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1 INTRODUCTION

SunZia Transmission, LLC (Applicant, or SunZia), submitted an application to the Bureau of Land Management (BLM) New Mexico State Office, U.S. Forest Service (USFS), and U.S. Fish and Wildlife Service (USFWS) on March 27, 2020, and submitted an updated application on December 21, 2020, to request amendment of their existing right-of-way (ROW) on public land (Serial Number NM-114438, cross reference BLM AZ A-35058) issued in September 2016. The application to amend the existing ROW grant authorization includes a new ROW for components of the SunZia Southwest Transmission Project (project) located outside of the previously granted ROW. The project, under the original and amended ROW grants, would include up to two 500-kilovolt (kV) transmission lines located on federal, state, and private lands between Torrance County, New Mexico, and Pinal County, Arizona.

Consideration of this ROW amendment request is a major federal action requiring compliance with the National Environmental Policy Act of 1969 (NEPA). To comply with the requirements of NEPA, an environmental impact statement and proposed resource management plan amendments (EIS) is being prepared to disclose the potential environmental impacts associated with the project’s construction and operation and to consider alternatives to SunZia’s proposed project. The BLM is the lead agency for the preparation of the EIS. Amendments to BLM land use plans may also be required. These actions are in compliance with NEPA, the Federal Land Policy and Management Act of 1976, as amended (FLPMA), and other BLM guidance.

As part of this process, the BLM began a scoping process on June 4, 2021, to solicit public comments and identify issues to be addressed in the development of the Draft EIS. Comments were received via mail, email, a 1-888 recorded telephone line, and a website form. The scoping period ended on July 6, 2021. This report summarizes the issues identified in the comments submitted.

2 SCOPING PROCESS

In accordance with the Council on Environmental Quality’s (CEQ’s) NEPA regulations (40 Code of Federal Regulations [CFR] 1501.9), it is through the scoping process that the lead agency will 1) determine the scope and significant issues to be analyzed in depth in the EIS; 2) identify and eliminate from detailed study the issues that are not significant, narrowing the discussion of such issues to a brief presentation in the EIS regarding why they would not have a significant effect on the human environment; and 3) identify a range of reasonable alternatives that address issues identified during scoping.

The scoping process also helps the BLM and cooperating agencies identify issues to be addressed in the EIS. The scoping process is open to federal, state, tribal, and local agencies and governments, the proponent of the action, and other likely affected or interested persons (including those who might not be in accord with the action).

The following sections describe the opportunities for public input that were made available to the public and interested parties for reviewing project materials and providing scoping comments.

2.1 Scoping Outreach

2.1.1 Publication of the Notice of Intent

The formal public scoping process for the project began on June 4, 2021, with the publication of the Notice of Intent (NOI) in the Federal Register informing the public of the BLM’s intent to prepare an EIS (Federal Register Vol. 86, No. 106; see Appendix A). The NOI defined the end date of the scoping period as July 6, 2021.
2.1.2 Other Outreach Methods

Other outreach methods, which are included in Appendix B, comprised the following:

- a pre-NOI postcard mailed the week of April 26, 2021, to the BLM’s interested party list\(^1\) announcing an upcoming scoping period and directed interested parties to the project website (https://eplanning.blm.gov/eplanning-ui/project/2011785/510);
- online project information (including Project Introduction and Frequently Asked Questions documents and scoping meeting registration links);
- a media release distributed on June 4, 2021, announcing meeting dates and locations; and
- a project newsletter mailed the week of May 31, 2021, to the BLM’s interested party list, announcing the publication of the NOI and public meetings.

2.2 Opportunities for Public Comment

Members of the public and agencies had several methods for providing comments during the scoping period:

- Comments could be submitted via the BLM’s ePlanning website: https://eplanning.blm.gov/eplanning-ui/project/2011785/510
- Individual letters could be mailed via U.S. Postal Service or hand delivered to:
  BLM New Mexico State Office
  Attn: Adrian Garcia, Project Manager, SunZia Southwest Transmission Project
  301 Dinosaur Trail
  Santa Fe, NM 87508
- A telephone message could be recorded at 1-888-959-2510.

The BLM also provided Mr. Garcia’s email address (agarcia@blm.gov) as a method for requesting additional project information or asking questions.

Although the formal comment period has ended, the BLM will continue to consider all comments received to the best of the agency’s ability. However, any future scoping comments received may not be formally published in a scoping report or other document.

2.3 Public Scoping Meetings

The BLM hosted three virtual public scoping meetings to provide the public a description of the proposed action (project) and an opportunity to become involved and offer informal comments on issues to be addressed in the Draft EIS (Table 1). The meeting included a PowerPoint presentation that provided an overview of the project and NEPA process, including information and methods for providing formal comments, followed by a live question and answer (Q&A) period. During the Q&A period, participants had 2 minutes to ask questions, which were then answered by one or more members of a panel comprising BLM, USFWS, USFS, SWCA Environmental Consultants (the third-party contractor assisting

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\(^1\) The project interested party list currently comprises identified stakeholders, interested non-governmental organizations, affected local state and federal agencies, and elected officials from existing BLM and USFS mailings lists. Parties that attend scoping meetings or provide scoping comments will be added to the interested party list unless they specifically request otherwise.
the BLM with preparation of the EIS), and SunZia representatives. A transcript of the Q&A session is available in the project record.

Table 1. Scoping Meetings

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Approximate Number of Attendees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday, June 22, 2021</td>
<td>1–3 p.m. MST</td>
<td>78</td>
</tr>
<tr>
<td>Wednesday, June 23, 2021</td>
<td>6–8 p.m. MST</td>
<td>56</td>
</tr>
<tr>
<td>Thursday, June 24, 2021</td>
<td>6–8 p.m. MST</td>
<td>51</td>
</tr>
</tbody>
</table>

2.4 Cooperating Agency Involvement

The CEQ’s regulations implementing NEPA allow federal agencies (as lead agencies) to invite tribal, state, and local governments, as well as other federal agencies, to serve as cooperating agencies during the NEPA process. In order to serve as a cooperating agency, the agency or government must have either jurisdiction by law or special expertise relevant to the environmental analysis. For more information on cooperating agencies, please see the publication *A Desk Guide to Cooperating Agency Relationships and Coordination with Intergovernmental Partners 2012*.2

The following agencies have been invited to be cooperators:

- U.S. Forest Service
- U.S. Fish and Wildlife Service
- U.S. National Park Service
- U.S. Department of the Army, Fort Huachuca
- U.S. Department of Defense, White Sands Missile Range
- U.S. Department of Energy
- Arizona State Land Department
- Arizona Game and Fish Department
- Pinal County, Arizona
- Graham County, Arizona
- New Mexico State Land Office
- New Mexico Department of Game and Fish
- New Mexico Office of Military Base Planning and Support
- Lincoln County, New Mexico
- Grant County, New Mexico
- Luna County, New Mexico
- Socorro County, New Mexico

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2 Available at: https://www.blm.gov/policy/im-2012-115
2.5 National Historic Preservation Act and Tribal Consultation

The requirements for consultation under the National Historic Preservation Act of 1966 (NHPA) are in addition to and independent of the opportunity for qualified entities to cooperate under the provisions of NEPA. Entities who qualify to be considered a consulting party include the New Mexico and Arizona State Historic Preservation Offices and Tribal Historic Preservation Offices, the Advisory Council on Historic Preservation, tribes, and others with legal, economic, or other demonstrated interest.

Project introduction letters were sent on December 7, 2020, to the 29 tribes listed below. The letters provided an overview of the proposed action and invited each tribe to enter into formal government-to-government consultation. The letters stated the existing Programmatic Agreement (PA) for the project could be amended or redrafted pursuant to Section 106 of the NHPA, and invited each tribe to participate in the development of an amended or new PA. The letters also invited each tribe to participate in the NEPA process as a cooperating agency, provided a draft cooperating agency Memorandum of Understanding for review, and invited each tribe to participate in an introductory webinar to discuss the cooperating agency role.

- Ak-Chin Indian Community
- Apache Tribe of Oklahoma
- Caddo Nation
- Comanche Nation
- Fort Sill Apache Tribe of Oklahoma
- Gila River Indian Community
- Hopi Tribe
- Jicarilla Apache Nation
- Kiowa Tribe of Oklahoma
- Mescalero Apache Tribe
- Navajo Nation (including Alamo Chapter)
- Pascua Yaqui Tribe
- Pueblo of Acma
- Pueblo of Isleta
- Pueblo of Jemez
- Pueblo of Laguna
- Pueblo of Sandia
- Pueblo of Santo Domingo
- Pueblo of Taos
- Pueblo of Tesuque
- Pueblo of Zuni
- Salt River Pima-Maricopa Indian Community
- San Carlos Apache Tribe
- Tohono O’odham Nation
- Tonto Apache Tribe
- White Mountain Apache Tribe
- Wichita and Affiliated Tribes
- Yavapai-Apache Nation
- Ysleta del Sur Pueblo
3 SUBMISSION RECEIPT, PROCESSING, AND COMMENT CODING

3.1 Submission Receipt

The BLM received 186 submissions from the public during and after the official public scoping period. The most common format used for submissions was ePlanning, which accounted for 53% of all submittals; 24% of all submittals were recorded telephone messages; 14% were emails to Mr. Garcia’s email address; and 7% of all submittals were received by U.S. Mail or hand delivery (Table 2). Three comments (2%) were submitted to BLM through the online scoping meeting registration process. All formal scoping comments were given equal consideration, regardless of method of submittal. Some members of the public submitted comments through the public meeting registration page or by emailing the BLM project manager. Although these were not identified as formal methods of scoping comment submittal, the BLM also accepted these comments.

<table>
<thead>
<tr>
<th>Format</th>
<th>Number of Submissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ePlanning</td>
<td>99</td>
</tr>
<tr>
<td>U.S. Postal Service (mail) or hand delivery</td>
<td>14</td>
</tr>
<tr>
<td>Recorded telephone message</td>
<td>44</td>
</tr>
<tr>
<td>Email</td>
<td>26</td>
</tr>
<tr>
<td>Meeting registration</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>186</strong></td>
</tr>
</tbody>
</table>

3.2 Submission-Level Processing

Each submission was entered into an online database, numbered, and labeled with a commenter code indicating the entity from which it was received (i.e., individual; government agency; non-governmental organization or special interest; business; or tribe). This system provides ease in referencing and cross-checking public letters received and the comments contained within them. Table 3 discloses the number of submissions by entity. The number of entities does not match the number of submittals reported in Table 2 because some entities provided more than one submission.

<table>
<thead>
<tr>
<th>Format</th>
<th>Number of Submissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>130</td>
</tr>
<tr>
<td>Agency</td>
<td>8</td>
</tr>
<tr>
<td>Organization or businesses</td>
<td>26</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>164</strong></td>
</tr>
</tbody>
</table>
All of the submissions were considered unique (i.e., not form letters containing exact text); however, some submissions did contain very similar text, indicating some organized letter-writing campaigns may have been conducted. The three groups of very similar letters were as follows:

1. submissions from “affected landowners” supporting the project and expressing a preference for a certain configuration of routes and subroutes as the preferred alternative;
2. submissions from stakeholders near Oracle, Arizona, expressing concern about impacts to dark skies; and
3. submissions from stakeholders or affected landowners within Santa Rita Ranches expressing opposition to the project.

Each of these letters was processed individually because text varied slightly within the letters.

3.3 Comment-Level Coding

Once the 186 submissions received during the public scoping process were entered into an online database, the letters were reviewed and parsed into individual comments to be coded according to issues categories. For example, if a letter brought up four completely different issues, the text was parsed into four separate comments, each assigned to a different issue category. Some letters included comments that fell into more than one issue category (for example, a comment about erosion and sedimentation might fall into both soil and water issues categories). In these cases, the comment was coded twice. Table 4 lists the coding categories and a tally of comments coded according to these categories. As shown in the table, there were a total of 835 coded comments. Of this total, 20% of the coded comments were opinion or preference statements. Of the remaining comments, wildlife (16.4%), alternatives (12.1%), and socioeconomics (7.1%) were the three issue categories most frequently raised.

<table>
<thead>
<tr>
<th>Coding Category</th>
<th>Coding Counts</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Out of Scope (opinion or preference statements)</td>
<td>167</td>
<td>20.0%</td>
</tr>
<tr>
<td>Wildlife Resources (including special-status species)</td>
<td>137</td>
<td>16.4%</td>
</tr>
<tr>
<td>Alternatives</td>
<td>101</td>
<td>12.1%</td>
</tr>
<tr>
<td>Socioeconomics</td>
<td>59</td>
<td>7.1%</td>
</tr>
<tr>
<td>NEPA Process</td>
<td>42</td>
<td>5.0%</td>
</tr>
<tr>
<td>Purpose and Need</td>
<td>38</td>
<td>4.6%</td>
</tr>
<tr>
<td>Visual Resources</td>
<td>35</td>
<td>4.2%</td>
</tr>
<tr>
<td>Public Health and Safety</td>
<td>24</td>
<td>2.9%</td>
</tr>
<tr>
<td>Cultural Resources and Native American Concerns</td>
<td>23</td>
<td>2.8%</td>
</tr>
<tr>
<td>Public Involvement</td>
<td>22</td>
<td>2.6%</td>
</tr>
<tr>
<td>Climate Change</td>
<td>21</td>
<td>2.5%</td>
</tr>
<tr>
<td>Traffic and Travel Management</td>
<td>21</td>
<td>2.5%</td>
</tr>
<tr>
<td>Reasonably Foreseeable Environmental Trends and Planned Actions</td>
<td>18</td>
<td>2.2%</td>
</tr>
<tr>
<td>Cooperation and Coordination</td>
<td>16</td>
<td>1.9%</td>
</tr>
<tr>
<td>Environmental Justice</td>
<td>15</td>
<td>1.8%</td>
</tr>
<tr>
<td>Vegetation Resources</td>
<td>15</td>
<td>1.8%</td>
</tr>
</tbody>
</table>
4 COMMENT SUMMARY BY RESOURCE CATEGORY

The following section provides a general summary of the substantive resource categories identified in Table 5, followed by sample comments that are representative of each issue category. Issues that are beyond the scope of the EIS are presented in Section 6.0.

Each subsection provide a summary of the common themes and concerns expressed, followed by transcripts of a few selected sample comments, with the associated database letter number given in brackets (i.e., [1023]). The selected sample comments are included to provide a representative example that is typical of many others in the category, and to illustrate the common themes and concerns summarized. The resulting preliminary issues statements can be found in Section 7.0. Tables containing all coded comments are included as Appendix C.

4.1 NEPA Process


Comments requested clarification on the scope of the project and decision to be made. Many comments suggested that the BLM should reexamine the permitted SunZia line in its entirety with consideration of the proposed modification and changed circumstances, which include several new transmission lines, and regional changes as a result of climate changes (including persistent drought and increased wildfire risk, as well as excessive groundwater pumping within the San Pedro River Valley; see also Section 4.7.4, Climate Change). Comments stated that environmental changes over the next decade require reconsideration of the entire SunZia project.
We urge BLM to spare no effort in using the National Environmental Policy Act (NEPA), its implementing regulations, and related statutes and regulations to assess the new SunZia ROW application in relation to already altered and rapidly changing environments and opportunities to lay out coordinated regional and interregional plans for power transmission. In particular, BLM is advised to review the new SunZia application not as an amendment to an approved ROW grant, but for what it is: a major bundle of significant and impossible-to-mitigate impacts to unique and fragile environments that have changed irrevocably in the decade since the analyses that resulted in the 2015 record of decision. These changes tip the balance against pro forma BLM approval of the new ROW and in favor of a broad review and reconsideration of the public benefits from SunZia [109].

During this scoping process, please be open to expanding the geographic scope of this EIS to additional segments of the route as well. Specifically, I am most concerned about the segment that traverses the San Pedro River Valley. It is my opinion that these lines are improperly sited in Arizona. The BLM should expand the purview of the current EIS to include route alternatives that avoid the San Pedro River Valley [171].

Comments also noted that the current no action alternative would not cancel the project in full, only those proposed project elements, and requested that the BLM include an alternative that formally canceled the entire SunZia line.

Given the trend of the SunZia proposal toward increasing adverse ecological impacts to both of the major north-south river ecosystems in the region and the new perspectives the nation has gained during the past decade about the importance of minimizing the length and impacts of proposed tie-lines for renewable energy transmission, it is essential that project abandonment be analyzed as an alternative in the next EIS. This can be analyzed in terms of both positive and negative impacts. When a project proposal languishes for such a long period of time and is surpassed in permitting by other transmission proposals that avoided paralleling our last remaining river ecosystems in the region, this abandonment alternative must be analyzed for the sake of future generations. Analyzing project abandonment as an independent alternative is reasonable, because it is the most direct way to consider if it is a good idea for federal agencies to amend additional resources management plans for a project that has embraced a highly controversial route design concept from the beginning. With our desert river ecosystems vanishing, now is not the time to throw good resources after bad [105].

Alternatives must include, but not be limited to: a true “no project” alternative that would result in no project being built; and siting alternatives that would re-route the line away from sensitive areas including avoiding crossings and transmission along the San Pedro River, in Aravaipa Canyon, and adjacent to the Rio Grande River [144].

Comments stated the proposed action does not provide information on action related to connecting the SunZia project to the Arizona system and delivering the electricity to end markets.

Connection to AZ System Will Require Connected Actions Which Have Not Been Analyzed. No public information has been released on interconnection or transmission service requirements for connecting the SunZia project to the Arizona system and delivering the electricity SunZia carries to end markets. The existing Arizona system cannot integrate/transmit 4500MW in the substation locations as proposed which will trigger new transmission that has not been assessed. The new proposed SunZia West connection will also trigger new connected action transmission to be built, and will therefore require a new process at the ACC. The new Arizona facilities need to be identified in the EIS process and
included in impact analysis and be subject to proposer review and process, or else the EIS will be subject to legal challenge since clear connected actions were not analyzed.

Comments noted that the impacts from resources affected by the requested amendments must be re-analyzed from what was memorialized in SunZia’s Final Environmental Impact Statement and Proposed Resource Management Plan Amendments for the SunZia Southwest Transmission Project (2013 FEIS), particularly with regard to additional lands sought for construction staging, permanent access roads, new route alternatives, and new substations, as well as any additional changes that were noted in the NOI, such as lighting requirements. Comments stated the analysis of impacts within Sevilleta National Wildlife Refuge would need to disclose impacts within the existing ROW, even if the permitted ROW width does not change. Comments suggested preparation of a comprehensive table of all proposed changes from the 2013 FEIS.

Comments expressed concern with how the 2013 FEIS would be used to inform the current analysis. Some comments stated that baselines used in the previous NEPA analyses would need to be reconsidered in light of new information and changed circumstances. Comments stated that the new EIS should clearly describe which finding are still valid, and address any exceptions.

Impacts and cumulative effects to all resources in New Mexico and Arizona affected by the requested amendments must be re-analyzed from what was memorialized in SunZia’s original EIS, particularly with regard to additional lands sought for construction staging, permanent access roads, new route alternatives, and new substations. Given the magnitude of miles/acreage of additional permanent access roads, miles/acreage of each new route alternative, and the fact that the former EIS is a critical part of the evidentiary basis for seeking state permits, a comprehensive table of all proposed changes that were not analyzed in the first EIS should be prepared, followed by a detailed analysis of additional impacts associated with these changes, including changes that were not disclosed in the recent Notice of Intent, such as new lighting requirements by the Federal Aviation Administration [153].

The Climate Crisis and the now-confirmed and still-escalating types and levels of environmental change in the SunZia impact area mean that all baselines used in the 2015 FEIS must reconsidered and the proposed action must be completely re-analyzed [77].

As part of the EIS, BLM must address all aspects of the project in light of the new information and changed circumstances in the area which include, but are not limited to: the permitting of other transmission in the area in the time since the initial ROW was issued including the Southline Transmission Project in Arizona and New Mexico (which is along a route with far less impacts to sensitive habitats and resources than SunZia) and Western Spirit Transmission in New Mexico [144].

