic properties projected to occur on any of the alternatives. SunZia PRMPA/FEIS, page 3-200. Based on these data, the BLM made a general assessment of adverse effects in 2009 pursuant to 36 CFR 800.5. SunZia PRMPA/FEIS, page 5-11. The BLM notified the Advisory Council on Historic Preservation (ACHP) of the adverse effect determination in 2009 and invited their participation in resolving the adverse effects. Because it was so early in the process, the BLM was unable to provide the information (36 CFR 800.11(e)) that is required by the ACHP to make a decision whether or not to join consultations. In 2012, the BLM provided the information to the ACHP and once again invited them to participate in consultations.

Due to the size of the project and the known density of historic sites, the BLM elected to conduct a "phased approach" to compliance with procedural requirements of Section 106 of the NHPA as permitted by and in accordance with 36 CFR 800.4(c)(2). The BLM also determined that a PA was appropriate. SunZia PRMPA/FEIS, page 5-11 (citing 36 CFR 800.4(c)(2) (permitting the use of a PA "[w]here alternatives under consideration consist of corridors or large land areas, or where access to properties is restricted, the agency official may use a phased process to conduct identification and evaluation efforts. The agency official may also defer final identification and evaluation of historic properties if it is specifically provided for in a . . . a [PA] executed pursuant to 800.14(b)")); see also 36 CFR 800.5(a)(3) (permitting the "use of a phased process in applying the criteria of adverse effect consistent with phased identification and evaluation efforts conducted pursuant to § 800.4(b)(2)"). The BLM began the process of developing a PA for the proposed SunZia project in October 2012. The execution of the PA and compliance with the

procedures established by an approved PA represents satisfaction of an agency's Section 106 responsibilities. The BLM is close to executing the PA with regard to the construction, operation and maintenance of the SunZia project.

During consultation meetings, Archaeology Southwest and the National Trust requested that the BLM consider realignments to avoid sites that were identified during the Class II sample inventories. These realignments were considered but were not analyzed in detail during the NEPA process for several reasons. First, the recommended realignments fall within the scope of the range of alternatives considered in the NEPA analysis. Second, the identification effort is not complete and trying to devise a reroute without a complete inventory could cause the route to impact other historic properties. Third, minor realignments, such as those suggested, will be fully utilized to avoid sites once the alignment is (1) chosen, (2) permitted, (3) inventoried for cultural resources, (4) cultural resources are evaluated for National Register eligibility, and (5) historic properties are assessed for adverse effects. At that time, the process of resolving adverse effects, which includes avoidance, minimization or mitigation, will occur. Minor realignments and pole placement are standard techniques for achieving avoidance and minimization. This process is further detailed in the draft PA. SunZia PRMPA/FEIS, Appendix M, pages 7 to 8.

The BLM will consider the adverse effects of access roads on cultural and historic properties using the process outlined within the Draft PA. SunZia PRMPA/FEIS, Appendix M. The PA includes a process for the assessment of direct, indirect and cumulative effects specific to the undertaking. The implementation of the PA will seek to resolve adverse effects to historic properties. The final PA will be appended to the POD, which is incorporated in the ROW grant, requiring compliance as a condition of the ROW grant. The POD will apply to whichever alternative is chosen, except the No Action alternative.

The stipulations concerning the areas of potential effects (APE) for direct, indirect, and cumulative effects can be found on pages 5 and 6 of the PA. SunZia PRMPA/FEIS, Appendix M. The APE for indirect effects is defined as areas visible and within five miles of any project component, including access roads, or to the visual horizon. SunZia PRMPA/FEIS, Appendix M, page 5. Several studies have found a quarter mile threshold for site impacts resulting from new roads in previously identified roadless areas and higher incidences of vandalism and illegal off-road driving on public lands<sup>1,2</sup>. This quarter mile threshold is well within the five mile APE, so potential impacts from new roads in previously roadless areas will be considered. As outlined in the draft PA, the BLM will assess possible effects from such activities during the implementation of the Programmatic Agreement. Such assessments will inform the BLM and consulting parties as to which sites are vulnerable to indirect effects. Furthermore, measures (e.g., restricting public access on new roads, eliminating roads unnecessary for operations and maintenance, etc.) will be considered, and implemented, if possible, to reduce the likelihood of

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<sup>&</sup>lt;sup>1</sup> Nickens, Paul R., Signa L. Larralde, Gordon C. Tucker, Jr. 1981. A Survey of Vandalism to Archaeological Resources in Southwestern Colorado. Bureau of Land Management Colorado Cultural Series No. 11.