We understand that BLM intends to tier this EIS to the 2013 EIS, to expedite the review of several resource impacts. We remind the agency, and other cooperating agencies, that in order to tier the EIS to the 2013 EIS, the agencies must make, and provide to the public, clear and accurate findings that the conditions and environmental effects described in the 2013 EIS and associated documents are still valid, or alternatively address any exceptions. 43 CFR § 46.140. Anything short of these findings would render the new EIS inadequate and likely invalid [141].

One long-term impact that must be fully analyzed is the effect of using more of the existing ROW [within the Sevilleta National Wildlife Refuge] for the new development; although the ROW width would not change, the impacts within the ROW would [134].
4.1.2  **Release and Presentation of Analysis Results**

Comments stated that the BLM should release work products as they are completed for review. Comments also indicated that the new EIS should include the results of key studies in the body of the document rather than in support appendices.

Under the National Environmental Policy Act (NEPA) and subsequent rule-making, the initial Scoping Process is designed to allow any individual, group, or agency to collaborate with the federal oversight agency to define the range of issues and potential alternatives to be analyzed in the Environmental Impact Statement (EIS). To support meaningful public participation, all information including all studies, all issues, all potential alternatives to those promoted by the applicant must be incorporated into the body of the Draft EIS (DEIS) rather than concealed in footnotes, appendices etc. as has been done in previous documents [138].

4.1.3  **NEPA Schedule**

Several submissions included comments about the NEPA process timeline, either that it would take too long, or that the proposed completion date is overly optimistic.

I appreciate that the National Environmental Policy Act is a very detailed and thorough process. However, I am concerned this critical infrastructure project is taking too long to build. Permitting should never be so difficult that vital energy projects take decades to complete [182, 116].

Although you plan to tier the new EIS to the 2013 EIS, the current proposal will require significant new analysis. The proposed timeline of having a completed EIS by the Fall of 2022 seems overly optimistic [163].

4.2  **Public Involvement**

Comments related to public involvement provided positive feedback regarding the three scoping meetings held in June 2021. Other comments raised concerns over meeting notifications and identified issues accessing the project website and linking to attend the public scoping meetings. Comments also included a request for additional meetings. Suggestions for improving public outreach included:

- more project information, including detailed project maps, and more information on interconnection and transmission to end markets
- release of analysis documents for review as they are completed
- release of a draft NOI prior to the final release of the NOI to give the public more time to provide more informed comments
- close communication with all communities and landowners affected by the proposed ROW amendments
- comment opportunities beyond virtual meetings
- advanced notification of meetings other than what was provided

Comments requesting a 30-day comment extension period cited COVID-19 concerns, and lack of time to assess impacts and to provide comments and alternatives for consideration in part due to the federal holiday.
Meaningful public participation in determining the scope of alternatives and issues that will be addressed and analyzed in the next SunZia Environmental Impact Statement (EIS) is prescribed in rules and case law associated with NEPA. To make an informed decision about SunZia’s requested amendments, it is essential to respect NEPA’s mandate for meaningful public participation, because the public does not have the professional lobbying resources at its disposal that have been employed by SunZia for over a decade of trying to “squeak by” the various permit processes at the state and federal levels, despite major public and institutional opposition arising from siting conflicts[105].

Release detailed map information as early as possible. I suspect that the BLM is a recipient of this data from SunZia in this particular case. SunZia has a conflict of interest with respect to this data becoming available, so they may not want to release it. What I would suggest is that the BLM should delay any activity regarding a rerouting in the future with a day for day slip and put SunZia or any other applicant on notice that they are in the critical path of their own schedule desire as an incentive to get them to release data, i.e. set a milestone for something like a public hearing and tell the applicant in no uncertain terms that at a minimum of 120 days before a public hearing can take place, the applicant must turn over all of the information to the BLM that is pertinent to the public hearing. This would include data such as GIS data (detailed coordinates, shape files, or kml/kmz files) and other data regarding the activity, so the public can have access to this data well in advance of any public hearing so they have time to incorporate the released information into alternate suggestions or other concerns regarding the project. My suspicion is that SunZia is slow to provide this data to the BLM and that should not be the case. The public needs to be informed [133].

Personally, my family found out about this project two months ago. Luckily, we were able to scour websites, make calls, write e-mails, attend Zoom meetings, and spend time and energy on scrambling to fill in the unending blanks and gaps in information that arose in dealings with SunZia and the BLM with respect to the project. The latter’s values are to serve with honesty, integrity, accountability, respect, courage, and commitment, which then quizzically elicits the question of why it is so disparagingly difficult to get straight answers from either group about the particulars of the project and our many concerns [153 and 184].

More time is needed to assess impacts and to provide comments and alternatives for consideration. The short period between receiving materials and the due date for comments leaves us with too little time to provide meaningful feedback, especially with the holiday weekend and observance of Independence Day on July 5th. Providing only six business days from the last scoping meeting to the comment deadline over a holiday is inadequate. Please consider extending the scoping period at least 30 days [96].

The BLM, in the future should release a draft NOI, prior to the final release of the NOI. This too, would allow the public to provide ample time to provide more informed comments. In addition, in this particular case, the formal NOI was released on 4 June and first public hearing was 22 June, with comments due on 6 July. The issue with this timing is that there was information provided at the public hearing that had a material bearing on public comment. Due to this, the comment period was in some aspects shortened to less than 30 days, i.e. more like 2 weeks because of the delay to have the public comments in so closely after the public hearing. If a draft NOI came out with the schedule laid out, of when the NOI would come out and when the public hearing would be, it would provide the public more time to prepare informed comments [133].
4.3  Cooperation and Coordination

Comments coded into this category raised concerns regarding tribal, NHPA Section 106 and Endangered Species Act (ESA) Section 7 consultation, cooperating and coordinating agencies, and coordination and with other entities and related projects.

4.3.1  Cooperating Agencies

Comments includes requests for coordination with the Middle Rio Grande Conservancy District regarding river crossing and permitting [97], the New Mexico Renewable Energy Transmission Authority (RETA) which, as stated in comment 84, is a co-development partner with SunZia and has had a formal agreement since 2014.

Additional comments requested coordination with Arizona Game and Fish Department’s raptor expert, Tuk Jacobson [185].

White Sands Missile Range identifies itself as a cooperating agency for the new EIS process.

4.3.2  ESA Section 7 consultation

Comments received regarding ESA Section 7 consultation stated that three proposed alternatives at the crossing of the Rio Grande occur in designated critical habitat for federally endangered species, and that the applicant should “enter into consultation with the United States Fish and Wildlife Service (USFWS) for species specific guidance on avoiding and minimizing impacts to aquatic and riparian habitats, as well as seasonal restrictions during transmission line construction” [115]. See Section 4.7.12 for additional comments related to threatened and endangered species and USFWS consultation.

4.3.3  Tribal Consultation

Comments related to tribal coordination requested meaningful consultation with tribes in Arizona and New Mexico, specifically Ysleta del Sur, Piro Manso Tiwa, and Apache. A request for a separate meeting with tribes was also requested [76], and that sovereign nations should be a part of drafting the new EIS [133].

4.3.4  NHPA Section 106 Consultation

Comments received regarding NHPA Section 106 consultation raised concerns that the 2015 programmatic agreement does not include provisions to address the current proposed action and does not consider the Rio Grande and San Pedro River as cultural landscapes (see also Section 4.7.8). The commenter also requests that the new Draft EIS now do so and stated a new or substantially amended programmatic agreement is now required [77].

4.3.5  Other Coordination

Additional comments coded to coordination and cooperation included requests for the BLM and/or the applicant to engage proponents of Southline Transmission Project, Borderlands Transmission Project, and other related projects; Pima County; and local residents directly impacted by the project, as well as an expert from Avian Power Line Interaction Committee to consult on the project. Sample comments include:
The independent, piecemeal process that the BLM has used to plan and evaluate proposals for power transmission does not serve public interests. The Federal Government is advised to engage the proponents for SunZia, Southline, and related projects and activities in deliberations toward a regional master plan that optimizes the efficiencies of renewable energy generation and transmission while minimizing adverse environmental impacts. [109]

The 2015 comment letter from Pima County recommends habitat protection and restoration efforts to offset the roughly 2,400 acres of County Conservation Lands in the San Pedro watershed that would be impacted by SunZia. Specifically, the request was to “Work with Pima County to collaboratively develop and implement a long-term monitoring and adaptive management plan that includes but may not be limited to, the control and eradication of invasive species, proliferation of off-road vehicle impacts, effective habitat restoration and vegetation management, and protection of cultural resources. The long-term monitoring and adaptive management plan will be effective for no less than 20 years and will be codified through an enforceable means.” We support this recommendation as mitigation for habitat impacts in this important conservation area and request that a full accounting of impacts and mitigation be presented in the DEIS [132].

4.4 Land Use Plan Conformance and Consistency

4.4.1 Federal Plan Conformance

Comments requested that the USFWS ensure that the project is consistent and compatible with the Sevilleta National Wildlife Refuge’s purpose. Comments stated the intent of stipulations in the Refuge’s land grant deed was not envisioned to allow new construction projects to collocate within the existing easements.

Analyses of route alternatives through Sevilleta NWR must consider and explain whether the alternatives are consistent with the Sevilleta NWR’s purpose to preserve and enhance the integrity and the natural character of the ecosystems of the property by creating a wildlife refuge managed as nearly as possible in its natural state [134].

…the 2013 EIS dismissal regarding crossing through the Sevilleta NWR… stated that a new transmission-line ROW crossing the Sevilleta NWR would conflict with the refuge management policy and restrictions that prohibit commercial uses, as stated in the Sevilleta NWR land grant deed. We see no valid reason that the routing across Sevilleta be reinstated [206].

The Department [NMDGF] also believes that the original intent of the stipulation in the land grant deed was not envisioned to allow new construction projects to co-locate within the existing easements, but was in fact put there in order to prevent any future commercial development within the Sevilleta. Additionally, habitat disturbance would extend beyond the existing easements, in order to accommodate for construction activities and long-term maintenance [115].

Comments suggesting development of an alternative route along U.S. Route 60 would eliminate the need for Rio Grande conservation plans revisions within both the Sevilleta National Wildlife Refuge and the Cibola National Forest.
SunZia should consider a route that parallels Highway 60 westward from Socorro County to the large coal-fired generators located in Springerville, Arizona. This route could begin at the Rio Grande crossing that is co-located with the planned and permitted Western Spirit line. Such a route would avoid requiring amendments to the Rio Grande conservation plans associated with the Sevilleta National Wildlife Refuge and the Cibola National Forest, as well as avoid construction of a new industrial-scale infrastructure corridor parallel to both the Rio Grande and San Pedro River [184].

4.4.2 State, County, and Local Plan Consistency

Comments coded to this topic were in relation to the Santa Rita Ranches subdivision near Riley, New Mexico. These comments raised concerns that any property or easement sold by a landowner and purchased by the Applicant is in violation of the Santa Rita Ranches Property Owners Association/Home Owners Association Covenants [133 and 164].

The BLM should take into consideration, when private landowners and communities are involved, deed restrictions and covenants of that community. Sunzia is out trying to negotiate with individual landowners who are members of a community with a Homeowner's Association (HOA) knowing full well that their endeavor that would go through this private community is in violation of multiple covenants of the community. This is negotiating in bad faith and the BLM should not put themselves in a position to appear that they are supporting an organization that is negotiating in bad faith. If the BLM would like a copy of the covenants that Sunzia is violating, they can be made available on request. This alone should make the long route around Ladron not viable, aside from all of the other aspects stated in previously submitted comments in more detail about the most recent Sunzia request [133].

4.5 Purpose and Need

Comments suggested that the project was not consistent with BLM’s mission. Comments stated that the proposed modifications are not necessary and that the BLM does not need to consider the proposed modifications. As discussed in Section 4.1.1, comments also suggested that changing circumstances are such that the purpose and need of the entire SunZia project should be reexamined with consideration of economic conditions, new power transmission facilities in the same area, and other changed circumstances. Comments stated that the project requires scrutiny in terms of whether the needs for and benefits of this much-altered proposal outweigh public interests in maintaining ecosystem and mitigating climate change.

Clearly define and assess the proposed ROW alteration purpose, need, and viability. BLM is advised to give rigorous attention to SunZia’s economic feasibility and to opportunities to combine and coordinate the siting of power transmission facilities on regional and interregional scales [77].

SunZia invented its own purpose and need as articulated by Chairman Little. Please revisit the purpose, need, and economic feasibility of this project in this new EIS, consider project abandonment as one of the alternatives [138].

The BLM should take into consideration the system as a whole from generation, through transmission and distribution to determine whether or not the plan is viable and whether or not access should be provided at all, i.e., to perform some type of benefit and impact analysis about the project itself [158].
SunZia's amended right of way proposal should be denied because: (1) the proposed use is inconsistent with the purpose for which BLM manages the public lands described in SunZia’s application; (2) the proposed use is not in the public interest; (3) SunZia is not qualified to hold a grant; (4) issuing the grant would be inconsistent with the Federal Land Policy and Management Act, other laws, or these or other regulations, and; (5) SunZia does not have or cannot demonstrate the technical or financial capability to construct the project or operate facilities within the right-of-way. See 43 CFR §2804.26(a). [145]

The BLM says that its vision is to enhance the quality of life for all citizens through the balanced stewardship of America's public lands and resources, but this project simply does not benefit those whose properties will be destroyed by construction of the SunZia lines [184].

Commenters questioned if the purpose of the transmission line was to transmit renewable energy and if the project as proposed would be economically viable. Some commenters requested disclosure of power purchase agreements.

Include in the EIS all third-party studies related to the economic feasibility of the SunZia transmission proposal! Disclosure of actual third-party economic feasibility studies for long-distance tie-lines that purport to transport over 90% renewable energy must be included in the main body of the EIS before the next Record of Decision is considered. These highly relevant studies were buried in the public comment appendix of the last SunZia EIS, like many other bits of information, where they could conveniently be ignored by decision-makers and made difficult to find for the public [105].

Include in the EIS the stated power purchase interest of all utility partners involved in the SunZia project, disclosing both the amount and source of electrical energy desired to be transported by SunZia and their backers and partners (105, 153, 184)

Please provide to the public the current basis of SunZia's marketing people insistence upon claiming this transmission line will be used to provide [renewable] energy to California [2].

Other comments stated development of the SunZia project would meet identified priorities for New Mexico to become a major supplier of renewable energy to other states.

Our state will still need massive infrastructure and transmission upgrades to meet our own renewable energy goals set by the ETA [Energy Transition Act] and to participate in the national renewable energy market and just simply to make our grids more resilient and capable of equitably accommodating our population while withstanding upcoming weather extremes [135].

New Mexico has historically been an exporter of thermal-sourced power supply to markets such as California, Arizona, and Texas. As states and corporations increasingly move toward clean energy resources, the vast renewable resource potential in New Mexico creates an opportunity for the state to become a major supplier of clean energy needs of other states while continuing to serve the needs of in-state customers. In June 2020, NM RETA released findings from a landmark: Energy Transmission and Storage Study compiled by Virginia-based energy company ICF Consultants that specifically looked at this potential…. Based on the findings, New Mexico has more than enough renewable energy and capacity to meet residential and business electricity demands in advance of New Mexico's Energy Transition Act's (ETA) requirement for 100% zero-carbon electricity for utilities by 2045 and rural electric cooperatives by 2050. … New Mexico's renewable capacity could expand from
2,500 MW as of the end of 2019 to 11,500 MW by 2030. The 11,500 MW would satisfy New Mexico's clean energy goals as well as support the goals of other states. To support the addition of renewables at this scale, roughly 900 to 1300 miles of new transmission and supporting equipment is required. …the greatest value for transmission would be to expand capabilities to the western states…. Adding an extra transmission corridor to connect New Mexico to the neighboring markets was identified as the top priority in the Study. [84]

Comments stated that existing capacity is available on existing transmission lines due to retirement or planned retirement of coal and gas-fired plants in the region and also suggested that long-distance transmission could become obsolete as target states generate their own renewable energy sources and as communities, homeowners, and business develop their alternative energy sources.

Since the SunZia NEPA process was initiated in 2009, much has changed. There are alternatives to the proposed SunZia route. Existing high voltage lines in the northern parts of Arizona and New Mexico will have available capacity due to reduced use of coal generated power. It makes far more sense both economically and environmentally to use that capacity to transport power from the New Mexico wind field to western population centers instead of opening new utility corridors, especially along bird migration routes. The project is more ill-advised than ever [9].

Our neighboring states are doing exactly what we are doing- installing more solar and wind. Each market area is trying to sell the same thing to its neighbor. At some point, the market next door will cease to buy because it will be generating plenty of its own. Companies such as Facebook at Los Lunas have installed their own solar farm and don't need to buy power from a wind farm or a utility. Community solar is rapidly becoming a developer's new approach- their customers will not need to buy from a utility or wind farm. Individual home owners install standalone solar systems- and they do not need to buy from a wind farm or a utility. That is the trend. But the companies who are installing current power line infrastructure don't want to look ahead. They want to complete an installation project and get paid. Has anyone at the State or Federal agency level (such as BLM) looked ahead to calculate when the alleged demand for all this power will be neutralized? I think long distance transmission will be obsolete in 10 to 20 years [167].

Comments also contained several assertions that the true purpose of the project was to provide power to proposed mining operations.

SunZia, et al, should be debated as to the real purpose of the proposed route for their so-called merchant application. They are running those lines to areas that are mining districts and not for use as suggested. [172]

4.6 Alternatives

As indicated above under Section 2.0, identification of alternatives is a key objective of public scoping. The following section summarizes comments related to the proposed action components as well as suggestions for new routes or other alternatives elements. Expressions of support or opposition to elements of the proposed action are summarized in Section 6.0.

4.6.1 Component 1 (Local Route Modifications)

Comments stated that the proposed Maverick Area local route modification is within the Southline Transmission Project corridor and suggested that this route modification should be kept north of that
corridor to avoid line crossings. There were no comments or suggestions specific to the other four proposed local route modifications; however, the concept of undergrounding lines in places of key resources was also generally discussed as an option to reduce project impacts (see Section 4.6.4.2). There were also comments expressed about avoiding populated areas. Several submissions requested clarification on lighting on towers near Oracle, Arizona, and expressed concern about impacts to dark skies in this area (see Section 4.7.21, Visual Resources).

### 4.6.2 Component 2 (Access Routes and Temporary Use Areas)

Scoping submissions raised concerns about proposed overall access road mileage, as well as the proposal to make many roads permanent rather than temporary and suggested the BLM provide more detailed information on road locations and analyze a full range of alternatives for constructing and managing these roads. Comments also expressed concern with the expansion of the construction footprint beyond the ROW that was approved in the Record of Decision for the SunZia Southwest Transmission Project (2015 ROD). Comments requested clarifications to ROW widths, and stated that the EIS would need to clarify define the ROW alteration purpose, need, and viability.

Critically evaluate the need for the apparently excessive creation of 700 miles of new roads in areas that are (mostly) already roaded. The amount of proposed new road construction entailed in the R-o-W application requires and deserves BLM analyses and evaluations that consider direct, indirect, and cumulative impacts on the full spectrum of biophysical and cultural resources [77].

We remain concerned about the impacts of other construction and maintenance activities; these concerns are amplified by the current proposal to expand the construction footprint beyond what was approved in the EIS, and make many miles of road permanent rather than temporary… The description of the amendment to keep access roads permanent after construction indicates a very large footprint (709 miles) but does not indicate where the new segments will be located and thus doesn’t contain enough information to enable analysis of impacts or comparison of alternatives. In the forthcoming EIS process, we ask that SunZia and BLM provide detailed maps showing where new and existing roads are located, and analyze a full range of alternatives for constructing and managing these roads [157].

We also note that the amendments proposed in the Notice of Intent include a large amount of road construction, both permanent maintenance access roads and temporary construction access roads. The construction and maintenance of these roads were not analyzed in the 2013 EIS, of course, because the line was going to be constructed along a different path. The impact of road construction and maintenance must be fully addressed through the lens of landscape and wildlife corridor fragmentation, ground and surface water interaction, and full cultural artifact surveys [141].

Several comments raised concerns about Socorro County Road 125, indicating the road was vital to local residents, is in disrepair, and has deteriorated further as a result of Western Spirit transmission line traffic.

Scholle Rd. (Socorro County Road 125) … has deteriorated considerably with the increased truck traffic. Will this traffic increase with SunZia and if so, how will SunZia provide better access to this 1 lane county road? The old and condemned wooden bridge at Scholle Rd. over the arroyo just south of Rt. 60 is already impacted by Western Spirit. How will SunZia handle the condemned bridge? …Is this a repair that SunZia could consider? [14]
4.6.3 Component 3 (Route Options in Segment 4)

Comments requested clarification for the rationale behind development of new routes in Segment 4, noting that an approved route already exists. Many comments offered statements of general support or opposition for a particular route within Segment 4. These comments are summarized in Section 6. The following sections summarize comments that suggested new routes or elements of new routes that should be considered; identified resources of concern along the three proposed route options that should be avoided; or identified options for adjusting the three proposed routes to minimize impacts.

4.6.3.1 COMPONENT 3, ROUTE 1

Many of the comments about Route 1 (which crosses the Cibola National Forest) were comments of general support or opposition (see Section 6). The following resources concerns were identified along this route:

- citizen-proposed lands with wilderness characteristics (LWCs)
- Wilderness study area (WSAs)
- riparian areas around the Rio Salado and Rio Grande
- coal and uranium mines
- private lands and populated areas, in particular Santa Rita Ranches
- threatened and endangered plant species habitat areas and Important Plant Areas
- threatened and endangered wildlife habitat areas

Comments expressed concern about the length of this line relative to other options and suggested with consideration of the resource impacts, the route should be eliminated from detailed analysis. The following specific suggestions for reroutes were provided:

- relocating this proposed route around Ladrones Mountains
- moving the line farther away from the Santa Rita Ranches
- rerouting along existing highways (see Section 4.6.3.3.2 for more details)

Comments also suggested that seasonal restrictions within Cibola National Forest/Inventoried Roadless Area may be necessary to minimize impacts to desert bighorn sheep if construction activities would occur during the rut and lambing season (see also Section 4.7.12, Wildlife Resources).

There are coal mines really close to where the power lines are slated to go through…. I was told that there are Uranium mines in the area….That should be researched [86].

This proposed route would also travel through a portion of desert bighorn sheep (Ovis canadensis nelson) habitat in the vicinity of Ladron Peak. [115]

4.6.3.2 COMPONENT 3, ROUTES 2 AND 3

Many of the comments about Routes 2 and 3 (which crosses the Sevilleta National Wildlife Refuge) were comments of general support or opposition. These comments are summarized in Section 6.0. Some comments suggested that development of these routes would be counter to the mission of the Refuge and should be eliminated from detailed analysis as it was in the 2013 FEIS (see Section 4.4.2). Resource
concerns along this route included wildlife, visual, noise, socioeconomics, and recreation. Comments suggested that impacts could be mitigated by placing the line underground (see Section 4.6.4.2).

Comments suggested that because both routes would be required to route both SunZia lines, it may be more accurate to characterize them as components of the same alternatives. Comments also suggested that the entire route through the Refuge should be placed underground.

SunZia’s proposed plan to go through the Sevilleta needs to be clarified, otherwise it seems to the Department that SunZia is actually proposing two alternatives, not three.

Create a “minimal WL impact alternative” (including avoidance of wildlife refuges or placing the transmission line(s) underground through those refuges) [144]

…the 2013 EIS dismissal regarding crossing through the Sevilleta NWR… stated that a new transmission- line ROW crossing the Sevilleta NWR would conflict with the refuge management policy and restrictions that prohibit commercial uses, as stated in the Sevilleta NWR land grant deed. We see no valid reason that the routing across Sevilleta be reinstated [106].

4.6.3.3 Proposed New Routes in Segment 4

4.6.3.3.1 Colocation with the Southline Transmission Project South of the White Sands Missile Range

Several comments suggested that the BLM should consider a route south and east of the White Sands Missile Range (WSMR) that would collocate the SunZia line with the Southline Transmission Project and utilize the Afton or Guadalupe Substation.

Route the lines from the wind field east then south to Southline’s Afton substation, co-locating as much as possible [138].

Lines could be built to come south on the east side of White Sands Missile Range to connect with the South line. Lines could go north to connect with the Guadalupe substation. The 345 kV line could be upgraded and power moved to the four corners area which already has a good distribution network [98].

If SunZia’s objective is to move New Mexico’s wind energy into southern and central Arizona, the Southline Transmission Project has already provided an east-west pathway that does not follow the regions last remaining natural desert river ecosystems. SunZia should consider routes located east of the White Sands Missile Range, routes that ultimately would connect to the Southline project in southern New Mexico [105].

4.6.3.3.2 Colocation with Existing Highways or Train Routes

Multiple comments suggested that the BLM should consider a route that collocates the line with existing highways or train routes. The three highways that were mentioned were Interstate (I-) 40, U.S. Route 60, and I-25.

Why not put it along I-40 where it will be less disruptive for birds and wildlife? [26]
The BLM should analyze a route that would construct the SunZia transmission line parallel to and in the same disturbance area as Highway 60, east-west, and parallel to and in the same disturbance area as I-25, north-south. It could connect into the original route evaluated in the 2013 EIS when it crosses I-25 at Escondido. Since such a route would clearly mitigate concerns about impacts on the WSMR as well as the Sierra Ladrones WSA, the Sevilleta National Wildlife Refuge, and other protected areas [163].

SunZia should consider a route that parallels Highway 60 westward from Socorro County to the large coal-fired generators located in Springerville, Arizona. This route could begin at the Rio Grande crossing that is co-located with the planned and permitted Western Spirit line. Such a route would avoid requiring amendments to the Rio Grande conservation plans associated with the Sevilleta National Wildlife Refuge and the Cibola National Forest, as well as avoid construction of a new industrial-scale infrastructure corridor parallel to both the Rio Grande and San Pedro River. This route alternative is similar in design concept to the Western Spirit Line, in that it minimizes the distance and impacts of a renewable energy tie-line by connecting to the Western Grid at the closest access point where transmission capacity is being freed up with the retirement of coal-fired energy[184].

To my knowledge there are two ways to reach Santa Rita Ranches. One way is from Magdalena over a sandy gravel road which can be difficult to traverse because of the sand and dunes on the sides of the road. The other entrance is off I-25 in Bernardo where you have to cross the Rio Puerco via an historic truss bridge then travel BLM roads and then do a bridgeless recrossing of the Rio Puerco closer to the Santa Rita Ranch entrance. It appears to me that the Santa Rita Ranch proposal is the longest route and would therefore be more costly. There appears to be an established route along Interstate I-25 which would have more accessibility to established infrastructure, such as, utility/tower maintenance, hazard control, and catastrophic response [48].

There's alternative routes now through Torrence County up to Valencia County, they got our lines going across the road. There's a good alternative [170].

4.6.3.3.3 Options for Crossing the Middle Rio Grande

Comments expressed concerns about crossing of the Middle Rio Grande (proposed under various subroutes associated with all three route options). Suggestions to minimize impacts included collocating with the Western Spirit transmission line or undergrounding the line within the Middle Rio Grande floodplain. Comments suggested development of a “no river corridor” alternative, expressing concern about impacts to important remaining desert riparian ecosystems and migratory flyways (see also Section 4.7.12, Wildlife Resources).

Analyze the MRG crossing above ground and underground as two separate alternatives, incorporating all impacts of each alternative. Fully detail all uncertain and unknown impacts as well as estimated benefits of any proposed mitigation to offset impacts [132].

We now strongly urge an alternative in the EIS include burying the line instead where it would cross the Rio Grande River. This single mitigation will protect birds, wildlife, the Bosque riparian forest and the visual, cultural, educational and recreational experience of users of the Rio Grande Trail [147].

The Department also recommends that EIS evaluate the option, feasibility, and the potential ecological benefits of the SunZia transmission line crossing under the Rio Grande, if it is not collocated with the Western Spirit line [115].
Comments suggesting that the project avoid the San Pedro River Valley (which is not part of the proposed action) are discussed in Section 4.1.1.

### 4.6.3.4 Reanalysis of Original Route

Comments suggested that the option of undergrounding the original route within Segment 4 to address conflicts with the White Sands Missile Range should be considered in the range of alternatives considered in the new EIS. These comments asserted that the route remains a viable option that would avoid many of the resource impacts associated with the other routes. Comments stated that the issues associated with missile testing could be addressed through undergrounding the line or other means.

I strongly support a “no action” alternative that would retain the proposed route of the 2013 EIS and the 2015 Record of Decision (ROD). Ideas for placing the transmission line underground could be resurrected and analyzed to address concerns of the White Sands Missile Range (WSMR). This would not only avoid the impacts discussed above but would save very significant amounts of time and money for the BLM and other cooperating agencies.

Comments from the U.S. Department of Defense (DOD) and U.S. Army stated that the route approved in the 2015 ROD crossing White Sands Missile Range is a significant concern as the DOD assesses the test range infrastructure needed to support the U.S. National Defense Strategy and provided a summary of concerns that were raised previously.

The 2016 Record of Decision (ROD) issued for the Final Environmental Impact Statement (EIS) authorizing a Right-Of-Way (ROW) for the SunZia transmission line across the NCUA is a significant concern as DoD assesses the test range infrastructure needed to support the emerging technologies and systems identified in the 2018 National Defense Strategy (NOS)... Aerial transmission lines in the NCUA would impede our ability to provide realistic operational environments including very-low-altitude test-flight profiles for, missiles, drones and other unmanned vehicles.

### 4.6.4 Other Alternatives

#### 4.6.4.1 ALTERNATIVE TECHNOLOGY

Comments asked for clarification on the use of direct current (DC) transmission lines, or alternating current (AC) lines, and suggested that retooling the project to comprise one 500-kV DC line could reduce resource impacts.

What technology is SunZia using to assure the most efficient transmission of its energy, to prevent voltage loss over the 500+ miles of the project? Are they high-voltage direct current transmission lines, or alternating current lines? [24]

The SunZia proposal now indicates a DC line capable of 3,000MW would be built first, a change from prior indications capable of an AC line capable of 1,500MW would be built first. If the first line is capable of 3,000MW, this questions the need for the second line and/or suggests alternatives should be considered. Why grant two 500kV AC lines at 3,000 MW total with 400-1000 feet of new disturbance, when one 500kV DC line could transmit the same amount of MW at a fraction of the impact? Reducing the scope to one 500kV line would reduce impacts significantly, at a similar capability to two AC lines. (136)
4.6.4.2 UNDERGROUNDING THE LINE IN MULTIPLE LOCATIONS

Commenters suggested that the BLM bury the line in sensitive areas along all routes. Comments also suggested that the routes through the Refuge should be undergrounded (see also Section 4.7.12, Wildlife Resources).

The BLM should look at the possibility of burying the high-tension lines in sensitive areas along all routes or look at other means to minimize environmental impact in any of the potential route options past and future [158].

Create a “minimal WL impact alternative” (including avoidance of wildlife refuges or placing the transmission line(s) underground through those refuges) [77]

4.6.4.3 COLLOCATION WITH OTHER T-LINES, POTENTIALLY ON SAME STRUCTURES

Comments suggested that the range of alternatives needs to consider alternatives of other routes that were not permitted at the time of the 2013 FEIS and 2015 ROD. Comments suggested that the proposed transmission line should collocate with other transmission lines such as the Western Spirit line or Southline or the Borderlands Transmission Projects. Comments acknowledged the proposed action includes colocation with a portion of the Western Spirit line and requested more information regarding the relative location of the two projects (see also Sections 4.1.1 and 4.6.3). Some comments also suggested that, with inter-project coordination, multiple transmission lines could be located on the same structures. Comments suggested that BLM should be taking a look at all proposed projects together and establishing a utility corridor or one high-capacity transmission line (see Section 4.1.1).

A preferable approach would be master-planning at the Federal level, leading to the selection of a single, direct route and to the construction of one high-capacity transmission line. Such high-capacity lines are common in other countries (e.g. China, India, Italy). The lines can be engineered so that each arm of a tower supports as many as six cables [46].

BLM is advised to give rigorous attention to …to opportunities to combine and coordinate the siting of power transmission facilities on regional and interregional scales [77].

4.7 Impact Analysis and Mitigation

4.7.1 Reasonably Foreseeable Environmental Trends and Planned Actions

Comments coded to this category mostly raised concerns over precedence, and how the project would lead to additional power lines in the same areas, turning the ROW into an energy corridor. Comments noted that the area was not identified as a good energy corridor in the West Wide Energy corridor study, but that the study did acknowledge that if the SunZia transmission lines were built it would become an energy corridor. [3] Comments requested a cumulative impacts analysis of collocating the crossing of the Middle Rio Grande with Western Spirit as well as a cumulative impacts of a separate Middle Rio Grande crossing. Comments also identified the lack of Southline as a reasonably foreseeable future action in the original 2013 FEIS. Additional comments included concerns over cumulative impacts of alternatives, permanent access roads, construction staging, new substations, and to specific resources. Comments also

requested the BLM consider cumulative impacts of development that could be facilitated due to the project, such as the addition of potential fossil fuel plants and housing developments:

Analyses of the subroutes that cross the MRG must fully analyze the cumulative impacts of collocating the crossing with Western Spirit and compare them to the cumulative impacts of adding a separate crossing [134].

Impacts and cumulative effects to all resources in New Mexico and Arizona affected by the requested amendments must be re-analyzed from what was memorialized in SunZia’s original EIS, particularly with regard to additional lands sought for construction staging, permanent access roads, new route alternatives, and new substations. Given the magnitude of miles/acreage of additional permanent access roads, miles/acreage of each new route alternative, and the fact that the former EIS is a critical part of the evidentiary basis for seeking state permits, a comprehensive table of all proposed changes that were not analyzed in the first EIS should be prepared, followed by a detailed analysis of additional impacts associated with these changes, including changes that were not disclosed in the recent Notice of Intent [105 and 184], such as new lighting requirements by the Federal Aviation Administration [105].

BLM must also consider cumulative impacts from the many types of development along the SunZia route that could be facilitated by a new line in these areas, for example, potential fossil fuel plants (which could undermine any GHG benefits from new renewable energy sources) and sprawl housing developments in remote areas that would impact scarce water resources and other resources [144].

…the BLM must analyze the cumulative impacts including continued dependence on fossil fuel-fired power plants, as well as the expected construction and operation of renewable energy projects to serve the capacity of the SunZia transmission line. While the purpose of the SunZia Southwest transmission line is to transport “primarily renewable energy”, the use of the word “primarily” suggests that fossil fuel-derived energy will also be transported. BLM and cooperating agencies must determine to what extent fossil fuel-derived energy will be supported by the construction and operation of this transmission line, and analyze the impacts therefrom [141].

### 4.7.2 Mitigation (non-resource specific)

Comments were coded to this topic for mitigation measures that were not resource specific. See resource sections for discussion of resource-related mitigation. Comments encouraged the BLM and SunZia to consider a “broader set of mitigation measures in this amendment than were mandated by the 2015 right-of-way approval” and suggested a “mitigation hierarchy” that would seek to “avoid impacts to areas with the greatest and most irreplaceable ecological value; minimize impacts to sites chosen; and offset (compensate for) the remaining unavoidable impacts by investing in a comparable amount of conservation benefits elsewhere. This approach closely matches federal guidance in 40 CFR1508.2” [157].

Comments indicated that given the “30 x 30” initiative to conserve 30% of our wild lands by 2030 to protect biodiversity, placements of large power line structures in such important river habitat would be a step in the wrong direction. Comments indicated that, previously, SunZia offered to purchase habitat in the area and set it aside for wildlife as a way to mitigate impacts of its power line but stated that areas used for mitigation would need to be in northern nesting areas and not in the middle Rio Grande Valley itself (see also Section 4.7.12, Wildlife Resources).
Comments also specifically identified the Sevilleta National Wildlife Refuge as a location where compensatory mitigation would be required (see Section 4.7.12, Wildlife Resources). Comments also reiterated a recommendation made in 2015 for habitat protection and restoration efforts to offset 2,400 acres of County Conservation Lands in the San Pedro watershed impacted by SunZia, and requested full accounting of impacts and mitigation in the Draft EIS. Additional comments recommended companies set aside funding for dismantling power line structures once power lines become outdated hazards [167].

Offsetting unavoidable impacts: Overall, we find the mitigation offsets described in the original 2013 EIS and the 2016 ROW grant processes to be inadequate to adequately compensate for unavoidable impacts. The 2016 ROW, for example, only required offsets for a small number of acres in Designated Critical Habitat of federally listed Endangered Species. These handful of acres represent a tiny fraction of the acres that will be exposed to watershed disturbance and habitat degradation from construction and maintenance of this powerline and its associated infrastructure. Our 2015 letter to the Arizona Corporation Commission describes these un-mitigated impacts in detail. This amendment is an opportunity to evaluate a broader suite of potential mitigation measures, from avoidance to offsets. Specific to road impacts, adding permanent road miles and an expanded footprint to the right-of-way would cause additional ongoing impacts; this BLM should look at the possibility [157].

### 4.7.3 Air Resources

The primary concerns around air quality were related to the increase in air pollutants and concerns about their effects on health. Comments also stated that corona discharge can lead to the generation of the ground-level ozone and nitrogen oxides and expressed concern about potential impacts to vegetation and nearby communities.

On still days, this area of the Southwest is some of the purest there is. Historically, it was even sometimes called the well country for sufferers of tuberculosis and other lung ailments who moved to sanitariums, especially in New Mexico, to breathe easier in the fresh, dry air. Tests increasingly show that a buildup of static electricity around power lines attracts particulates in the air and carries them to the area, where they accumulate. This problem is made worse if power lines are located close to other sources of pollution (like the many sources inherent to large-scale construction sites). Pollutants are often made up of a mixture of contaminants that can then become charged by the electricity running through the power lines. In turn, breathing in charged particles has been linked to many adverse health effects, including cancer. How will SunZia and/or the BLM safeguard the populations in these areas, human and otherwise? [153]

### 4.7.4 Climate Change

The primary concerns around climate change were related to the need for rigorous climate change analysis and reconsiderations of the baselines used in the 2013 FEIS.

As part of the EIS, BLM must address all aspects of the project in light of the new information and changed circumstances in the area which include, but are not limited to: persistent drought and increased wildfire risk which will increase the need for vegetation clearing along the transmission line and new roads and significantly increase impacts to species, habitats and other resources to a degree not anticipated in earlier environmental review…As part of the EIS, BLM must address all aspects of the project in light of the new
information and changed circumstances in the area which include, but are not limited to:
excessive local groundwater pumping which is impairing the San Pedro River system along
with the impacts of increasing drought and climate change, these cumulative impacts to the
San Pedro River, adjacent lands and resources must be addressed along with the critical need
to protect and conserve these rare and declining resources. [144]

Comments specifically identified the middle Rio Grande as an area where impacts of climate change and
prolonged drought have affected wetland habitat.

Estimates of riparian habitat loss range from 40% to 90% in the arid southwestern states
(Dahl 1990), and riparian habitats are considered to be one of the region's most endangered
ecosystems (Minckley and Brown 1994, Noss et al. 1995). Because of the increasing impacts
of climate change, prolonged drought and urban development in the historic floodplain, the
loss of wetland habitat in the MRG now likely exceeds the higher range of Dahl's estimates
that were published in 2000 [176].

Several comments brought up greenhouse gas (GHG) emissions, specifically sulfur hexafluoride and the
lack of scientific studies. Comments also suggested that the BLM should consider topsoil losses in its
GHG emission calculations.

BLM is advised to consider topsoil losses due to road and transmission line construction in
terms of contributions to greenhouse gas emissions and in terms of reductions in regional
capacities to capture and retain carbon dioxide in soil [109].