<sup>&</sup>lt;sup>2</sup> Schroeder, Melissa R. 2010. Cultural Resources Specialist Report for the Travel Management Environmental Impact Statement. The U.S. Department of Agriculture (USDA) Southwest Forest Service Region, Apache-Sitgreaves National Forest. USDA Southwest Forest Service.

future illegal activities by third parties. The inventory and assessment methodologies will be presented in the inventory report with the results of the inventory and the assessments of National Register eligibility and effect for all of the cultural resources identified during the Class III, intensive inventory.

In response to the allegation that the BLM withheld information, 36 CFR 800.11(a) states "When an agency official is conducting phased identification or evaluation under this subpart, the documentation standards regarding description of historic properties may be applied flexibly." And 36 CFR 800.11 (c) (1) states that the agency "shall withhold from public disclosure information about the location, character, or ownership of a historic property when disclosure may cause a significant invasion of privacy; risk harm to the historic property; or impede the use of a traditional religious site by practitioners." The draft report referenced by the protestor includes information that poses a privacy risk if released. The BLM will make available to consulting parties either a redacted version of the final report, or a full-version of the final report with a signed non-disclosure agreement.

In regards to surveying and site density, the EIS used projections based on known site density. SunZia PRMPA/FEIS, pages 4-123 to 4-125. The EIS acknowledged the uncertainty of archaeological data based on Class I review. SunZia PRMPA/FEIS, page 4-124. The BLM supplemented that knowledge with Class II inventory in areas where a high density of resources were anticipated. SunZia PRMPA/FEIS, pages 4-124. Indeed, while Subroute 4B would impact the fewest *known* sites, our analysis, based on the Class I and II inventories, predicts that a higher number of anticipated sites would be impacted by subroute 4B. For Subroute 4B, 521 sites are anticipated to be found through an intensive Class III inventory, and 72 percent of those are estimated to be of moderate to high sensitivity SunZia PRMPA/FEIS, pages 4-138, while for Subroute 4C2c, 188 sites are anticipated to be found and 70 percent are estimated to be of moderate-to-high sensitivity. SunZia PRMPA/FEIS, pages 4-141. To avoid errors from potentially inaccurate data, only sites that were discovered during documented archaeological inventories were included in site density calculations. That is, sites that did not occur within an archaeological inventory project parcel or corridor were excluded to improve the accuracy of the analysis and the projection of anticipated sites. Further, to improve the accuracy of the projection, only archaeological sites for which the acreage of the project's study area was known were included in the analysis.

While there are potential impacts to paleontological resources from the proposed action, particularly resulting from the potential "loss of scientifically significant fossils and their contextual data," appropriate mitigation measures will be included in the Plan of Development, and when implemented "would reduce any potential adverse impacts to paleontological resources to a low level." SunZia PRMPA/FEIS, pages 4-48 to 4-50.

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## Environmental Justice

**Issue Number:** PP-NM-SunZia-13-09-2 **Organization:** Cochise County Board of

Supervisors

**Protestor:** Ann English

#### **Issue Excerpt Text:**

"The responses provided in Appendix J of the FEIS (Attachment 2) to the comments in this letter were only limited to the "Noted" in two of the five responses. In the remaining responses, BLM acknowledges that there are potentially significant environmental impacts as well as impacts to rural communities associated with either of these Subroutes and that mitigation will be required on either Subroute. However, the responses fail to acknowledge that Subroute 4C2c results in impacts to

161.2 miles, which is 28.2 miles longer than Subroute 4B's 133.0 miles. This is an increase in the environmental impacts of 21.2% that is unnecessary if Subroute 4B is selected as the preferred alternative. While indicating that impacts would be mitigated on each subroute, the report fails to justify additional impacts to the environmental justice for mitigation as result of additional costs of building a 28.2 mile longer transmission line and mitigating all the impacts of that additional 28.2 miles. These additional costs would unnecessarily increase utility rates for consumers of the electricity conveyed by the project which is a potential environmental justice issue for end users that remains unevaluated in this document."