We advise BLM to proceed deliberately to close the gap between management of BLM lands
and scientific studies of climate change by actively integrating available research results into
land management plans, practices, and decisions. 3 U.S. courts are now consistently doing
something they were not doing in 2015: upholding requirements for BLM and other federal
agencies to consider the Climate Crisis in their decision regarding land alterations. SunZia
must not be excused from rigorous analysis and evaluation of its Climate Crisis impacts
(and benefits) simply because it links renewable energy sources and major markets. [77]

Other materials and equipment of all kinds that will be necessary for the construction and
maintenance of the project are also potentially detrimental to environments in the vicinity.
For example, will SunZia’s high-voltage systems be insulated with sulfur hexafluoride, a
potent greenhouse gas, like many others? Sulfur hexafluoride can leak into the atmosphere
from aging equipment or during maintenance and servicing, trapping heat and warming local
and global atmospheres, ultimately degrading the tenuous climate situation that SunZia’s
green energy is supposed to countereffect. [153]

The other primary climate change concern raised in the comments was social cost of carbon and risk to
damage from extreme weather events.

Has anyone done a cost benefit analysis analyzing the costs and negative impacts of the
transmission line with the costs and positive benefits of an equal amount of capital deployed
into a carbon capture venture? [3]

Also, as we have seen more and more recently, large power grids are more easily disrupted
by extremes in weather. In a time of global climate change, it seems important to put our
resources into generating more power locally at the place where it is being used so that 1) the
people using the power also experience and understand the effects of generating it instead of
pushing those effects off onto other people, lands, and ecosystems, and 2) power sources are not so vulnerable to disruption by weather or sabotage. [140]

4.7.5 Soils, Minerals, and Geology

The primary concerns around soils, minerals, and geology were related to the unique soils, erosion, floods, landslides, and damage to habitat. Comments noted that the proposed project would require over 700 roads and expressed concern about topsoil loss and carbon sequestration in soil (see also Section 4.7.4, Climate Change). Comments expressed concern that erosion could introduce additional silt into the riparian environment of the Rio Salado and the Rio Grande. Many comments were very specific, listing properties and specific location concerns. Comments also stated that there were mines along the route that should be considered.

The Riley/SRR Route right-of-way will consume ~3697 acres. The ~3697 acres under these transmission towers is mostly pristine land with many terrain changes. The difficulty in building in this terrain will be rife with issues, such as potential erosion, permanent damage to terrain and vegetation, and destruction and disruption of habitat to name a few. ....Roads would create additional damage. Given the rough terrain as seen in Figure 5, which shows the elevation changes along the Riley/SRR Route, construction may be difficult and especially prone to erosion. As depicted, many of these slopes are extremely steep. Machinery used to build these transmission lines would likely leave significant and permanent damage along the route and possibly off the route as well. Desert terrain is a very fragile environment. There are still trail ruts from wagons that used the Santa Fe trail over a century ago. Erosion would be a significant concern and ultimately the silt products from erosion could end up in the Rio Grande. The Rio Grande is already struggling with water levels and water flow and adding additional silt and soil material into the Rio Grande would be detrimental to this great river which is vital to New Mexico. Fourteen miles North of Magdalena and within five miles of the proposed Riley/SRR Route is where the C de Baca Uranium project was located. It could be that uranium, or some other minerals could be exposed while digging foundations and disturbing the earth under these sites. [158]

BLM is advised to consider topsoil losses due to road and transmission line construction in terms of contributions to greenhouse gas emissions and in terms of reductions in regional capacities to capture and retain carbon dioxide in soil [109].

What guarantees will there be that …SunZia will protect inhabitants from the devastating and known effects of erosion in delicate areas? Will flood and landslide insurance be provided? [184]

There are coal mines really close to where the power lines are slated to go through. This is a real danger. I was told that there are Uranium mines in the area by my real estate agent who sold me the property. There are several other mineral mines in the area. Not a good idea to ruin them with this project. Too many things at stake. New Mexico may need them later. I would think that would be considered! [86]

4.7.6 Water Resources

The primary concerns around water were related to the amount of water needed for construction, available water resources, and water rights in both Arizona and New Mexico. Comments stated that land development activities, climate change, and drought have substantially compromised the ecological integrity of stream, wetland, and riparian ecosystems, and expressed concern that erosion could further
affect the riparian environments of the Rio Salado and the Rio Grande through introduction of additional silt.

In their final state, the transmission lines would not be a big consumer of water resources or have a significant effect on the overall water situation in and around the transmission lines. There are a few potential exceptions to that, however. Presumably anchoring towers to the ground, would require concrete, which requires water to mix. Given the scant amount of water in the area it would stand to reason that it will have to be trucked in, which of course creates significant road damage. Additionally, to mitigate dust during construction sites may have to be wetted down. The more significant concern would be that the large right of ways required under the transmission lines would create a natural path for erosion, especially if vegetation needs to be cleared for other reasons, as vegetation naturally reduces the effect of running water as it relates to erosion. The same concerns would exist with both temporary and permanent roads created by the project. The area by these power lines is cut through by arroyos and in the case of the Riley/SRR Route most of these end up in the Rio Salado and ultimately the Rio Grande. [158]

How about the often conflict-ridden and tense issues surrounding water rights in New Mexico and Arizona? When the transmission project disrupts existing waterways and accesses, who will provide resources for the properties and environments below the kinks? [14]

4.7.7 Paleontological Resources

Comments expressed concern with impacts to paleontological resources that can be easily located along the proposed project ROW.

These particular areas of New Mexico and Arizona … contain literally countless records of human prehistory and history, as well as the scientific history of the regions plant and animal life. … Along with the state and nationally protected lands that are home to these exquisite and fading sites, archeological and paleontological locations can be found simply by exploring properties and roadsides along the proposed SunZia routes. Having trekked just a small percentage of this acreage, I can attest to finding: … fossilized marine invertebrates from when the area was part of a large inland sea… the delicate imprint of ferns from bygone geologic periods; etc. [153]

4.7.8 Cultural Resources and Native American Concerns

4.7.8.1 GENERAL CONCERNS

Several comments were concerned with how the SunZia transmission project would have potential adverse impacts to specific cultural and historic values. Comments requested that cultural resource surveys be conducted. Many comments were very specific, listing properties and historic designations and/or values of each.

This project also demands historic surveys of the area to determine the presence of and protect cultural and historic artifacts, particularly due to the proximity of the Camino Real and Jornada del Muerto. [141]

Speaking again to the Riley/ Santa Rita route, this area is rich in cultural and archaeological resources. There are pottery shards strewn about the land. Much of it is Socorro black-on-white, which can be dated as far back as the 10th century. To build the transmission lines
through this area would destroy the cultural heritage and archaeological treasures it holds. Riley is also a documented ghost town, an authentic vestige of the Old West that would be coopted and have its character ruined by the intrusion and eyesore of large modern power structures. The small cemetery there includes the grave of Deputy Sherriff Daniel Bustamante, killed by the bandits infamous for performing the last great train robbery in the west. [139]

The proposed route through Santa Rita Ranches will be encroaching upon the historic lands and communities of Magdalena, Riley, and the Alamo Navajo Reservation. In doing so, there is a distinct possibility of disturbing potentially historic archeological sites and locales, which, if it does, will require federal archeological investigations, causing the Proposed Route through SRR (Santa Rita Ranches) to be delayed for an indeterminate period. [164]

Native American petroglyphs in the area of Scholle Rd. south of Rt. 60 approximately 2 miles are already impacted by Western Spirit. How will SunZia protect these petroglyphs? [14]

The lines will run directly over Indian cultural sites and are directly over seven irrigation and drainage canals, as well as the railroad- All passing over within one miles' width; and less than a mile for Escondida Lake. [3]

Comments coded into this category raised concerns about the BLM’s need to give special consideration to cultural and historic values. Comments ask that the BLM consider cultural resources in conjunction with biophysical aspects of the environment.

BLM is advised to give special consideration to the vital importance of the Rio Grande and Rio San Pedro corridors as cultural landscapes and as region-defining visual resources that are far too precious to sacrifice for incompletely considered, profit-driven projects, especially a tie line with extraordinarily high visual impacts. [77]

Lastly, comments were concerned about the Rio Grande and San Pedro Corridors as cultural landscapes. Comments ask the BLM to give special consideration to these landscapes and ask for an amended programmatic agreement.

BLM is advised to give special consideration to the vital importance of the Rio Grande and Rio San Pedro corridors as cultural landscapes and as region-defining visual resources that are far too precious to sacrifice for incompletely considered, profit-driven projects, especially a tie line with extraordinarily high visual impacts. The 2015 programmatic agreement (to satisfy the requirements of the National Historic Preservation Act) for the approved ROW does not include provisions for changes to the ROW. Neither that agreement nor the 2015 FEIS adequately consider or address the Rio Grande and Rio San Pedro as likely cultural landscapes. The impending DEIS must do so. A new or substantially amended programmatic agreement is now required. [109]

Comments about Native American concerns were related to the mitigation measures being taken to protect cultural resources and tribal lands.

…we urge you to consider and mitigate as much as possible the impact to our lands and particularly to sacred cultural sites and tribal lands. [92]
4.7.8.2 OPTIONS TO AVOID, MINIMIZE, OR MITIGATE IMPACTS

As noted above, comments suggested a new programmatic agreement is required. No other design or mitigation options were identified.

4.7.9 Fire Management

4.7.9.1 GENERAL CONCERNS

The primary concerns around fire were related to the dangers of fire and the lack of resources in the community to fight fires. Several comments cited Santa Rita Ranches specifically and the risks that fire poses to landowners. Comments also expressed concern about fire risks in the Rio Grande Bosque.

It is remote and completely out of the way with no water and the closest, volunteer only, fire department 22 miles away and on a rugged, dirt county road as well. In the event of a fire, which these high-powered lines have been known to cause in California, it would take well over an hour to get to Riley. The other fire department in Socorro (47.9 miles) would take well over 2 hours. [111]

High voltage transmission lines can be a significant impediment to fighting fires. There are significant power line hazards that are present to personnel fighting fires. The Santa Rita Ranches community does not have installed fire equipment. Wildland fires already present a risk in that area due to the lack of water. This is a risk that the landowners accepted when purchasing their property, but this risk could be significantly exacerbated by the presence of the transmission lines both by making it more difficult to fight fires in the presence of the transmission lines and also the possibility that the transmission lines could contribute to the possibility of a fire. Vegetation management and other measures can mitigate some of that risk, but of course eliminating vegetation is also environmentally detrimental, especially in desert landscapes. Transmission lines present in an area can make fires more prevalent due to weather related events, inadvertent contact with vegetation or other items, equipment failure, and possible conductor slap creating sparks in a dry environment. These are all valid concerns. There is increased risk to the lives and property of the people in the proximity of these transmission lines. [58]

4.7.9.2 OPTIONS TO AVOID, MINIMIZE, OR MITIGATE IMPACTS

Comments suggested reroutes to Alternative 1 to minimize fire risk to the Santa Rita Ranches community and undergrounding the line as a way to minimize fire risk in the Rio Grande Bosque.

Undergrounding should be considered as fool proof mitigation for fire in the Rio Grande bosque. Fires in California have shown that cleared rights of way are not sufficient. [103]

4.7.10 Public Health and Safety

4.7.10.1 GENERAL CONCERNS

The primary concerns around public health and safety were related to the dangers of electromagnetic fields (EMFs), especially in context of exposure and the line’s proximity to residents. Several comments cited studies documenting potential health risks and correlation of sickness and disease specific to proximity and prolonged exposure to transmission lines.
Levels of electromagnetic fields emitted by high-voltage power lines are hard to quantify and depend on many variables; therefore, accurately gauging the exposure to nearby humans and environments is tricky. Undeniably, the closer in proximity the power lines are to specific people and places, as well as the amount of time spent within their exposure, increases the negative impacts that are possible. It is also practically impossible to shield EMFs from homes and habitats. [158]

Another large concern is the threat to health. I would urge the BLM and those making decisions about this project to err on the side of caution, as epidemiological research has found associations between magnetic field exposure and cancer. [139]

The other primary health and safety issue raised in the comments was the increased emergency communication risk associated with electric lines and weather-related events.

Cell phone and emergency service will be affected, and digital television signals will be affected by the power line as well. [172]

Large overhead structures can be more vulnerable to weather-related events. Global climate change caught Texas by surprise this spring, freezing infrastructure and causing massive loss of power and bringing suffering to customers. What measures will be taken to protect the lines from extreme weather events not experienced in the past and prevent dangerous conditions for communities in their wake? [144]

Comments also raised a concern about crossing existing mines, exposing uranium or hazardous materials during project development (see also Section 4.7.5, Soils, Minerals, and Geology).

They are also running this line through a hazardous waste site, caused by Eagle Picture battery manufacturing along the base of ‘M’ mountain in Socorro County. How is this possible? Does the NMED and EPA know about this and how could it be allowed? [172]

4.7.10.2 OPTIONS TO AVOID, MINIMIZE, OR MITIGATE IMPACTS

Comments suggested reroutes to Alternative 1 to avoid existing mines, potential hazardous materials, and populated areas where EMF could be a concern. No other design or mitigation options were identified.

4.7.11 Vegetation Resources

4.7.11.1 GENERAL CONCERNS

Commenters who expressed concerns about vegetation resources cited issues regarding permanent disturbance and the possible spread of invasive noxious plants within the disturbance footprint. Several commentors also expressed concerns about the degradation of vegetation habitat due to the construction of access roads. Additional comments related to temporary and permanent disturbance related to access roads and other construction activities are discussed in Section 4.7.20, Travel and Transportation.

Construction of any of these alternative routes will cause major, lasting disturbance to an area that is already under duress from climate change. It will accelerate invasive species colonization, augment erosion, disrupt habitat, and alter the natural landscape irremediably. All these impacts would need to be analyzed fully in a new EIS, which would have to include a complete survey of flora and fauna in all areas effected by construction and maintenance of the transmission line. [163]
We remain concerned about the impacts of other construction and maintenance activities; these concerns are amplified by the current proposal to expand the construction footprint beyond what was approved in the EIS, and make many miles of road permanent rather than temporary. Roads are widely considered to be one of the major sources of habitat and watershed degradation, especially in semi-arid areas. The description of the amendment to keep access roads permanent after construction indicates a very large footprint (709 miles) but does not indicate where the new segments will be located and thus doesn’t contain enough information to enable analysis of impacts or comparison of alternatives. [157]

Comments identified concerns with past, present, and proposed impacts to wetland and riparian habitat around the Middle Rio Grande (see Section 4.7.4, Climate Change; Section 4.7.6, Water Resources; and Section 4.7.12, Wildlife Resources). Several commenters also indicated that the project footprint is expected to contain special-status plant species and is located near a number of Important Plant Areas.

There are 23 rare plants in Socorro County, NM as described in the Rare Plant List maintained by the University of New Mexico. Three of these plants are listed as threatened or endangered by the US Fish and Wildlife Service (USFWS); the Wright's Marsh Thistle, the Dune Pricklypear, and the Pecos Sunflower, which is also listed as threatened by the US Fish and Wildlife Service (USFWS). The Pecos Sunflower, seen in Figure 4, is a particularly beautiful flower and had been found at the nearby La Joya Wildlife Refuge. This refuge is very near the confluence of the Rio Salado and the Rio Grande. The community of Riley/SRR straddles the Rio Salado and the proposed Riley/SRR Route parallels the riparian environment of the Rio Salado and also crosses many arroyos which empty into the Rio Salado. These riparian environments are corridors for wildlife and critical environment for vegetation. This route is in very close proximity to Important Plant Areas: 54-Rio Salado at Riley, 55-Rio Grande at Belen, 56-Sevilleta Basin, and 142-Socorro and Strawberry Peaks to name a few. Special care must be made in all these areas to preserve and protect endemic plants. [158]

As with other linear projects, the Department recommends consideration of potential impacts to wildlife movement corridors, outdoor recreation (e.g., hunting, hiking, camping, and wildlife watching), deposition and/or spread of noxious and invasive weeds, and habitat fragmentation. Enclosed is a report from the Department's online Environmental Review Tool (ERT) prepared specifically for the SunZia Southwest project access roads and temporary work areas outside the granted ROW, and the SunZia West Substation. Within the report are lists of special status species documented within two miles of the project vicinity, special areas that intersect with the project footprint, Species of Greatest Conservation Need (SGCN) predicted to intersect with the project footprint, and Species of Economic and Recreation Importance predicted to intersect with the project footprint. The ERT report is a vital information resource for your use in evaluating potential environmental impacts in Arizona. [185]

4.7.11.2 OPTIONS TO AVOID, MINIMIZE, OR MITIGATE IMPACTS

Commenters offered suggestions to mitigate or offset impacts to vegetation resources. Comments expressed the need for a more comprehensive examination of alternatives, in order to sufficiently analyze which alternatives may have the smallest impact to vegetation resources.

This amendment is an opportunity to evaluate a broader suite of potential mitigation measures, from avoidance to offsets. Specific to road impacts, adding permanent road miles and an expanded footprint to the right-of-way would cause additional ongoing impacts; this
network should be examined for least-harm alternatives, and then considered in offset calculations. These impacts will be cumulative to impacts of the road network and construction footprint already described in the 2015 EIS. Because habitat/watershed degradation often has non-linear effects, the most robust approach for this amendment’s NEPA process would be to conduct an analysis of mitigation options for the full set of roads, construction disturbance, and other infrastructure, not just the most recent proposed changes. [157]

Other comments suggested that the project applicant collaborate with local governments to develop long-term monitoring and management plans to offset the potential disturbance caused by the project.

The 2015 comment letter from Pima County recommends habitat protection and restoration efforts to offset the roughly 2,400 acres of County Conservation Lands in the San Pedro watershed that would be impacted by SunZia. Specifically, the request was to work with Pima County to collaboratively develop and implement a long-term monitoring and adaptive management plan that includes but may not be limited to, the control and eradication of invasive species, proliferation of off-road vehicle impacts, effective habitat restoration and vegetation management, and protection of cultural resources. [132]

4.7.12 Wildlife Resources

4.7.12.1 GENERAL CONCERNS

The majority of comments coded under this resource were concerned with impacts to migratory birds within the Middle Rio Grande, the Sevilleta National Wildlife Refuge, and the Bosque del Apache Wildlife Refuge. Comments regarding migratory birds, particularly sandhill cranes, involved concerns about power line collisions and disruption of an important migratory corridor. Other common concerns included the degradation of wildlife habitat within the Rio Grande riparian areas.

We are concerned about the impact to Sandhill Cranes of the proposed route for SunZia Southwest transmission line near Socorro, New Mexico. Bosque del Apache and the surrounding area near Socorro are the critical wintering areas for thousands of Greater (Antigone canadensis tabida) and Lesser Sandhill Cranes (A. c. canadensis) from October-March. The proposed transmission line directly bisects the Sandhill Cranes migration path to and from their breeding grounds in the northern Rocky Mountains and could present an obstacle during their biannual migration. Sandhill Cranes roost in the small lakes and the Rio Grande River at night nearby Bosque del Apache NWR and Socorro and fly out to feeding areas in nearby fields during the day. [161]

Both of these Refuges (Sevilleta and Bosque del Apache) are vital at a hemispherical scale to successful bird migration and breeding. Major transmission lines, towers, and guy wires can pose significant strike hazards for bird life, especially during times of poor visibility. [105]

I am concerned that the Sandhill Cranes will not be cognizant of the power lines with the few number of visibility balls that are installed at the moment. Since the birds have already migrated north this year, the accidents will not be noted until the fall. We see many birds that are killed in the fields around the river valley when they fly into the lower residential type of power lines. Since the SunZia lines are much higher, denser in number (and new) there may be a higher incidence of mortality when larger groups are flying through the area, rather than just between fields. [1]
There are many reasons why the Rio Grande corridor is so critical for birds. During spring and fall migration, the shorelines, mudflats, and sandbars of the reservoir and river in this area provide important feeding grounds for migrating shorebirds and waterbirds that need to refuel during their journey along the river corridor. The waters of the Rio Grande in this area also support valuable riparian forests and marshes which host breeding populations of many neotropical migrants such as warblers, tanagers, and flycatchers, and these same riparian habitats are critical migration stopovers for other species that breed farther north. [132]

We appreciate that it appears SunZia chose to move the location where its power line will cross the Rio Grande River north after concerns about siting it in proximity to the Bosque del Apache National Wildlife Refuge were raised in 2015. These concerns centered on the fact that the River is a very important migratory corridor and Bosque del Apache is an important wintering ground for birds like Sandhill Cranes, geese, ducks, and raptors like hawks and eagles. The height of the lines guarantees that birds will collide with them insuring their deaths and potentially starting fires in the bosque forest as their remains plummet to the ground. However, placing the line further north will still imperil these migratory birds which also use other important bird areas along the Rio Grande such as the Bernardo Waterfowl Management Area and the Whitfield Wildlife Conservation area. The same concerns for wintering birds will apply. These birds fly daily to and from feeding and roosting grounds and will be risking their lives each time they do it in the proximity of the power line. Waterfowl and raptors are the largest birds that could be affected, but smaller birds are at risk also [147].

Additionally, several commenters expressed concerns over the cumulative impacts associated with the proposed transmission corridor. Many expressed concerns that the proposed transmission line associated with the Segment 4 Reroute, if built, would set a precedent for future projects to utilize the same corridor, further adding to the degradation of the Middle Rio Grande riparian area.

Another company is proposing another transmission line. I fear the SunZia project will set a precedent. How transmission lines are constructed and where they are located will most likely lead to other lines crossing the river at the same location. It will become an energy transmission corridor and should be located and built with that consideration in mind. So instead of being a corridor for over 400 species of birds, our valley could turn into an industrial site, obliterating its great natural value for humans, birds, and other wildlife. [80]

North America has lost nearly 3 billion birds since the 1970's representing a third of the overall avian population. Every single negative impact cumulatively adds to this alarming decline. In addition to being a migratory corridor, in our warming world and age of persistent drought, the river offers a life line of water and riparian trees to birds and other wildlife. The riverine forest of Cottonwoods is extremely important for biodiversity in our arid state. The Middle Rio Grande riparian habitat hosts 270 species of birds with just about 1/3 of them breeding in the valley, over 60 species of mammals and 11 species of bats in addition to turtles, reptiles, amphibians and invertebrates. In our current age of mass extinction, we can no longer take the long term survival of these species for granted [147].

Lastly, commenters presented concerns regarding the impact to ecotourism and recreational opportunities related to birdwatching. See Section 4.7.18, Socioeconomics, for additional discussion regarding the potential impacts to ecotourism as related to birdwatching.
Of concern also is the crossing of the Rio Grande and the impacts on migrating birds and the local tourism economy. Socorro County depends on these tourism dollars and the negative impact of news stories of dead sandhill cranes will seriously harm an already fragile economy. [8]

4.7.12.2 AFFECTED ENVIRONMENT DATA AND INFORMATION

The New Mexico Department of Fish and Game (NMDGF) provided a report from the its online Environmental Review Tool (ERT) prepared specifically for the SunZia Southwest Transmission Project access roads and temporary work areas outside the granted ROW, and the SunZia West Substation. The report identified lists of special-status species documented within 2 miles of the project vicinity, special areas that intersect with the project footprint, Species of Greatest Conservation Need (SGCN) predicted to intersect with the project footprint, and Species of Economic and Recreation Importance predicted to intersect with the project footprint. The NMDGF indicated prairie dog (black-tailed prairie dogs [Cynomys ludovicianus] and Gunnison’s prairie dogs [Cynomys gunnisoni]) colonies could occur along the length of the transmission line project construction area and recommended surveys to determine whether burrows are active and whether burrowing owls (Athene cunicularia) may be using the site. The NMDGF also indicated the proposed route through the Cibola National Forest would also travel through a portion of desert bighorn sheep habitat in the vicinity of Ladron, but indicated there was a lack of data on bighorn sheep populations in the area.

Several commenters brought up the potential for the project footprint to interfere with areas where special-status species have been previously documented, such as the Rio Grande and the Sevilleta National Wildlife Refuge.

All three of the alternative sites where SunZia is proposing to cross the Rio Grande occur in designated critical habitat for the federally endangered southwest willow flycatcher (Empidonax traillii extimus), Rio Grande Silvery Minnow (Hybognathus amarus) and the threatened yellow-billed cuckoo (Coccyzus americanus). SunZia should enter into consultations with the U.S. Fish and Wildlife Service for species specific guidance on avoiding and minimizing impacts to aquatic and riparian habitats, as well as seasonal restrictions during transmission line construction. [115]

The area along the Riley/SRR route is home to many species of wildlife because of its remoteness and large undeveloped areas. The endangered Meadow Jumping Mouse is down along the Rio Grande Southeast of Riley/SRR, North of Riley/SRR in the Jemez, and Southwest of Riley/SRR on the Mogollon Rim. It would not be a stretch to say that they exist in the Riley/SRR area but they have not been surveyed. The Riley/SRR Route around Ladron is wholly contained within Socorro County, which is critical habitat for the Meadow Jumping Mouse. The Mexican Spotted Owl also makes its home in Socorro County, NM. The Riley/SRR Route comes within 10 miles of Spotted Owl habitat at its southermost point. Spotted Owl habitat is to the east in the Manzanos, south in the Magdalenas, and to the north at Mt. Taylor. Riley, Ladron, and the Bear Mountains are all between these three points and could provide additional habitat for them….Desert Bighorns, which were on the brink of extinction at one point in time in New Mexico have done well in the area near the Riley/SRR Route…. One of the most endangered mammals in the United States, the Mexican Gray Wolf also has its range nearby [158].

This proposed route would also travel through a portion of desert bighorn sheep (Ovid canadensis nelson) habitat in the vicinity of Ladron Peak. The EIS should evaluate possible impacts to the desert bighorn sheep population, particularly if construction activities will
occur during the rut and lambing season. Seasonal restrictions may need to be implemented, however; the Department currently lacks sufficient data on this population of desert bighorn sheep to fully assess the project’s potential impacts. [115]

4.7.12.3 OPTIONS TO AVOID, MINIMIZE, OR MITIGATE IMPACTS

Several comments offered suggestions to mitigate impacts to wildlife resources. As discussed above, comments suggested that seasonal restriction would be needed for construction in federal listed designated critical habitat as well as in desert bighorn sheep habitat and recommended consultation and coordination with applicable agencies. Comments also suggested live-trapping and relocation of prairie dogs if ground-disturbing activities cannot be relocated off the prairie dog colony, or if project activities involve control of prairie dogs.

Commenters suggested that bird flight patterns be monitored and that a project-specific avian mitigation plan be developed prior to project commissioning. Comments also included specific facility components that should be utilized in order to mitigate avian collisions.

To aid in siting and mitigation planning, we recommend that the EIS process include monitoring seasonal bird flight behavior at the three alternative sites SunZia is proposing for crossing the Rio Grande. Project planning should include development of a project specific post-construction Avian Protection Plan, that includes mortality monitoring and adaptive management provisions. Line marker devices should be installed on the lines at potential collision hazard locations, and support towers should be lighted only where required by law, using red or red-and-white blinking or strobe lights. Towers should be erected without guy lines if possible; if a guyed design is necessary, the guy wires should be provided with line markers. In addition to line markers, a recent study using near-ultraviolet light reduced Sandhill Crane (Antigone canadensis) collisions with power lines by 98%. Mitigation with line markers has had limited success because most collisions occur at night when line markers are least visible. The Department recommends that the EIS evaluate the use of near-ultraviolet light to mitigate avian collisions where the transmission lines cross the Rio Grande. [115]

Analyses for an above ground alternative must also fully analyze avian collision mortality and mitigation and providing perches for predators. Mitigation factors to minimize collision mortality should consider line marking and near UV illumination, along with conclusive and timely testing to justify use of this technology in an untested context. [134]

Additionally, several commenters expressed their support of an underground transmission line, which would potentially alleviate impacts associated with an overhead transmission line (see also Section 4.6.4.2.

In particular, it is important that the Environmental Impact Study consider undergrounding the line beneath the Rio Grande and its entire floodplain as mitigation for impacts to birds. [28]

Both Socorro County (9/26/2019) and Valencia County (1/20/2020) Commissions opposed the above ground crossing of the Western Spirit transmission line and now Sun Zia is petitioning to double the damage with a second line crossing in the same area of the Rio Grande. The ONLY mitigation for impacts to birds, degraded landscape, interference with the Rio Grande Trail, and the health and well-being of local residents is UNDERGROUNDING the line beneath the Rio Grande and its entire floodplain. [178]
Comments stated that compensation would be necessary if impacts to wildlife could not be avoided, and specifically identified the Sevilleta National Wildlife Refuge and the Rio Grande corridor as locations where mitigation would be required (see Section 4.7.12, Wildlife Resources).

For all proposed routes, analyze impacts thoroughly and holistically, gathering pre-decisional information to identify areas where wildlife impacts are more likely and detail how mitigation will be used to prioritize avoiding impacts through siting, minimizing them wherever needed, and completely compensating for them when they occur to produce net conservation benefit. .... Habitat mitigation that would offset these impacts, including habitat enhancement, must be fully analyzed. Mitigation factors should also consider the benefits of protecting and enhancing habitat through acquisition of the Herkenhoff property and associated water rights [134].

Additionally, if an alternative is chosen that would construct the line through Sevilleta, we expect significant offsets in the final EIS and record of decision to ensure that any impacts suffered upon the refuge and its inhabitants do not result in population decline of any avian species [141].

If this line is built across the Rio Grande, the applicant must be forced to acquire suitable conservation lands in the area that will be set aside under public management to mitigate the inevitable bird deaths that it will cause [44].

Additionally, given the 30 x 30 initiative to conserve 30% of our wild lands by 2030 to protect biodiversity, placing these large power line structures in such important river habitat is a step in the wrong direction. In the past, SunZia offered to purchase habitat in the area and set it aside for wildlife as a way to mitigate impacts of its power line. But, because the migratory birds using the river in winter don’t breed in the area, to be useful to replace birds killed by the power line, this land would need to be in northern nesting areas and not in the middle Rio Grande Valley leaving the river corridor impaired [147].

4.7.12.4 IMPACT ANALYSIS

Commenters requested that a wildlife impact analysis be conducted in order to fully assess the impact to wildlife species and habitat as a result of the proposed project. Primary concerns were in regard to avian collision risks associated with an overhead transmission line.

Impacts analysis for any routes through Sevilleta NWR must quantify avian collision risk from the existing transmission lines as currently configured and compare them to impacts of the two parallel ROWs that would be installed, one with current transmission incorporated, if these routes were chosen. This analysis must fully account for how the lines are distributed into vertical planes and how this affects collision risk as well as the effect of using more of the existing ROW for the new development; although the ROW width would not change, the impacts within that ROW would. [132]

Additionally, many commentors requested that the impacts associated with an underground transmission line versus an overhead transmission line alternative be further analyzed.

Analyses for both above ground and underground alternatives must consider the following impacts: Construction disturbance of river morphology, disruption of flow regimes, impact (including direct mortality) on endangered species, threatened species and other sensitive species, impact on critical habitat for endangered and threatened species, potential
introduction of invasive species, removal of riparian vegetation along the ROWs, and maintenance disturbance. [134]

Underground analysis must include a full analysis of the following impacts: construction disturbance of river morphology, dewatering station impacts, disruption of flow regimes, removal of riparian vegetation along underground ROWs, impact on critical habitat for endangered species, maintenance disturbance, and potential introduction of invasive species. Habitat mitigation that would offset these impacts needs to be fully detailed as well. A complete examination is needed of new cable technologies being manufactured in Japan and Italy, as well as the implementation of these new cable types for the SOO Green line in the Upper Midwest and for any other projects to date; these were not available when the previous undergrounding study was undertaken, and the flexibility they could provide for a state of the art underground installation must be incorporated into the analysis. [132]

### 4.7.13 Noise

The primary concerns around noise were related to the lines affecting quiet for both humans and wildlife, especially in context of exposure and the line’s proximity to residents in Santa Rita Ranches and Riley, New Mexico. Several comments cited the quiet remoteness of those areas.

… the construction and operation of systems that transport mega amounts of electricity have easily discernable effects on environmental noise and light pollution. Untouched areas are quiet and dark by nature, environmental conditions that are critically necessary for certain ecosystems. The audible hum of huge electrical wires coupled with industrial equipment and buildings that will require bright light sources in a dark sky region can have profound and dire impacts on bat, bird, and insect populations, nocturnal mammals, and other native fauna and flora in dry and riparian zones. What measures will SunZia take to contain light and noise pollution for the incredible mileage of the project? [153]

The other primary noise issue raised in the comments was the radio interference risk associated with electric lines. Several comments mentioned general communication interference concerns, while some were location specific.

The University of New Mexico operates the Long Wavelength Array (LWA-SV) station located at the Sevilleta National Wildlife Refuge. The LWA observes the Universe at frequencies between 3 and 88 MHz. At these low frequencies, arcing from power-lines, especially high-voltage powerlines like the ones proposed by SunZia, emit broad-band emission which interferes with the operation of the radio telescope. Often powerlines start out fairly clean, but over time they become noisy as components loosen, become weathered, or damaged. Even a small amount of noise can blind our highly sensitive radio telescope that is looking at cosmic signals arriving from great distances. We point out that certain bands are specifically reserved for radio astronomy and protected against unwanted emission by the International Telecommunications Union (ITU). These include 73-74.6 MHz in Regions 1 and 3, 37.5-38.25 MHz (all regions) and 25.550-25.670 MHz, and 13.360-13.410 MHz in Region 2 (US). The 5.149 bands are taking all practicable steps to protection and according to ITU-R 769 the harmful interference threshold is -195 dBW at 74 MHz. Although detailed propagation models can be complicated, as a general rule, high voltage lines (over 100 kV) should not be located within 10 miles of a radio telescope. [32]
Electromagnetic Interference (EMI) - Corona generation and gap discharges from electric power transmission lines generate radio noise during their normal operation. These discharges can create EMI that can affect all types of electronics including cell phones, radios, and TVs. There are even studies that show the EMI can have detrimental health effects. Due to the remoteness of Riley(Santa Rita), it is already difficult to obtain a cell signal due to topographic effects, being on the fringe of coverage, and frankly being on the wrong side of geography from where cell phone providers earn their revenue, i.e. population centers. One of the most renowned radio telescopes in the world, the Very Large Array is approximately 25 miles from this route. Radio telescopes are extremely sensitive to EMI of all kinds. [158]

4.7.14 Land Use

4.7.14.1 GENERAL CONCERNS

Comments coded to land use generally raised concerns about private land acquisition for the project, identified potential conflicts between the project and other ROW or special use permits, and expressed concern about impacts to public and visitor access and recreational use (see also Section 4.7.15, Recreation Resources).

Comments related to existing ROW permits or special use permits suggested that the stipulations in the Sevilleta National Wildlife Refuge’s land grant deed do not allow new construction projects to collocate within the existing easements. Comments also identified a potential conflict between the project and an existing National Radio Astronomy Observatory Very Large Array (NRAO VLA) located with the Sevilleta National Wildlife Refuge. See Sections 4.4.2 and 4.7.21 for more information. Comments related to the proposed Maverick Area local route modification stated the proposed modification is within the permitted Southline Transmission Project corridor and suggested that this route modification should be kept north of that corridor to avoid line crossings.

As discussed in Section 4.4.2, comments suggested that land acquisition by SunZia within the Santa Rita Ranches area would be in violation of the Santa Rita Ranches Property Owners Association/Home Owners Association Covenants.

4.7.15 Recreation Resources

4.7.15.1 GENERAL CONCERNS

Comments raised general concerns regarding impacts the project would have on outdoor recreation (hunting, hiking, camping, wildlife viewing), species of recreation importance [185], and recreational areas [153 and 184], which include the Rio Grande and River Grande Trail.

The glorious and enchanting landscapes of the areas through which SunZia would like to place their 135-foot high-voltage power lines should be walked and experienced by everyone who plans to desecrate them for southern California’s air conditioning needs. The acreage is home to mountains, rivers, valleys, outcroppings, mesas, and other land and water forms that would be irreparably damaged if the proposal proceeds. Other than individual families and landowners, public access and enjoyment for the many visitors who escape to these beautiful pristine scenes will also be impacted.
Once the landscape is altered, even with enough money, we would not be able to reform peaks, waterways, and ecosystems to their current natural majesty. Other than the obvious economic increases that will benefit certain investors and populations, what will local flora and fauna “including humans” gain from the destruction of their land and recreational areas?

### 4.7.15.2 OPTIONS TO AVOID, MINIMIZE, OR MITIGATE IMPACTS

Comments suggested that burying power lines to would reduce recreation impacts to the Rio Grande and Rio Grande Trail [147]. Comments also suggested that conservation properties in the project area be identified, and that the applicant should be required to donate to public agencies to mitigate impacts from the project.

This placement will also have impacts on the quality of experience for users of the Rio Grande Trail, a long distance trail that follows the river through New Mexico from the Colorado to the Texas Border. The building of this trail is in progress and it promises to provide users with a tapestry of diverse natural habitats and striking landscapes while contributing to the economic prosperity of the surrounding counties. Placing the power line and its enormous towers over the river where they can be seen for miles will industrialize the area and degrade that experience. Plus, in the future, other power lines may follow in a similar path adding to this degradation. Burying the line so that it crosses under the river is technologically feasible and will eliminate all of these problems [147].

If the EIS process recommends the approval of line construction in any form, it’s imperative that the EIS identify conservation properties in the immediate project area that the applicant must be required to purchase and donate to public agencies to mitigate the project’s effects on wildlife, hunting, birdwatching and other recreation [44].

### 4.7.16 Lands with Wilderness Characteristics

#### 4.7.16.1 GENERAL CONCERNS

The primary concern was related to the line affecting the wilderness characteristics near or within wilderness and wilderness study areas; of special concern was the line’s proximity to Ladrone Wilderness Study Area, Cibola National Forest, and the Bear Mountains. Several comments cited the quiet remoteness of those areas. Comments also identified a citizen-inventoried LWC just west of Sierra Ladrones.

In close proximity to the Riley/SRR Route, is the Ladron Wilderness Study Area. Much of the route is not officially designated as Wilderness or WSA, but is a land with wilderness characteristics just the same, being adjacent to or encroaching upon the WSA. The route also runs through or adjacent to Cibola NF in the foothills of the Bear Mountains, which are also nearly pristine roadless areas. This local part of the Cibola NF is a land with wilderness characteristics. The disruption to these two pristine landscapes would be immeasurable as they are in a natural state and provide habitat for many animals, birds, and plants that are fragile in this desert environment. [158]

This citizen inventoried LWC is in the southern Sierra Lucero, just west of the Sierra Ladrones WSA, and totals about 10,700 acres without any structures or roads beyond a couple of fences that do not negatively impact the apparent naturalness of the area. Utilizing already disturbed areas whenever possible would better serve to limit the environmental and destructive impacts of construction and operation of this transmission line, and ought to be
4.7.16.2 OPTIONS TO AVOID, MINIMIZE, OR MITIGATE IMPACTS

Comments suggested that a reroute of Alternative 1 to be parallel to and in the same disturbance as U.S. Route 60 and I-25 would minimize impacts to Sierra Ladrones WSA, and the citizen-inventoried LWC just west of Sierra Ladrones (see also Section 4.6.3). No other design or mitigation options were identified.

4.7.17 Special Designations

4.7.17.1 GENERAL CONCERNS

Comments coded to this category raised concerns over the protection of wilderness areas, research areas, and designated habitat. Concerns included why some of these areas are designated when protections seem to cease for the “right dollar amount” and despite the negative environmental impacts [153 and 184]. Specific areas of concerns that were raised included the Bosque Del Apache and Sevilleta National Wildlife Refuges, Sierra Ladrones Wilderness Study Area, the Ladron Mountains and Devil’s Backbone Complex Area of Critical Environmental Concern, the Bear Mountains and Scott Mesa Inventoried Roadless Area.