## **Summary:**

The BLM failed to evaluate the potential increase in utility rates for Environmental Justice communities from the preferred alternative.

## **Response:**

It is speculative to assume that the SunZia preferred alternative would lead to increases in the utility costs of minority, low-income and tribal communities within the planning area. Even if the preferred alternative resulted in higher retail electricity costs for consumers relative to the other alternatives, those increases would not disproportionately affect the Environmental Justice communities within the planning area as they would be passed on to all consumers, not just the minority, low-income and tribal communities themselves. Executive Order 12898 directs the Federal Government to identify and address "disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." Executive Order 12898 and SunZia PRMPA/FEIS, page 3-333. If the increased costs will be borne by all consumers, then they do not disproportionately impact minority, low-income and tribal communities.

## Fish, Wildlife, Plants, Special Status Species

Issue Number:PP-NM-SunZia-13-10-13(Arizona) ChapterOrganization:Sierra Club - Grand CanyonProtestor:Sandy Bahr

#### **Issue Excerpt Text:**

Impacts to tree-roosting bat species, such as the western red bat (Lasiurus blossevillii) or western yellow bat (Lasiurus xanthin us), are not discussed in the FEIS. Note that both of these species are special status and have a high likelihood of being present or are present (respectively) in the project area. They are mentioned in Appendix B1, but no impacts as a result of this project are discussed. Vegetation removal is a primary threat to these species. Will preconstruction surveys be conducted to identify presence of these species in the project corridor? When roosting, these species can be very difficult to locate.

**Issue Number:** PP-NM-SunZia-13-10-16 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

#### **Issue Excerpt Text:**

Typically, it is assumed that such species will only be affected in areas where perennial water occurs. However, as discussed in the section on special status species, intermittent and ephemeral waters can be very important to a variety of species, including various amphibians. This should have been considered in the FEIS

**Issue Number:** PP-NM-SunZia-13-10-18 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

## **Issue Excerpt Text:**

While the FEIS identifies the potential for construction related activity to cause direct mortality, there is no discussion of impacts related to fragmentation caused by road construction.

**Issue Number:** PP-NM-SunZia-13-10-20 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

## **Issue Excerpt Text:**

Again, the FEIS only considers impacts to areas where perennial water occurs. However, many fish

species utilize ephemeral waters for dispersal, etc. The BLM must consider how the various fish species found in or near the study corridor may be affected for all water sources.

**Issue Number:** PP-NM-SunZia-13-10-22 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

#### **Issue Excerpt Text:**

Information regarding invertebrate species is, unfortunately, completely lacking, as is acknowledged in the FEIS. As noted above, without an understanding of what species occur in the project area, it is impossible to know the full extent of impacts caused by this project. As the FEIS notes, many invertebrate species are highly endemic and may only occur in relatively small areas. If such species occur within the project area, this project has the potential to disrupt the required habitat and have significant negative impacts on the species, including impacts at both the population or species level.

**Issue Number:** PP-NM-SunZia-13-10-23 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

## **Issue Excerpt Text:**

The FEIS states that talussnails are present in the project area and acknowledges that habitat degradation and loss are the primary threats to these species. However, the FEIS does not discuss any impacts related to this project nor any mitigation efforts.

The Rosemont talussnail (Son orella rosemontensis) is a candidate species under the ESA. In March 2012, the USFWS issued a pre-proposal notification regarding this species, stating that information indicates that the species may need protection afforded under the ESA as threatened or endangered. The Sonoran talussnail (Sonorella magdalenensis) is similarly being considered for listing as threatened or endangered under the ESA. A notice published in the Federal Register in July 2012 states that listing of this species may be warranted, and the USFWS is in the process of reviewing the status of the species.