Alternative Route 1 would cut off the Sierra Ladrones Wilderness Study Area (WSA) and the Ladron Mountain / Devil’s Backbone Complex Area of Critical Environmental Concern (ACEC) from important habitat in the Bear Mountains, e.g., the Scott Mesa Inventoried Roadless Area (IRA), and the Sevilleta National Wildlife Refuge. The impacts of such a disruption in wildlife corridors are incompatible with the goals of a WSA or ACEC and would need to be fully studied and addressed by a new EIS [163].

This route is the longest of the three proposed routes, and would diverge approximately 13 miles to the west in order to avoid the Sevilleta National Wildlife Refuge (Sevilleta) and BLM specially designated areas, but would require traversing a portion of the Cibola National Forest that includes an Inventoried Roadless Area. This route would also result in the greatest amount of habitat disturbance, as it would traverse through a large area of remote relatively undisturbed habitat [115].

Analyses of route alternatives through Sierra Ladrones Wilderness Study Area must fully detail the impacts on the wilderness study area. The analysis must fully detail mitigation factors, such as proper siting, that would prevent impairment of the area’s suitability for wilderness designation [134].

4.7.17.2 OPTIONS TO AVOID, MINIMIZE, OR MITIGATE IMPACTS

Comments suggested that a reroute of Alternative 1 would minimize impacts to Sierra Ladrones WSA, the Ladron Mountains / Devil’s Backbone Complex Area of Critical Environmental Concern (ACEC), as well as the Sevilleta National Wildlife Refuge (see also Section 4.6.3). No other design or mitigation options were identified.

…Rather than crossing the Sevilleta National Wildlife Refuge or going around the Sierra Ladrones WSA and cutting it off from nearby ACECs and the Bear Mountains, a route that bypasses the White Sands Missile Range to the north, then parallels the I-25 corridor should
be thoroughly analyzed. It could connect into the original route evaluated in the 2013 EIS when it crosses I-25 at Escondido. Since such a route would clearly mitigate concerns about impacts on the WSMR as well as the Sierra Ladrones WSA, the Sevilleta National Wildlife Refuge, and other protected areas [163].

4.7.18 **Socioeconomics**

4.7.18.1 **GENERAL CONCERNS**

Comments coded to this category raised concerns over the economic losses to the local tourism industry and fundraising opportunities for advocacy groups over the loss of birds and degraded landscape (including the Rio Grande Corridor, and the Bosque del Apache and Sevilleta National Wildlife Refuges), reduction in property values, future film industry revenues, and future grant revenues to conservation groups and eco-tourism groups that rely on hiking, biking, hunting, and birding, as well as economic impacts to agriculture and ranching.

The EIS must fully explore the economic impacts of the proposed line, including the negative impacts on private property owners and local communities. The EIS must evaluate the following economic effects: reductions in property values; reductions in tourism due to bird kills and degraded landscape; reductions in future film industry revenues due to degradation of the viewscape and landscape; reductions in future grant revenues to conservation groups and ecotourism groups that rely on undiminished hiking, biking, hunting and birding [44].

This project will seriously impact my property value without recompense. Who wants to buy land with a mega transmission line? [8]

What part of the existing economy in agriculture will be replaced by the SunZia project? Much of the proposed siting of the "lanes" would go through small, privately owned, economically viable ranches and other sustainable agricultural areas that have every potential of losing land and being split up by the "lanes" making them no longer economically viable as agriculture producers. Our small family ranch was once in the proposed path of a similar "lane". If it had gone through our small ranch our loss of usable land would have made our ranch no longer economically viable [81].

The Negative Economic Impact of the Lines needs to be objectively weighed…. Previous Environmental Impact Statements have only looked at the economic benefit of construction and a few additional permanent jobs while ignoring the negative costs to the communities that the line runs through. Studies have shown that property values near high-voltage transmission lines are reduced by 10-15%. Diminished viewspeacs will reduce tourism which is a major economic driver in our area and in our state. The New Mexico Tourism Department has found that tourism supports 12.8% of all jobs in Socorro County. The annual economic impact for Socorro County alone in 2015 was over $60 million. Since that time tourism in the state has increased 13%. Bosque del Apache is a major tourist destination, and has consistently brought over $15 million per year into our impoverished county…. Conservation efforts have been ongoing for the past 20 years, bringing in substantial money to this impoverished area. Conservation partners have brought in $5 million in US Fish and Wildlife Service-North American Wetlands Conservation Act (NAWCA) grants. The partners to these grants leveraged over $15 million in non-federal match funds to obtain the NAWCA grants. These funds have been used to protect and restore conservation lands, utilizing local work forces to accomplish these efforts. The Intermountain West Joint Venture (IWJV) has chosen the middle Rio Grande corridor as a focal area for their Water 4 Initiative.
The IWJV will help secure and leverage funding to build conservation capacity. High voltage transmission lines crossing the Rio Grande will make that much harder if not impossible, since conservation funding does not usually go to heavily impacted areas [103].

Comments also suggested there could be changes to the quality of life of the area.

Impacts I would like to see considered for Component 3--Segment 4 reroute: Possible disruptions to the aesthetics, livability, and community cohesion of existing small communities along the route due to effects of construction and operation of transmission lines [140].

The BLM says that its vision is to enhance the quality of life for all citizens through the balanced stewardship of America's public lands and resources…Some of the BLM’s guiding principles are supposedly to cultivate community-based conservation, citizen-centered stewardship, and partnership through consultation, cooperation, and communication. How, exactly, has the Transmission Project fulfilled these principles? What does the SunZia project do to enhance the lives of individual and family landowners, retirees, small farmers and ranchers, or nearby native populations who experience particular socio-economic difficulties different than many of their urban and suburban peers? [153]

Comments also requested clarification on the number of jobs provided by and impacted by the project, including jobs gained and lost to out-of-state workers. Comments also welcomed expanding renewable energy, supplemental revenues from the project, and economic benefits for local and state revenues.

It is my understanding that a recent economic impact report, conducted by Moss Adams, estimates that SunZia will create thousands of jobs in construction and operations while enabling even more wind generation employment throughout eastern and central parts of New Mexico [94].

The 500 miles of power lines and substations will deliver up to 4,500 MW of renewable energy to many users. The economic benefits to all it effects will be huge. SunZia will generate $1.1 billion to Arizona alone. SunZia has spent years with many entities to build consensus for the project that will benefit so many [104].

How many jobs will stay in the affected areas and how many existing jobs will be lost? We heard during the scoping hearing that there will be only 44 permanent jobs for the entire completed SunZia project. [81]

As states and corporations increasingly move toward clean energy resources, the vast renewable resource potential in New Mexico creates an opportunity for the state to become a major supplier of clean energy needs of other states while continuing to serve the needs of in-state customers. … New Mexico's renewable capacity could expand from 2,500 MW as of the end of 2019 to 11,500 MW by 2030. The 11,500 MW would satisfy New Mexico's clean energy goals as well as support the goals of other states. To support the addition of renewables at this scale, roughly 900 to 1300 miles of new transmission and supporting equipment is required. …the greatest value for transmission would be to expand capabilities to the western states…. Adding an extra transmission corridor to connect New Mexico to the neighboring markets was identified as the top priority in the Study. [84]

Comments also requested that the EIS disclose third-party studies related to the economic feasibility of the project (see also Section 4.5, Purpose and Need).
Include in the EIS all third-party studies related to the economic feasibility of the SunZia transmission proposal. Disclosure of actual third-party economic feasibility studies for long-distance tie-lines that purport to transport over 90% renewable energy must be included in the main body of the EIS before the next Record of Decision is considered. These highly relevant studies were buried in the public comment appendix of the last SunZia EIS, where they could conveniently be ignored by the decision makers [105].

4.7.18.2 OPTIONS TO AVOID, MINIMIZE, OR MITIGATE IMPACTS

Suggested mitigation for socioeconomic impacts included development of underground alternatives, purchase of conservation properties as mitigation, local hires (see also Section 4.7.19, Environmental Justice), and project abandonment.

If the EIS process recommends the approval of line construction in any form, it’s imperative that the EIS identify conservation properties in the immediate project area that the applicant must be required to purchase and donate to public agencies to mitigate the project’s effects on wildlife, hunting, birdwatching and other recreation [44].

4.7.19 Environmental Justice

4.7.19.1 GENERAL CONCERNS

Multiple comments coded to this topic raised concerns over environmental and social justice issues of placement of the project in small, rural communities which lack the resources and political clout to oppose the line, sourcing of materials whether they are mined by unethical means, and that the project would benefit out-of-state interests at the expense of low-income local communities.

The BLM should study whether or not in the interests of fairness and social justice if approving these transmission lines is a fair treatment of all people in the counties, specifically in Socorro County, or is SunZia using this route because they believe that they would obtain less resistance than in some of the more affluent counties in NM, especially given that the power is not destined for NM, but markets in California. Please consider the environmental justice impacts on a larger scale. There is a growing and disturbing trend of cities outsourcing their power generation and transmission to rural areas. The federal government needs to facilitate healthy growth with minimal impacts to the human environment [158].

The Bureau of Land Management is selling out our small, rural communities first in Escondida and now Belen that don’t have resources or time or political influence to oppose them. How does the destruction of our property values and indeed our communities compare with short-term construction jobs for out-of-state linemen? [169]

Consider the possibility that a stronger environmental resistance movement in California and the more significant wealth of those in California as opposed to those in New Mexico and particularly those in the counties in New Mexico that would be most affected, such as Socorro County, may have been a cost/benefit factor by these corporations as to why New Mexico was chosen as the place for this project that would send power to another state. The 2019 per capita income of a resident of California was nearly twice that of a resident of Socorro County, NM. The poverty level in Socorro County is more than twice that of California. The profits of a private corporation should not be a consideration in a decision regarding the SunZia project. New Mexico’s environmental pain, should not be California’s gain. There is a growing and disturbing trend of cities outsourcing their power generation and
transmission to rural areas. The federal government needs to facilitate healthy growth with minimal impacts to the human environment [158].

Additional comments raised concerns over the lack of access to computers, Internet, time, or financial resources, making it difficult for these communities to participate in comment submissions, research, meetings, or in the search of legal advocacy [153 and 184]:

As with many things, the fight for environmental justice is stymied by lack of access. In the region of the SunZia development, there are many New Mexicans and Arizonans whose voices will be left out of these public discussions and comment submissions due to obstacles like lack of access to computers or internet, lack of time or financial resources to devote to research and meetings, lack of legal advocacy, and more. Not only is it already difficult to ensure equal access to the decision-making process in situations like this proposal, but also, SunZia is doing no member of the public any favors in being forthcoming or helpful throughout the process.

4.7.19.2 OPTIONS TO AVOID, MINIMIZE, OR MITIGATE IMPACTS

Comments suggested returning to one of the previously approved routes through White Sands Missile Range or the two alternate routes through Sevilleta National Wildlife Refuge, which use existing rights-of-way to minimize impacts on vulnerable communities in New Mexico and Arizona [184]. Comments also requested that those of vulnerable communities, and minority and local populations be hired for employment on the project [135]:

… [we] would like to see that due diligence is done for the rural and vulnerable communities that may be affected most by this project. We ask that in hiring people to work on this project, if it is approved, that special preference be given to New Mexicans with attention to racially diverse and local hiring for any employment in construction and for the ongoing jobs from the project. We suggest that New Mexican companies and banks be used for the project, again as an environmental and racial justice request. Too often our state is seen as a sacrifice zone to be taken advantage of for the gain of other populations and companies, especially those who benefit outside of our state. We see these various concerns as justice and ethical considerations [135].

4.7.20 Travel and Transportation

Comments coded to this category raised concerns over the addition and amount of access roads being constructed (see Section 4.6.2), traffic and effects of heavy equipment on local roads, and the potential for inviting motorized trespassing to the area. Socorro County Road A-125 (Scholle Road) was identified as a road of concern.

Scholle Rd. (Socorro County Road 125) is mandated by Socorro County for “Light Traffic Only”. The sign put up by Western Spirit (EC Subcontractor Folks) may address the requirement of the lighter weight limit imposed by Socorro County due to the disrepair of the road; however, the amount of pick-up truck and service truck traffic is very heavy under Western Spirit’s (EC) workforce. The road has deteriorated considerably with the increased truck traffic. Will this traffic increase with SunZia and if so, how will SunZia provide better access to this 1½ lane county road? I’m asking for safety reasons - ours, our neighbors, and all the cows and wildlife that graze along this road. Note: The service road provided and built by Western Spirit (EC) does not satisfy all their access needs. They still use the County Road all day long [14].
At the northernmost portion of Socorro County Road A-125 is a one-lane bridge that crosses Abo Arroyo. I understand that this bridge has been condemned by the New Mexico Department of Transportation. While it remains open to local residents, it is not safe for commercial vehicles or other heavy equipment. The bridge has deteriorated further in recent months with traffic from light-duty trucks working on the Western Spirit 345 kV Transmission Project. I am including a current picture of the bridge with these comments; note the absence of guardrails [142].

Comments also expressed aviation and logistical concerns at White Sands Missile Range (WSMR) and other military installations and airports.

WSMR is a tri-service installation operated by the Army, under the responsibility of the Secretary of the Army, with Deputies representing the Navy and Air Force and all three having future emerging needs to test extended long range weapon systems. WSMR provides Holloman, Kirtland, and Cannon Air Force Bases (AFBs) air space and range operations for training, special air operations and other missions. The Department of the Air Force issued a ROD in March 2021 for the EIS to implement actions to achieve Special Use Airspace (SUA) optimization for Holloman AFB, which may be of interest for the Project [159].

A significant portion of the proposed SunZia project is the designation and analysis of alternative routes to move the previously pre-approved route out of the White Sands Missile Range (WSMR) Northern Callup Area. This action is critical to national defense due to WSMR’s unique capabilities for testing and validating new and emerging military technologies. These unique capabilities cannot be duplicated on any other land-based test and training range. While the pre-approved routing will allow operations to continue at the range, the testing scenarios will be more limited and constrained due to narrowly defined azimuths of approach to the impact areas. This will limit data collection and evaluation and potentially increase the number of failed tests due to the constrained environment. In addition, as military technology continues to evolve, the additional constraints from the transmission line may prevent the ability to test and evaluate the newest systems [151].

4.7.20.1 OPTIONS TO AVOID, MINIMIZE, OR MITIGATE IMPACTS

Comments suggested that some traffic impacts could be avoided through use of an established route along I-25 which would have more accessibility to established infrastructure, such as utility/tower maintenance, hazard control, and catastrophic response [48].

4.7.21 Visual Resources

Comments coded to this category raised concerns over the diminishing of visual aesthetics of communities (such as Santa Rita Ranches; Riley, New Mexico; and Oracle, Arizona), rural areas, the Sevilleta National Wildlife Refuge, the Rio Grande Trail, the Rio Grande and San Pedro River corridors, areas around airports, areas of colocation with existing power lines, and diminishing the overall quality of landscapes across Arizona and New Mexico. Many of these comments coded to visual resources coincided with concerns related to wildlife (see Section 4.7.12), vegetation (see Section 4.7.11), water (see Section 4.7.6), noise (see Section 4.7.13), and socioeconomics (see Section 4.7.18).

From a human perspective, building Sun Zia transmission lines across 520 miles, with 125’-179’ towers placed every 1,400’, resulting in a minimum of 42-53 towers, either monopole or lattice, will introduce visual pollution, spoiling the view scape where the planned route crosses the refuge. If the new lines are co-located with existing El Paso or Tri-State
transmission lines, new towers will be double the height of existing towers, vastly increasing the eyesore aspect of the installation [106].

Additionally, comments raised concerns over additional lighting requirements on power line structures (as part of Federal Aviation Administration requirements near airports), degrading riparian areas as well as the International Dark Sky Designation in Oracle State Park, Oracle, Arizona, which also supports University of Arizona astronomical research, and dark sky areas in Riley, New Mexico; and conditions within the Sevilleta National Wildlife Refuge.

As part of the EIS, BLM must address all aspects of the project in light of the new information and changed circumstances in the area which include, but are not limited to: new Federal Aviation Administration lighting requirements on a portion of the towers and lines that would significantly increase adverse impacts to river ecosystems and to dark skies including at Oracle State Park (which has an International Dark Sky Park Designation) that were not anticipated in earlier environmental review [144].

The required transmission tower nighttime lighting due to the nearby airport also will adversely impact operations of the astronomical observatory under development at the [Oracle State] Park for public outreach and University of Arizona astronomical research [70].

There are two concerns with respect to unwanted light pollution. Many of the community members are amateur stargazers. Some, like ourselves own telescopes. The night sky in Riley (Santa Rita) is a class two on the Bortle Dark Sky Scale. During a new moon or after the moon has set, the stars are extremely visible. Corona discharges from power lines when igniting surrounding atmospheric gases can give off visible light. This is not a good thing in dark sky areas. Additionally, depending on Federal Aviation Administration guidelines, it may be required that the towers be lighted. Again permanent lighting in such a dark location is detrimental to the character of the area [158].

Various comments proposed mitigation measures, such as undergrounding the power lines, specifically at the Rio Grande crossing and the Sevilleta NWR, to reduce the visual impacts from the project [106, 143, 147, 150, and 167]. Again, many of these comments coded to visual resources coincided with concerns related to wildlife (see Section 4.7.12), vegetation (see Section 4.7.11), water (see Section 4.7.6), and socioeconomics (see Section 4.7.18).

I write urging you to require that the proposed SunZia power lines be placed underground to mitigate the impact to birds as they use the Rio Grande River as their flyway and to reduce interference with the Rio Grande Trail. It is certain that if this is not done a precedent will be established and soon our beautiful riverscape and bosque will become an ugly corridor of power lines and pipelines. There will be negative impacts on tourism, birding and a general degradation of the gorgeous wide spaces of New Mexico. Our wildlife corridor, the Rio Grande River and it's bosque are priceless treasures that we must protect. BURY THE LINES near the Rio [143].

Since visitors to Sevilleta come to view the unbroken panorama, for the pleasure of experiencing the broad vista of open space that defines the roughly quarter million acres of the refuge, transmission towers and a 400’+ wide “road” through the refuge will radically alter that visual experience. Undergrounding the majority of the line on Sevilleta NWR would serve to reduce the impact on humans and animals. No information covering a trade-off analysis for this approach is offered in the Sun Zia documents, implying little or no consideration has been given for undergrounding the lines [106].
5 COMMENT SUMMARY BY LOCATION

5.1 Cibola National Forest

The following resources concerns were identified along the route that passes through the Cibola National Forest:

- **Wildlife:** threatened and endangered wildlife habitat areas, desert bighorn sheep rutting and lambing areas
- **Vegetation:** riparian areas around the Rio Salado and Rio Grande; threatened and endangered plant species habitat areas and Important Plant Areas
- **Soils, Minerals, and Geology/Public Health and Safety:** Presence of coal and uranium mines
- **Special Designations:** impacts to WSAs, inventoried roadless areas, and ACECs
- **LWCs:** impacts to a citizen-proposed LWC
- **Land Use/Social and Economic Conditions:** impacts to private lands, property values and populated areas, in particular Santa Rita Ranches

Comments suggested rerouting Alternative 1 around the Ladrones Mountains or along U.S. Route 60, I-25, and/or farther away from Santa Rita Ranches to avoid or minimize impacts to these resources. Consider also suggested that seasonal restrictions within Cibola National Forest may be necessary to minimize impacts to desert bighorn sheep if construction activities would occur during the rut and lambing season.

Detailed descriptions of each of these resource issues and representative scoping comments are included in Section 4.