Provided this information, the BLM should have analyzed potential impacts to these species. Many

snail species are highly specialized and are often found in very small areas.

**Issue Number:** PP-NM-SunZia-13-10-25 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

#### **Issue Excerpt Text:**

With regards to this species, with reference to both perennial and ephemeral waters, the USFWS states that, "for Chiricahua leopard frogs, defining the action area of a proposed project must consider the reasonable dispersal capabilities of the species, and the likelihood/extent of any downstream or upstream effects that might arise from the proposed action." The FEIS did not include this analysis.

**Issue Number:** PP-NM-SunZia-13-10-27 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

### **Issue Excerpt Text:**

the FEIS also notes that lesser long nosed bats are likely to use different roosts in different years to be closer to better foraging areas (Section 3.6.6.1, pg. 3-92, 3-93). If an important roost site is disrupted or destroyed as part of this project, it could have significant impacts on this species. However, such an impact is not discussed in the FEIS.

**Issue Number:** PP-NM-SunZia-13-10-29 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

#### **Issue Excerpt Text:**

The FEIS states "There are no known areas within the portions of the study area (Peloncillo and Pyramid mountains) closest to known roosts for the species that contain large concentrations of agaves that would be attractive to it." (FEIS, p. 3-93) The FEIS does not reference any recent survey data, however. The BLM should not rely on survey records from nearly 20 years ago in order to determine absence or presence of a species. Thorough surveys must be done for species such as this. Without that information, the BLM cannot analyze and mitigate

potential impacts from this project or meet its mandates under NEPA and FLPMA.

**Issue Number:** PP-NM-SunZia-13-10-32 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

#### **Issue Excerpt Text:**

The FEIS fails to adequately evaluate the impact of the proposed SunZia project on the Mexican gray wolf. It states that "the potential for the species occurring at present or in the future within the study corridor or being affected by any phase of Project development or operation is very low" (FEIS, pg. 4-78). That assumption is not defensible as, even with the current low numbers in the wild, Mexican gray wolves have ranged across various portions of the proposed SunZia project planning area in search of new territory. Such occurrences will likely occur more often as the population grows and disperses. The Five-Year Review of the Mexican gray wolf recovery program found that movement distances for lone wolves averaged  $87 \pm 10 \text{ km}$  ( $54 \pm 6 \text{ mil}$ . In addition, introduced Mexican wolves in northern Sonora, Mexico, could also range into the SunZia project planning area.

**Issue Number:** PP-NM-SunZia-13-10-34 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

#### **Issue Excerpt Text:**

The USFWS recently proposed critical habitat for the jaguar, including in areas to be affected by the SunZia project. The FEIS neither mentioned nor analyzed the impacts this project would have if critical habitat for this species is approved, which could occur as early as next year.

**Issue Number:** PP-NM-SunZia-13-10-37 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

## **Issue Excerpt Text:**

The FEIS states that no impacts are anticipated for the Mexican spotted owl (FEIS, pg. 4-83), a threatened species under the ESA, and, therefore, no mitigation measures are proposed. However, the project would cross through critical habitat for this species. Critical habitat is essential for the conservation of species such as these. The FEIS notes that no habitat suitable for this species occurs within approximately 0.5 mile of the reference centerline of the project. (FEIS, pg. 4-83)

**Issue Number:** PP-NM-SunZia-13-10-41 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

#### **Issue Excerpt Text:**

Pygmy-owls are currently found primarily in Sonoran desert scrub vegetation and riparian drainages and woodlands, as well as palo-verde-cacti-mixed scrub associations. It primarily nests in saguaro cacti cavities, so additional loss of saguaros associated with this project could negatively impact this imperiled species. To improve habitat for this species, it is important to both maintain and restore "woodland vegetation along drainages and tall upland vegetation with saguaros." The BLM should avoid, salvage, and relocate saguaros of transplantable size is important to reduce impacts to pygmy owl habitat. Any activities should also avoid mesquite bosque habitat. The FEIS failed to evaluate the potential cumulative effects upon the owl of energy development that would be enabled by the construction of SunZia.