5.2 Sevilleta National Wildlife Refuge

Commenters stated the Sevilleta Wildlife Refuge (Refuge) was “established specifically to return the land to its pre-human state; installation of the towers and their maintenance are in direct conflict with this mandate”, and raised concerns that the Refuge is vulnerable to human disturbance. Comments requested that the USFWS ensure that the project and that the analysis of route alternatives is consistent with the Refuge’s purpose, indicating that the stipulations in the Refuge’s land grant deed were not envisioned to allow new construction projects to collocate within the existing easements. See Section 4.4.2 for more information.

The following resources concerns were identified along the route that passes through the Sevilleta National Wildlife Refuge:

- **Wildlife:** threatened, endangered, and special-status species; migratory birds, including sandhill cranes (see Section 4.7.12).
- **Land Use and Noise:** Comments noted the presence of a Long Wavelength Array (LWA-SV) station operated by the University of New Mexico within the Refuge and stated that broadband emission from high-voltage power lines like the ones proposed by the project, may interfere with the operation of the radio telescope (see Sections 4.7.13 and 4.7.14).
• Recreation, Visual Resources, and Socioeconomics: impacts to broad vistas of open space and resulting visitation and ecotourism (affected also by wildlife impacts). See Sections 4.7.15, 4.7.18, and 4.7.21.

Comments stated that the short-term temporary and long-term permanent impacts to resources be fully analyzed including impacts to existing permitted ROWs even if they are not expanded (see Section 4.4.1).

Comments also identified the Sevilleta National Wildlife Refuge as a location where compensatory mitigation would be required for impacts to avian species. Comments also suggested undergrounding the line within the Refuge.

Detailed descriptions of each of these resource issues and representative scoping comments are included in Section 4.

5.3 Rio Grande Corridor

Many comments identified the Rio Grande corridor as an area of special importance and expressed concern about degradation of the area as a result of construction and operation of the SunZia project. The following resources concerns were identified along the route that passes through the Sevilleta National Wildlife Refuge:

• Wildlife and Special-Status Species: degradation of wildlife habitat within the Rio Grande riparian areas, impacts to special-status species habitat (including critical habitat for federally listed species), impacts to migratory bird flyways and sandhill crane roosting and feeding areas. See Section 4.7.12.

• Recreation, Visual Resources, and Socioeconomics impacts to Rio Grande and River Grande Trail as areas of recreation importance that could be affected by the project, both visually as well as in terms of impacts to wildlife and resulting impacts to ecotourism.

• Soils, Water Resources, and Vegetation: potential impacts to riparian areas around the Rio Salado and Rio Grande from silt.

• Fire Management: increase fire risks in the Rio Grande Bosque.

• Cultural Resources: requested consideration of the Rio Grande as a cultural landscape.

Suggestions to minimize impacts included collocating with the Western Spirit transmission line or undergrounding the line within the Middle Rio Grande floodplain. Comments also indicated cumulative impacts analysis should consider the Western Spirit line crossing as well as the future crossings that would occur in the same area as a result of creating a utility corridor.

Detailed descriptions of each of these resource issues and representative scoping comments are included in Section 4.

5.4 San Pedro River Corridor

While the proposed action does not include modification of the route through the San Pedro River corridor, comments on the scope of the project suggested that the BLM should reexamine the permitted SunZia line in its entirety with consideration of the proposed modification and changed circumstances and identified this as an area of particular resource concerns, including cultural resources, visual resources, and wildlife (migratory bird flyways). Comments cited the mission of the BLM’s San Pedro River
National Conservation Area as underscoring the importance of this river corridor and suggested undergrounding the corridor as an option to mitigate impacts.

Details and representative comments are included in Section 4.1.1 and Section 4.6.3.

5.5 Oracle, Arizona

Comments included concerns about changes to lighting requirement (as part of Federal Aviation Administration requirements), degrading riparian areas, and the International Dark Sky Designation in Oracle State Park, Oracle, Arizona.

Details and representative comments are included in Sections 4.6.1 and 4.7.19.

6 ISSUES RAISED THAT WILL NOT BE ADDRESSED AS PART OF THIS PLANNING PROCESS

Not all comments with issues received during public scoping will be addressed in the development of the Draft EIS. Such issues are those that fall outside of the scope of an EIS, or are otherwise not subject to environmental analysis. Pursuant to CEQ’s NEPA regulations, the scope of an EIS includes the extent of the action, the range of alternatives, and the types of impacts to be evaluated (40 CFR 1508.25). Thus, comments that are not focused on the purpose and need of the proposed action, the proposed alternatives, the assessment of the environmental impacts of those alternatives, and the proposed mitigation are beyond the scope of the EIS.

The comments categorized as beyond the scope of the EIS included opinion statements without an explanation or reason, comments related to the potential or location for alternative energy development, the source or destination of power to be transmitted, and compensation for easements. Rationale for why these comments would not be addressed is included in Table 5.

Table 5. Issues Beyond the Scope of the EIS

<table>
<thead>
<tr>
<th>Out of Scope of the EIS Categories</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative energy development</td>
<td>The application under consideration does not include proposed alternative energy development, and alternative energy generation is not directly linked to the proposed project. Neither the proponent’s objective for the project or the BLM’s purpose and need are dependent on new sources of energy. Analyzing alternative energy development as an alternative is outside the scope of the BLM’s analysis under NEPA for this project.</td>
</tr>
<tr>
<td>Impacts of wind energy</td>
<td>The application under consideration does not include wind energy development. Analyzing impacts to resources from wind energy development is outside the scope of the BLM’s analysis under NEPA for this project.</td>
</tr>
<tr>
<td>Sources of power to be transmitted</td>
<td>Similar to the rationale above, the scope of the proposal is to transmit energy from one substation to another. While SunZia intends to transmit renewable energy for wind farms, the ultimately sources of that power are outside the scope of analysis for this project.</td>
</tr>
<tr>
<td>Destination of power transmitted</td>
<td>The final destination of power potentially transmitted via the proposed project is ultimately out of the BLM’s control and scope of analysis for this EIS; in addition, analysis regarding the eventual destination would be speculative. Therefore, this issue is not addressed in the EIS.</td>
</tr>
<tr>
<td>Land acquisition process</td>
<td>Comments about financial benefit as a result of land acquisition are beyond the scope of the EIS analysis or BLM decision to be made.</td>
</tr>
</tbody>
</table>
Out of Scope of the EIS Categories | Rationale
---|---
Opinion-only statements for support of opposition to the project | Statements of opinion without corresponding issue topics are not considered in the EIS.
Opinion-only statements expressing a preference for a preferred alternative | The BLM will select a preferred alternative after impact analysis is conducted. Selection of a preferred alternatives at this point would be pre-decisional.

Representative statements are for each of these issues are included below.

The BLM should determine if this method of centralizing power and making people dependent on the utility for their power is more beneficial than a distributed energy model where energy is localized, which would not suffer line losses and be less damaging to the environment.

There is no need to send wind power to California anyway, they are already creating quite enough of their own, and the idea is much more likely to get non-alternative sources of power from one part of Arizona through to California having nothing to do with wind energy [68].

Include in the EIS all third-party studies related to the economic feasibility of the SunZia transmission proposal…. Disclosure of actual third-party economic feasibility studies for long-distance tie-lines that purport to transport over 90% renewable energy must be included in the main body of the EIS before the next Record of Decision is considered. These highly relevant studies were buried in the public comment appendix of the last SunZia EIS, where they could conveniently be ignored by the decision makers [105].

I am an affected land holder and my family has an affected grazing lease. The actions of this company are suspect and underhanded negotiations from SunZia representatives from the beginning of the project shows their lack of integrity on all levels. I sincerely hope their past performance and shady dealings will be seriously considered [8].

I am an impacted landowner in Veguita, New Mexico who is currently working with Western Spirit’s Transmission Line Project on my property and also fully support the proposed parallel path of SunZia’s Transmission Line on the same piece of property. Planning clean energy for future generations is visionary. SunZia’s plan achieves economies of scale and less environmental impact by paralleling the Western Spirit path. And staying well clear of the White Sands Missile Range just makes sense [149].

We feel to support the transmission line coming through part of our 1269-acre property because of the obvious need for new and future transmission infrastructure [10].

As stewards of our land of Arizona, I think it’s just too many miles, three miles (sic), to abandon that pipeline that will endanger the last remaining waterways the Rio Grande and San Pedro [61].

I encourage BLM to choose to approve the proposed Segment 4 - Route 1, Route 3, Sub-route A-1 and Sub-route B-2 and Original Par Alignment Segments 1-3 (New Mexico Tech to the Pinal Central Substation located in Arizona [27].
7 NEXT STEPS IN THE ENVIRONMENTAL IMPACT STATEMENT PROCESS

Scoping is the first public involvement opportunity in the planning process. Several more steps are necessary in the NEPA process to consider the ROW amendment request, including identifying issues, formulating alternatives, analyzing the effects of alternatives, publishing a Draft and Final EIS, and issuing the final Record of Decision. Figure 1 shows where the BLM is currently, in the NEPA process, and future major milestones and public involvement opportunities.

7.1 Issues for Analysis

The scoping comments summarized in the preceding sections will be used to identify issues and resource conflicts for analysis in the EIS. “For the purpose of BLM NEPA analysis, an ‘issue’ is a point of disagreement, debate, or dispute with a proposed action based on some anticipated environmental effect” (BLM 2008:40). According to the BLM, an issue

- is a point of concern based on an anticipated impact;
- has a cause and effect relationship with the proposed action and alternatives;
- is within the scope of analysis;
- has not been decided by law, regulation, or previous decision; and
- is amenable to scientific analysis rather than conjecture.

The issues identified for analysis in the Draft EIS are based on internal and external scoping and will be summarized in Chapters 1 and 3 of the Draft EIS.

7.2 Alternatives Development

In addition to the identification of issues for analysis, scoping comments, issues, and resource conflicts are also used to develop alternatives. The BLM will use the comments collected during scoping to define issues and to develop a range of alternatives to address those issues that will be analyzed in the EIS. The impacts that could result from implementing the alternatives will be analyzed and documented in a Draft EIS (see Section 7.3 below).

The alternatives suggested by the public and cooperating agencies during external and internal scoping will be detailed and responded to by the BLM in the Draft EIS. These alternatives will be detailed in the Draft EIS and will generally fall into two categories: 1) alternatives not analyzed in detail with rationale for no further analysis, or 2) alternatives to be analyzed in detail in the Draft EIS.

The BLM’s NEPA Handbook H-1790-1 (BLM 2008) indicates the agency may eliminate an alternative from detailed analysis if it would not respond to the agency’s purpose and need, if it is technically or economically infeasible, if its implementation would be remote or speculative, if it is very similar to an alternative that is analyzed, or if it would have substantially similar effects to those of an alternative that is analyzed.
7.3 **Environmental Impact Statement Development and Public Comment**

Once the alternatives are developed, the BLM team will analyze the effects of each alternative on the environment. The analysis will consider the scoping feedback as preliminarily summarized in Section 4.0. All documentation of this process and results will be included in the Draft EIS.

Once the Draft EIS is internally vetted with cooperating agencies, it will be made available for public review. The availability of the Draft EIS will be announced in the Federal Register and advertised in the local and regional media. Public comments will be accepted for 90 days, during which public meetings or hearings will be held to receive comments on the adequacy of the Draft EIS. The BLM will review and consider all comments received on the Draft EIS. The document will be modified as appropriate based on public comments; all substantive comments and responses will be incorporated into the Final EIS.
The availability of the Final EIS will be announced in the Federal Register and advertised in local and regional media. A record of decision selecting the alternative to be implemented will be made by the U.S. Department of the Interior no sooner than 30 days after the date the Notice of Availability of the Final EIS is published in the Federal Register. Throughout the process the public may continue to monitor the BLM’s project website for updates, and can also be added to the project mailing list.

Project Website: https://eplanning.blm.gov/eplanning-ui/project/2011785/510

To be added to the mailing list:

**Email:** agarcia@blm.gov

**Mail:**

Bureau of Land Management  
SunZia Southwest Transmission Project  
Attn: Adrian Garcia, Project Manager  
301 Dinosaur Trail  
Santa Fe, New Mexico 87508
APPENDIX A

Federal Register Notice of Intent to Prepare an EIS
and BLM News Release
Federal Register Notice of Intent to Prepare an EIS

required to “assess the security of each surface transportation mode and evaluate the effectiveness and efficiency of current Federal Government surface transportation security initiatives.” E.O. 13416, sec. 3(a) (Dec. 5, 2006).

TSA developed the BASE program in 2007, in an effort to engage with surface transportation entities to establish a “baseline” of security and emergency response operations. This program was initially created for Mass Transit/Passenger Rail (MT/PR) including rail and bus operations) and passenger rail. Based on the success of the program, TSA developed the Highways (HWY) BASE program in 2012, which achieved full implementation in 2013. The HWY BASE applies to trucking, school bus contractors, school districts, and overhead road motor coaches. This voluntary program enables TSA to collect and evaluate physical and operational preparedness information and critical assets and key point-of-contact lists. TSA also reviews emergency procedures and domain awareness training and provides an opportunity to share industry best practices. The program provides TSA with current information on adopted security-practices within the MT/PR and HWY modes of the surface transportation sector. The information collected also allows TSA to dynamically adapt programs to the changing threat with an understanding of the improvements made to transportation entities in their security posture. Without this information, the ability for TSA to perform its security mission would be severely hindered. Additionally, the relationships these face-to-face contacts foster are critical to TSA’s ability to reach out to the surface transportation entities participating in the BASE program.

Absent this program, there would be no consistent data about these transportation security programs, nor a database that could be used to benchmark the programs. While many MT/PR and HWY entities have security and emergency response plans or protocols in place, the BASE provides a consistent approach to evaluate the extent to which security programs exist and the content of those programs.

The Government Accountability Office, audit GA-20-404, recommended TSA update the BASE cybersecurity questions to ensure they reflect key practices. As a result, TSA is revising the collection to include all five core functions of the National Institute of Standards and Technology cybersecurity framework. All core functions and a majority of the subcategories are amalgamated with industry best practices in the newly developed cybersecurity questions and the new annex strengthening the cybersecurity health for the transportation sector.

In carrying out the voluntary BASE program, TSA’s Transportation Security Inspectors-Surface (TSIs-S) conduct BASE reviews during site visits with security and operating officials of MT/PR and HWY systems, throughout the Nation. The TSIs-S receive and document relevant information using a standardized electronic checklist. Advance coordination and planning ensure the efficiency of the assessment process. The TSIs-S review and analyze the stakeholders’ security plan, if adopted, and determine if the mitigation measures included in the plan are being effectively implemented, while providing additional resources for further security enhancement. In addition to examining the security plan document, TSIs-S reviews one or more assets of the private and/or public owner/operator. During BASE site visits of MT/PR and HWY entities, TSIs-S collect information and complete a BASE checklist from the review of each entity’s documents, plans, and procedures. They also interview appropriate entity personnel and conduct system observations prompted by questions raised during the document review and interview stages. TSA conducts the interviews to ascertain and clarify information on security measures and to identify security gaps. The interviews also provide TSA with a method to encourage the surface transportation entities participating in the BASE reviews to be diligent in effecting and maintaining security-related improvements.

While TSA has not set a limit on the number of BASE program reviews to conduct, TSA estimates it will conduct approximately 75 MT/PR BASE reviews and approximately 107 HWY BASE reviews on an annual basis. TSA does not intend to conduct more than one BASE review per mass transit or passenger rail system in a single year.

TSA estimates that the hour burden per MT/PR entity to engage its security and/or operating officials with inspectors in the interactive BASE program review process is approximately 11.7 hours, while those who choose to also take the new cyber annex assessment will spend 17.7 hours. Also, TSA estimates that the hour burden per HWY entity to engage its security and/or operating officials with inspectors in the interactive BASE program review process is approximately 1.8 hours, while those who choose to also take the new cyber annex assessment will spend 7.8 hours. Thus, the total annual hour burden for the MT/PR BASE program review is 1,196 hours annually and for HWY BASE 512 hours annually.

Christina A. Walsh, TSA Program Reduction Act Officer, Information Technology.

DEPARTMENT OF THE INTERIOR
Bureau of Land Management
[LLNM930000 LS1010000.E0000 LVRWG90690 9X8SL017AP]

Notice of Intent To Prepare an Environmental Impact Statement and Resource Management Plan Amendments for the SunZia Southwest Transmission Project, New Mexico

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of intent.

SUMMARY: The Bureau of Land Management (BLM) New Mexico State Office (NM), Santa Fe, New Mexico (NM), intends to prepare an Environmental Impact Statement (EIS) to analyze the environmental impacts associated with SunZia’s application seeking to amend its right-of-way grant for the SunZia Southwest Transmission Project. Proposed amendments to SunZia’s right-of-way grant may require plan amendments to the Socorro Field Office Resource Management Plan, the Las Cruces District Mineless Resource Management Plan, the Sevilleta National Wildlife Refuge Comprehensive Conservation Plan, and the Gila National Forest Land and Resource Management Plan, which the agencies will analyze in the EIS. BLM NM50 is the lead agency for purposes of the National Environmental Policy Act (NEPA) analysis with the U.S. Fish & Wildlife Service (FWS), U.S. Forest Service (FS), National Park Service (NPS), and other agencies serving as
cooperating agencies. This Notice initiates the scoping process and opens a 30-day public comment period to solicit public comments and identify issues.

DATES: The BLM requests comments concerning the scope of the analysis and identification of relevant information, studies, and analyses. All comments must be received by July 6, 2021.

ADDRESSES: Submit comments electronically via the ePlanning site: https://eplanning.blm.gov/eplanning-ui/project/2011785/510. Comments and requests for additional information may also be sent to Adrian Garcia, Project Manager, Bureau of Land Management, New Mexico State Office, 301 Dinosaur Trail, Santa Fe, NM 87508; telephone: (505) 954-2199, or email: agarcia@blm.gov. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Relay Service (FRS) at 1-800-877-8339 to contact the above individual during normal business hours. The FRS is available 24 hours a day, 7 days a week, to leave a message or question. You will receive a reply during normal business hours.

SUPPLEMENTARY INFORMATION:

Purpose and Need for the Proposed Action

In compliance with NEPA, and the Federal Land Policy and Management Act of 1976, as amended, the BLM NMSE plans to prepare an EIS to analyze the environmental impacts associated with SunZia Transmission, LLC’s (SunZia) application seeking to amend its right-of-way grant for the SunZia Southwest Transmission Project (Project). Proposed amendments to SunZia’s right-of-way grant may require plan amendments to the Socorro Field Office Resource Management Plan, the Las Cruces District Miners Resource Management Plan, the Sevilleta National Wildlife Refuge, Comprehensive Conservation Plan, and the Cibola National Forest Land and Resource Management Plan, which the agencies will analyze in the EIS.

Preliminary Proposed Action and Alternatives

The proposed Project is composed of two planned 500 kilovolt (kV) transmission lines located across approximately 252 miles of Federal, State, and private lands between central New Mexico and central Arizona. The purpose of the Project is to transport up to 4,500 megawatts of primarily renewable energy from New Mexico to markets in Arizona and California. The permitted route originates at a planned substation in Torrance County, New Mexico, and terminates at the existing Pinon Central Substation in Pinon County, Arizona. The Project traverses Lincoln, Socorro, Sierra, Luna, Grant, Hidalgo, Valencia, and Torrance counties in New Mexico and Graham, Greenlee, Cochise, Pinal, and Pima counties in Arizona. The route has four segments:

• Segment 1: Pinon Central Substation to Willows Substation
• Segment 2: Willows Substation to SunZia South Substation (Segment 2a in Arizona, Segment 2b in New Mexico)
• Segment 3: SunZia South Substation to New Mexico Institute of Mining and Technology (NM Tech)
• Segment 4: NM Tech to SunZia East Substation

Prior environmental documents include a Final EIS in 2015 and a Record of Decision and subsequent Environmental Assessment and Finding of No New Significant Impact in 2018 to accommodate burial of approximately five miles of the transmission line in three locations in the vicinity of White Sands Missile Range. The BLM issued a right-of-way (ROW) grant to SunZia in 2016, authorizing use of a 400-foot-wide corridor across 183 miles of Federal lands administered by the BLM. Construction of the lines has not begun.