**Issue Number:** PP-NM-SunZia-13-10-43 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

## **Issue Excerpt Text:**

Regarding the Rio Grande silvery minnow, the FEIS notes that the project would affect the sole remaining population of this species. (FEIS, pg. 4-103) No actions should be permitted that could further threaten this last remaining wild population. The FEIS does not suitably discuss potential impacts to this species, nor does it recognize that impacts to this population could jeopardize the species' survival.

**Issue Number:** PP-NM-SunZia-13-10-45 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

#### **Issue Excerpt Text:**

The proposed project would affect critical habitat for a variety of species, including, but not limited to, Mexican spotted owl, Southwestern willow flycatcher, Gila chub, Rio Grande silvery minnow, spikedace, and loach minnow. The FEIS does not adequately recognize the importance of these areas and the significance of any effects on them. Critical habitat is "essential for the conservation of a threatened or endangered species." The project may significantly alter portions of critical habitat, thereby potentially affecting the species at the population level. The FEIS failed to address impacts to these critically important areas.

**Issue Number:** PP-NM-SunZia-13-10-59 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

#### **Issue Excerpt Text:**

In its discussion of wind energy facilities, the BLM erroneously assumes that wind facilities have a minor effect on bat species. One of the justifications provided for this is that "wind energy facilities are generally sited in open habitat lacking bat roosts" (FEIS pg. 4-327). This assumption is completely in error. Although many facilities are not located in the immediate vicinity of cave-dwelling bat roosts, they are frequently located in areas utilized by bats for foraging and migration and, therefore, can and do have significant impacts on bat species.

**Issue Number:** PP-NM-SunZia-13-10-8 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

## **Issue Excerpt Text:**

The number of special status species could be higher as BLM has not conducted a complete inventory throughout the SunZia Project area to support the proposed action and the sources the BLM used for data may be outdated or are incomplete. The FEIS / RPMA does not acknowledge the sources BLM used

## **Summary:**

The BLM's analysis for fish, wildlife, plants, and special status species was flawed for the following reasons:

- The PA/FEIS fails to adequately analyze the impacts to tree-roosting bat species, such as the western red bat, the western yellow bat, or the lesser long nosed bat.
- The PA/FEIS does not account for impacts to wildlife, fish, and special status species near intermittent and ephemeral waters.
- The PA/FEIS does not discuss impacts of fragmentation to species endemic to the region caused by road construction activities.
- The PA/FEIS does not have an adequate inventory of invertebrate species in the project area.
- The PA/FEIS should have analyzed potential impacts to the Rosemont talussnail and the Sonoran talussnail, candidate species under the ESA.
- The PA/FEIS does not analyze the impacts of the proposed project on the dispersal capabilities of the Chiricahua leopard frog.
- The PA/FEIS fails to address the potential impacts to the Mexican gray wolf population.
- The PA/FEIS does not analyze the impacts to critical habitat for species, including, but not limited to, jaguar, Mexican spotted owl, pygmy owl, Southwestern willow flycatcher, Gila chub, Rio Grande silvery minnow, spikedace, and loach minnow.
- The PA/FEIS does not disclose the sources that the BLM used to determine the species in the proposed project area.

## **Response:**

The BLM adequately analyzed the critical habitat and potential impacts to fish, wildlife, plants and special status species associated with the preferred alternative and the other alternatives to the extent required by federal law. The Biological Technical Report and Addendum (Appendix B1) of the SunZia PRMPA/FEIS states that the expected threats to survival of the western red bat, western yellow bat, and the lesser long-nosed bat include disturbances to broad-leaved deciduous trees used as roosts in riparian areas, loss of food sources, and habitat fragmentation. SunZia PRMPA/FEIS, Appendix B1, pages B1-81, B1-87, B1-88. The BLM seeks to address the potential threats to the lesser long-nosed bats in the project area in the FEIS by establishing the timing for project construction activities to occur in months (October to April) when bats are not present, if roosts are directly in the project area. SunZia PRMPA/FEIS, pages 4-77 to 4-78. Additionally, the BLM establishes measures to avoid where possible damage to saguaros and agave populations used by the lesser long-nosed bats for habitat and forage. SunZia PRMPA/FEIS, page 4-78. However, if construction activities require removal or relocation of

plants, studies have indicated that the surrounding vegetation sources will be more than adequate to support the local lesser long-nosed bat populations. SunZia PRMPA/FEIS, pages 4-77 to 4-78. The western red bat and the western yellow bat were noted in Appendix B1 to have the potential for high and moderate occurrences, respectively, within the project area. In the vegetation mitigation measures section of Chapter 4, the PA/FEIS states that disturbances to, or loss of, vegetation would be minimized when possible, but acknowledges that some degree of habitat fragmentation may occur and may be a permanent disturbance for the lifespan of the project. SunZia PRMPA/FEIS, page 4-72. Measures such as selective tree-cutting, spanning riparian woodlands, and management of noxious weeds and invasive plants would ensure that the disturbance to roosting areas does not severely impact the bat populations. Under section 4.6.5 of the PA/FEIS, the BLM Preferred Alternative routes addresses mitigation measures to reduce potential impacts to food plants, as well as potential impacts to riparian woodlands that affect the western red bat or western yellow bat. SunZia PRMPA/FEIS, pages 4-104, 4-107, 4-111.

For concerns related to intermittent and ephemeral streams, the water resources inventory was obtained from scientific literature as well as government agencies and institutions. SunZia PRMPA/FEIS, page 3-58. A sample of 20 percent of intermittent streams in the study area was used to estimate the disturbance to streams and jurisdictional waters. SunZia PRMPA/FEIS, page 3-58. The PRMPA/FEIS disclosed that potential impacts from project construction activities to perennial or intermittent surface waters are likely and could include erosion, sedimentation, and removal of riparian vegetation. SunZia PRMPA/FEIS, page 4-54 to 4-55. However, aquatic habitats would be spanned or re-aligned, minimizing the potential for direct impacts to amphibians and fish. SunZia PRMPA/FEIS, page 4-75 to 4-76. Additionally, mitigation measures would be in place to address direct and indirect disturbances where and when the project activity may intersect with aquatic habitat or ephemeral streams.

The BLM discusses fragmentation caused by road construction in section 4.6.2.2 of the PA/FEIS. The BLM acknowledges that linear features such as access roads could fragment wildlife habitat, adversely affecting species that are reluctant to cross areas of open ground due to threat of predation, and cause edge effects, adversely affecting species dependent on large blocks of contiguous habitat. SunZia PRMPA/FEIS, page 4-64. While some mitigation measures to prevent severe impacts were provided in Tables 2.10 and Table 2.11, the impacts to wildlife from the result of man-made linear features, such as access roads, are mostly negative and may be difficult to mitigate onsite. SunZia PRMPA/FEIS, page 4-64.

As it relates to the protest issue regarding invertebrate species, section 3.6.5.6 of the PRMPA/FEIS of the affected environment chapter acknowledges that the inventory for specific habitats or regions is incomplete, stating that "[a]ttempts at quantifying numbers of species of invertebrates within a given habitat or region are usually little more than guesswork, as data regarding this element of biota are, for the most part, incomplete." SunZia PRMPA/FEIS, page 3-88. However, section 1.8.1.6 of Appendix B1 describes information such as distribution, habitat, and threats from project activity for invertebrate Special Status Species. Also, the Estimated Distribution of Special Status Species in Appendix B3 contains a list of potential special status invertebrates that have been noted for each segment of the project study area. SunZia PRMPA/FEIS, Appendix B3, page B3-15.

The BLM discusses the status, distribution and threats to the Rosemont and Sonoran talussnail in Appendix B1 of the FEIS, as the protestor correctly states. SunZia PRMPA/FEIS, Appendix B1, page B1-258. The impacts assessment and the mitigation measures discussion in the wildlife section and the special status species section of the PRMPA/FEIS do not note the Rosemont and Sonoran talussnails because neither species occurs in areas that would be affected by any alternative.

As it relates to the protest issue regarding the Chiricahua leopard frog, the BLM did not include in the FEIS a detailed analysis on the dispersal capabilities or upstream and downstream effects. The designation of critical habitat for the species presented the best available information on overland and upstream-downstream dispersal capabilities, supporting the conclusion that the Chiricahua leopard frog would not occur in areas affected by the project and that detailed analysis was not necessary. The SunZia PRMPA/FEIS and Appendix B1 note the distribution of the species within the study area outside the area of influence from the proposed project. SunZia PRMPA/FEIS, pages 3-100 to 3-101; Appendix B1, pages B1-207 to B1-208.

The PRMPA/FEIS does acknowledge that the current nonessential experimental population (NEP) of the Mexican gray wolf has the potential to expand beyond its current recovery area and into the proposed project area. SunZia PRMPA/FEIS, page 4-79. The possibility of human-related disturbance or construction activities to a Mexican gray wolf expansion would impact the survival of young pups. The standard mitigation measures for the Mexican gray wolf apply as well, if the wolf intersects with the project area. SunZia PRMPA/FEIS, page 4-73.

In addition to the general discussion of potential impacts and appropriate mitigation measures in Chapter 4 of the PRMPA/FEIS, the BLM analyzed the critical habitat for species including, but not limited to, Mexican spotted owl, Southwestern willow flycatcher, Gila chub, spikedace, Rio Grande silvery minnow, and loach minnow in Appendix B1 of the FEIS. The environmental impacts analysis included defining the impact level to special status species from each alternative considered for the SunZia project. The impacts analysis found that:

- Addressing vegetation loss and erosion to habitat used by the jaguar will help to mitigate any impacts. SunZia PRMPA/FEIS, page 4-79.
- The Mexican spotted owl habitat is not expected to be directly impacted by areas of influence of each alternative. SunZia PRMPA/FEIS, page 4-83.
- Selective vegetation clearing, noxious weed management, and preservation of saguaro cacti will ensure that the habitat for the pygmy-owl is maintained. SunZia PRMPA/FEIS, page 4-83.
- In addition to similar measures for the pygmy-owl, bird diverters placed on transmission line wires and structures will help the Southwestern Willow flycatcher population. SunZia PRMPA/FEIS, page 4-83.
- Habitat for the Gila chub, spikedace, and loach minnow may see some impact from project construction activities, but standard mitigation measures addressing erosion will minimize effects to stream waters. SunZia PRMPA/FEIS, pages 4-86 and 4-87.
- The Rio Grande silvery minnow will have some impacts to the habitat resulting from project-related activities. Measures such as vegetation management, spanning across the

riparian area, and erosion control will reduce the potential impacts to the species. SunZia PRMPA/FEIS, page 4-87.

Further, the addendum to Appendix B1 notes that critical habitat was proposed for the jaguar. The BLM concluded, however, the proposed critical habitat is not crossed by any alternative. SunZia PRMPA/FEIS, page 3-95.

Finally, while the analysis of special status species in Chapters 3 and 4 of the PA/FEIS contain a smaller list of species for discussion, it should be noted that the biological inventory report in Appendix B1 extensively covered a wider range of species in the study area. The PRMPA/FEIS acknowledged the sources for the wildlife, fish, and flora data in section 3.6.1.2, as well as in section 1.9 of Appendix B1.

## Social, Economic Interests

**Issue Number:** PP-NM-SunZia-13-10-48 **Organization:** Sierra Club - Grand Canyon

(Arizona) Chapter **Protestor:** Sandy Bahr

## **Issue Excerpt Text:**

The FEIS fails to analyze the impact of the proposed project on ecotourism including direct, indirect, and cumulative impacts. The FEIS underestimates and fails to adequately analyze the economic role of public lands, river valleys, playas, and natural open space, plus the wildlife these support for the local communities and it ignores existing research documenting the economic importance of protected public land resources.

**Issue Number:** PP-NM-SunZia-13-12-3 **Organization:** Friends of the Aravaipa

**Protestor:** Peter Else

#### **Issue Excerpt Text:**

The BLM failed to consider the HPX study's findings, and allowed the applicant and the contracted environmental firm to claim that an energy mix deemed unfeasible for transfer on EHV lines is the most probable scenario for development. The alleged intent of the applicant to facilitate 81 to 94% renewable energy development is irrelevant to the project's ultimate purpose. Market and regulatory factors determine economic feasibility on a merchant line, not intentions. While the FEIS includes disclaimers related to open access regulatory factors, it still has not addressed the economic feasibility of the energy development forecast presented in the FEIS.

## **Summary:**

The BLM failed to analyze the impact of the proposed project on ecotourism including direct, indirect, and cumulative impacts, and underestimates and fails to adequately analyze the economic role of public lands and protected public land resources.

## **Response:**

The BLM has taken into account impacts of the proposed project on ecotourism, as well as noting the economic role of public lands and the importance of protected public land resources. For instance, the BLM noted that "Tourism is frequently high in counties that have specific areas of interest, such as Grant County (Gila National Forest and Gila Cliff Dwellings National Monument); Graham County (CNF, Tombstone); Pima County (Saguaro National Monuments, CNF, and destination resorts); and Lincoln County (ski resorts)." SunZia PRMPA/FEIS, page 3-322. The BLM identified the impacts to "tourism and recreation" from the proposed project (SunZia PRMPA/FEIS, page 4-245), and summarized the key impacts to scenery, recreation, and other resources from the preferred alternative. Those impacts include several instances of high to moderate visual resources impacts. SunZia PRMPA/FEIS, page 4-201-202. The BLM also noted the impacts to Wilderness and Wilderness Study Areas (WSA). "Although significant impacts are not expected, indirect impacts may occur for portions of the Project where components would be visible from within wilderness, WSA, and lands with wilderness characteristics inventory units. Per BLM direction, visibility of the proposed facilities could affect outstanding opportunities for solitude and/or primitive and unconfined recreation." SunZia PRMPA/FEIS, page 4-228 and 4-236.

## Wilderness Characteristics

Issue Number: PP-NM-SunZia-13-10-56

Organization: Sierra Club - Grand Canyon (Arizona) Chapter

**Protestor:** Sandy Bahr

### **Issue Excerpt Text:**

Direct and indirect impacts to lands with wilderness characteristics and values were not adequately evaluated in the FEIS. These include the potential of SunZia foreclosing future wilderness designations. The potential for SunZia to open up currently roadless areas (i.e., areas with wilderness characteristics) to additional road creation (both legal and illegal) and other human developments that are contrary to wilderness designation and management must be considered.

## **Summary:**

The FEIS did not analyze the impacts to wilderness characteristics and values caused by road creation and other human development associated with the transmission line.

## **Response:**

The BLM analyzed direct and indirect impacts to lands with wilderness characteristics in Section 4.12.5 of the FEIS. Direct impacts to lands with wilderness characteristics inventory units were characterized by the number of acres that would no longer qualify as potential lands with wilderness characteristics because project components (including new and improved access roads, structures, and ancillary facilities) would cross lands with wilderness characteristics inventory units. SunZia PRMPA/FEIS, page 4-228. Indirect impacts were characterized as areas where project components would be visible from within lands with wilderness characteristics inventory units. SunZia PRMPA/FEIS, page 4-228. Section 4.12.5 provides a detailed analysis of all subroutes based on these criteria; the results of these analyses are summarized on page 4-236. Additionally, the BLM assessed the cumulative effects to lands with wilderness characteristics in Section 4.17.4.12. As described in these sections, the preferred alternative would result in some impacts to lands with wilderness characteristics; however, none of the RMP amendment alternatives would impact lands with wilderness characteristics. SunZia PRMPA/FEIS, page 4-359.