SunZia is proposing to amend the existing grant in four components:

• Component 1—Localized Route Modifications: Five route modifications in New Mexico in Segments 2 and 3. These five modifications involve BLM-administered land (an increase in route length of approximately 0.6 miles and an additional approximate 38.8 acres). Proposed modifications on non-BLM-administered land involve an increase in route length of approximately 0.6 miles and an additional approximate 38.9 acres. These modifications are being proposed to address a range of issues, including challenges in obtaining a private landowner ROW or easement and topography.

• Component 2—Access Roads and Temporary Work Areas Outside the Granted ROW: Adding a ROW for about 761 miles of existing and new access roads, of which approximately 703.8 miles would be permanent, 52.2 miles would be temporary, and approximately 338.8 acres of temporary work areas that fall outside the permitted 400-foot-wide corridor across both States. About 216-5 miles of access roads are on BLM-administered land (172.3 in New Mexico; 44.2 in Arizona). About 157.7 acres of temporary work areas are located on BLM-administered land in New Mexico and 22.6 in Arizona.

• Component 3—Segment 4 Reroute: A reroute of Segment 4 to accommodate ongoing concerns of White Sands Missile Range, take advantage of an opportunity to partially parallel the Transe State Project, and move the eastern substation closer to proposed wind-generation projects. The total length of the current route is 91.7 miles, of which 20.2 miles are Federal land administered by the BLM. SunZia is considering three reroute options. Common to all three alternatives are approximately the first 65 miles, from the SunZia East Substation to where the alternative lines diverge. These 65 miles would cross BLM (approximately 0.6 miles), State, and private lands, 33 miles of which are parallel to the proposed Western Spirit 345 kV Transmission Project. The three alternative routes (including the initial 65 miles) are:
  • Alternative Route 1: options ranging from 118.1 to 132.9 miles, would cross approximately 5.9 miles of BLM-administered land and 14.2 miles across the Sevilleta National Wildlife refuge administered by the FWS.
  • Alternative Route 2: options ranging from 112.9 to 125.9 miles, would cross approximately 6.6 miles of BLM-administered land and approximately 11.6 miles across the Sevilleta National Wildlife Refuge administered by the FWS.

Additionally, the BLM may consider and analyze in detail additional route alternatives through the NEPA process other than those requested by SunZia.

• Component 4—SunZia West Substation: A substation to convert power from DC to AC. SunZia intends for one of the two proposed SunZia transmission lines to be AC and the other transmission line to be either AC or DC. The DC line would require equipment at each terminus to convert the power from AC to DC (SunZia East HVDC converter) and from DC to AC (SunZia West HVDC converter). The SunZia West Substation is being sited along the permitted SunZia ROW on approximately 80.7 acres of Arizona.
State land just east of Red Rock, Arizona (no Federal ROW is needed) SunZia states the width of the permanent ROW for the transmission lines typically is a minimum of 400 feet on BLM-administered lands but may be up to 1,000 feet wide in areas with terrain constraints.

**Summary of Expected Impacts**

Impacts from the proposed action would include ground disturbance-associated impacts to natural and cultural resources; visual impacts; potential impacts to threatened and endangered species at the Rio Grande Woodpecker, including the Southwestern Willow Flycatcher, Yellow-billed Cuckoo, and the Silvery Mink, and socioeconomic effects from construction, operation, and maintenance. If an alternative route is selected, Federal agencies may not need to amend land use plans. The skeletons to be represented and used to prepare the EIS include, but are not limited to:

- Land use and recreation;
- Visual resources;
- Wildlife, wilderness study areas, lands with wilderness characteristics, and FS designated roadless areas;
- Vegetation/riparian/nuisance and invasive weeds/special status plant species, including Threatened and Endangered Species and their habitat;
- General and special-status wildlife species, including Threatened and Endangered Species and their habitat;
- Earth resources (geology, minerals, and soils);
- Water resources;
- Air quality;
- Cultural resources;
- Social and economic conditions;
- Health and safety/hazardous materials;
- Paleontological resources;
- Special designations; and
- Wildland fire ecology and management.

**Anticipated Permits and Authorizations**

If approved, the BLM would issue a ROW Grant and Temporary Use Permit for Federal lands. Any alternative route selected that would cross the Cibola National Forest or the Svellieta National Wildlife Refuge would require permit approval from the FS and FWS, respectively.

**Public Scoping Process**

The BLM will initiate a 30-day scoping period beginning with the publication of this Notice of Intent (NOI). The BLM will hold a series of public scoping meetings to begin approximately 15 days after issuance of the NOI.

The BLM will utilize and coordinate the NEPA scoping process to help fulfill the public involvement process under the National Historic Preservation Act (54 U.S.C. 300108) as provided in 36 CFR 0.2(c)(3). The information about historic and cultural resources within the area potentially affected by the proposed action will assist the BLM in identifying and evaluating impacts to such resources.

The BLM will continue to consult with Native American tribes on a government-to-government basis in accordance with Executive Order 13175 and other policies. Tribal concerns, including impacts on Indian trust assets and potential impacts to cultural resources, will be given due consideration.

Federal, State, and local agencies, along with Tribes and other stakeholders that may be interested in or affected by the proposed Project that the BLM is evaluating are invited to participate in the scoping process and, if eligible, may request, or be requested by the BLM, to participate in the development of the environmental analysis as a cooperating agency.

Authorization of this proposal may require amendments to the Sycamore Field Office Resource Management Plan, the Las Cruces District Resource Management Plan, the Svellieta National Wildlife Refuge Comprehensive Conservation Plan, and the Cibola National Forest Land and Resource Management Plan. By this notice, the BLM is complying with requirements 43 CFR 1510.2(d) to notify the public of potential plan amendments. The BLM will integrate the land use planning process with the NEPA analysis process for this project. A Forest plan amendment may be required for this project. The 2012 Planning Rule (36 CFR part 219) requires consideration of the applicable substantive requirements as described in 36 CFR 219.0 through 219.11 that are directly related to the plan direction being added, modified, or removed by the amendment (36 CFR 219.13).

**Request for Identification of Potential Alternatives, Information, Analyses, and Mitigation Measures Relevant to the Proposed Action**

The BLM encourages comments concerning the proposed SunZia Southwest Transmission Project, feasible alternatives, possible measures to mitigate, minimize and/or avoid adverse environmental impacts, and any other information relevant to the proposed action. You may submit comments at any time by using one of the methods listed in the \textbf{ADDRESSES} section of this Notice. Public scoping meetings will be conducted virtually with BLM staff to explain project details and gather information from interested individuals or groups. Representatives from SunZia will be available to answer questions. You should submit comments by the close of the 30-day scoping period or 10 days after the last public meeting.

Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made public. Please review the Public Scoping Notice. You may call or write to the BLM, as described in this Notice. Additional information meetings may be conducted throughout the process to keep the public informed of the progress of the EIS. (Authority: 40 CFR 1510.1 and 43 CFR 1510.2)

Steven R. Wells,
Acting New Mexico State Director.

\textbf{DEPARTMENT OF THE INTERIOR}

\textbf{Bureau of Ocean Energy Management}

\textbf{[Docket No.: BOEM-2021-0029]}

\textbf{Notice of Intent To Prepare an Environmental Impact Statement for Revolution Wind LLC’s Proposed Wind Energy Facility Offshore Rhode Island: Reopening of Comment Period and Corrections}

\textbf{AGENCY: Bureau of Ocean Energy Management, Interior.}

\textbf{ACTION: Notice: reopening of comment period and corrections.}

\textbf{SUMMARY: On April 30, 2021, the Bureau of Ocean Energy Management (BOEM) published the “Notice of Intent to Prepare an EIS for Revolution Wind LLC’s Proposed Wind Energy Facility Offshore Rhode Island” in the Federal Register. The NOI announced that BOEM will prepare an EIS as part of its review of a construction and operations plan submitted by Revolution Wind LLC and provided project information. The notice stated that comments received by June 1, 2021, will be considered. This notice corrects two statements in the NOI regarding the energy capacity of the proposed wind facility and its distance from the shoreline.}

News Release

BLM TO HOST PUBLIC MEETINGS FOR SUNZIA SOUTHWEST TRANSMISSION PROJECT

SANTA FE, N.M. – The Bureau of Land Management opens a 30-day public scoping period to collect public comments and identify potential issues of the SunZia Southwest Transmission Project. If approved, this project aims to transport up to 4,500 MW of energy from New Mexico to markets in Arizona and California. The scoping period will end on July 6, 2021.

“We are pleased to give the public an opportunity to provide their input on this project. We invite all interested parties to attend the virtual public scoping meetings to learn about the project and provide comments,” said BLM New Mexico Acting Associate State Director Melanie Brem. The previously permitted route originates at a planned substation in Torrance County, N.M., and terminates at the existing Paul Central Substation in Paul County, Ariz.

A notice of intent has been published in the Federal Register for the proposed SunZia Southwest Transmission Project Environmental Impact Statement and potentially associated Resource Management Plan Amendments which will analyze and disclose environmental impacts associated with the project. The environmental impact statement process provides a formal opportunity for public engagement.

The BLM has scheduled three virtual public meetings. To register for the public meetings, which will be held via the Zoom virtual platform, please visit https://eplanning.blm.gov/eplanning-ui/project/2011785-510. The meetings will be held on the following dates:

- Tuesday, June 22 at 1-3 PM (MDT)
- Wednesday, June 23 at 6-8 PM (MDT)
- Thursday, June 24 at 6-8 PM (MDT)

To have your comments considered in the draft environmental impact statement, please submit them by July 6, 2021. Comments can be provided in the following ways:

- Submit a verbal comment via the hotline: 1-888-959-2510
- Submit your comments electronically via the ePlanning site: https://eplanning.blm.gov/eplanning-ui/project/2011785-510
- Mail comments to BLM New Mexico State Office at the below address, Attention: SunZia Southwest Transmission Project

Documents pertinent to this proposal may be examined at the BLM New Mexico State Office and BLM Arizona State Office or on the project website at https://eplanning.blm.gov/eplanning-ui/project/2011785-510.

For further information, contact Adrian Garcia, BLM New Mexico State Office, 301 Dinosaur Trail, Santa Fe, New Mexico 87504; phone 505-954-2199; or email agarcia@blm.gov.

This year, we invite everyone to explore our public lands as we celebrate 75 years of the BLM's stewardship and service to the American people. The BLM manages approximately 245 million acres of public land located primarily in 12 Western states, including Alaska. The BLM also administers 200 million acres of subsurface mineral estate throughout the nation. The agency's mission is to sustain the health, diversity, and productivity of America's public lands for the use and enjoyment of present and future generations.
APPENDIX B

Scoping Informational Materials and Meeting Presentation
SunZia Southwest Transmission Project Right-of-Way Amendment EIS
Scoping Report – Volume 1

Postcard

SunZia Southwest Transmission Project 2021

The BLM will initiate the National Environmental Policy Act (NEPA) process as a response to SunZia's application. BLM's decision is whether to issue a ROW grant amendment, and if so, under what terms and conditions.

History
Prior environmental documents include a Final Environmental Impact Statement (EIS) in 2013, and a Record of Decision and subsequent Environmental Assessment and Finding of No New Significant Impact in 2015 to accommodate burial of approximately five miles of the transmission line in three locations near the Department of Defense's (DoD) White Sands Missile Range. The BLM issued a ROW grant to SunZia in 2016, authorizing use of a 400-foot-wide corridor across 183 miles of Federal lands administered by the BLM.

In 2018, the DoD raised further concerns with the BLM-approved route. In response, SunZia voluntarily proposed to evaluate a new alignment. SunZia submitted the new application to the BLM in March 2020 to amend their existing ROW.

The U.S. Fish and Wildlife Service and the U.S. Forest Service are Cooperating Agencies in this Project. They each have their own review and decision processes concurrent with the Project.

Attn: Adrian Garcia, SunZia Project
Bureau of Land Management
New Mexico State Office
301 Dinosaur Trail
Santa Fe, NM 87508

SunZia Southwest Transmission Project

How YOU can get involved!

A 30-day public scoping period will begin in the near future.
The purpose of scoping is to solicit input on the issues, impacts, and potential alternatives that will be addressed through the NEPA process. The scoping period for the new EIS will begin with the release of the Notice of Intent in the Federal Register. At that time, the BLM will mail a newsletter to those on the project mailing list and post a news release to the BLM website with scoping period and commenting method information. Please contact Adrian Garcia (agarcia@blm.gov or 505-954-2199), BLM Project Manager, with any questions or to add your name to the mailing list.

To add your name to the Project email or mailing list, or to see more information about the Project, visit:
https://eplanning.blm.gov/eplanning-ui/project/2011785/510
**SunZia Southwest Transmission Project Environmental Impact Statement**

**Newsletter**

**Project Description**

The proposed SunZia Southwest Transmission Project (Project) comprises two planned 500 kv transmission lines located across approximately 320 miles of Federal, State, and private lands between central New Mexico (NM) and central Arizona (AZ). The purpose of the project is to transport up to 4,200 megawatts of primarily renewable energy from NM to markets in AZ and California. The Project was evaluated through the National Environmental Policy Act (NEPA) process from 2009 to 2015 when and Record of Decision was issued for a Final Environmental Impact Statement (EIS), authorizing a right-of-way (ROW) grant for the Project on federal lands administered by the Bureau of Land Management (BLM).

SunZia has submitted a new application to amend their existing BLM ROW grant. The proposed amendments are comprised of the following four components:

- Changes to access roads and temporary work areas on Federal lands
- Localized route modifications in five areas along the selected route
- Three route alternatives near Socorro, NM, proposed to address ORO concerns about NMHP, parallel another proposed transmission line, and move the east substation closer to proposed wind generation projects
- The addition of a substation (SunZia West) on lands managed by the Arizona State Land Department

**NEPA Process**

The BLM will prepare an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act of 1969 (NEPA) for the SunZia Project. The EIS will provide a detailed analysis of the potential environmental impacts of the proposed action and a range of reasonable alternatives, including any necessary mitigation. Amendments to BLM land use plans may also be required. Preparing an EIS has a number of steps: (as diagram, right).

- The process begins with publishing a Federal Register Notice of Intent to prepare an EIS, which begins a 30-day public scoping period.
- During this period, the BLM will conduct public scoping meetings to help identify potential issues and concerns that may result from the SunZia Project.
- In coordination with the cooperating agencies, the BLM will assess the impacts that the Project may have on each of the resources that the planning process uses and apply measures to mitigate the impacts. Alternatives will be compared, and a preferred alternative(s) will be identified. The process will be documented, and this impacts analysis will be included in the Draft EIS. Then a public comment period will be held. Comments will be analyzed and responses to the comments will be included in a Final EIS and proposed plan amendments.

**Agency Decisions to be Made**

- Whether to grant, grant with conditions, or deny the application for an amended ROW
- Whether or not to amend any of the existing land use plans

**Resources to be Considered in the EIS**

EIS analysis will include 2013 Final EIS analysis, augmented as needed to address changes in circumstances of new analysis areas. Amenities include:

- Climate and Air Quality
- Earth Resources (Minerals, Geology, Geophysical Hazards, and Soil)
- Hydrological, Ecological, and Wildlife Resources
- Water Resources
- Biotic (Vegetation, Fish, Wildlife, and Invertebrates)
- Land Use Issues
- Cultural Resources and Tribal Concerns
- Visual Resources
- Land Use and Human Resource
- Audubon Biomonitoring
- Resource Reserves
- Federal Lands With Wilderness Character
- Socioeconomic and Environmental Justice
- Health and Safety and Hazardous Materials

**Tips for providing effective scoping comments**

Your participation is an important part of the decision-making process. Before submitting comments, please:

- Review the BLM ePlanning website, monitor local newspapers, attend public meetings, and become familiar with the proposed project development.
- Learn about the NEPA process and when in the process agencies will accept comments.
- Provide substantive and concise comments. The most effective comments identify resources to be evaluated, issues that may require environmental review, reasonable alternatives to consider, or potential mitigation (ways to reduce or avoid environmental impacts).
- Keep your comments focused on the proposed project being analyzed.
- Submit your comments within the timeframe announced. This helps the agencies include all concerns in the NEPA document.
- Make sure that you are on the EIS mailing list to receive notification of public meetings or project information, or both.

**Cooperating Agencies Participating in the EIS Process**

- United States Fish and Wildlife Service (USFWS)
- United States Forest Service (USFS)
- United States Department of the Army
- New Mexico State Land Office
- New Mexico Office of Military Base Planning and Support
- New Mexico State Land Office
- Graham and Field counties, AZ
- Grant, Lincoln, Luna, Socorro counties, NM

**Published Notice of Intent; Merger Public Scoping Sessions**

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**BLM Contact Information**

BLM NMSS, SunZia Southwest Transmission Project
301 Shoshone Trail
Socorro, NM 87904

**BLM Contact Information**

BLM NMSS, SunZia Southwest Transmission Project
301 Shoshone Trail
Socorro, NM 87904

**Newsletter**

**BLM’s ePlanning website**

https://eplanning.blm.gov/eplanning-ui/project/2011785/510

- to view project materials
- to submit public comments
- to add your contact information to our project mailing list

- Contact Adrian Garcia, BLM Project Manager at (505) 954-2199 or agarcia@blm.gov

**How to Submit Formal Scoping Comments**

Opportunities to submit public comments during the 30-day public scoping period:

- Submit comments on ePLanning at https://eplanning.blm.gov/eplanning-ui/project/2011785/510
- Mail or hand deliver comments to: BLM NMSS: Attn: SunZia Southwest Transmission Project, Project Manager Adrian Garcia, 301 Shoshone Trail, Socorro, NM 87904
- Record a telephone message at 1-888-939-2510

**All public scoping comments are due July 6, 2021**
SunZia Southwest Transmission Project (External)

SunZia Frequently Asked Questions (FAQ)

What is the SunZia Southwest Transmission Project?
The proposed SunZia Southwest Transmission Project (SunZia Project) is composed of two planned 500 kilovolt (kV) high transmission lines located across approximately 530 miles of Federal, State, and private lands between central New Mexico (NM) and central Arizona (AZ). The purpose of the SunZia Project is to transport up to 4,700 megawatts of primarily renewable energy from NM to markets in AZ and California. The route goes from Torrance County, NM, to Pinal County, AZ.

Prior environmental documents include a Final Environmental Impact Statement (EIS) in 2013, a Record of Decision in 2015, and an Environmental Assessment and Finding of No New Significant Impact in 2015 to accommodate burial of approximately five miles of the transmission line in three locations in the vicinity of White Sands Missile Range. The Bureau of Land Management (BLM) issued a right-of-way (ROW) grant to SunZia Transmission, LLC (SunZia) in 2016, authorizing use of a 400-foot-wide corridor across 183 miles of Federal lands administered by the BLM. Construction on the lines has not begun.

SunZia is now proposing to amend the existing grant in four components (see What are the four components of SunZia’s application? below). The amendments to SunZia’s existing ROW are the scope of this project, not re-routing the entire path for the transmission line. See the Project Introduction for more information and maps.

What are the four components of SunZia’s application?

- **Component 1: Localized Route Modifications**: Five route modifications in NM in Segments 2 and 3, proposed to address a range of issues, including challenges in obtaining a private landowner ROW or easement and topography.
- **Component 2: Access Roads and Temporary Work Areas Outside the Granted ROW**: Adding a ROW for existing and new access roads and temporary work areas that fall outside the permitted 400-foot-wide corridor across both States.
- **Component 3: Segment 4 Reroute**: A reroute of Segment 4 to accommodate ongoing concerns of the Department of Defense (DOD) and White Sands Missile Range, take advantage of an opportunity to partially parallel the Western Spirit 345 kV Transmission Project, and move the eastern substation closer to proposed wind-generation projects. SunZia is considering three alternatives to the 2015 selected route. Common to all three alternatives are approximately the first 65 miles, from the SunZia East Substation to where the alternative routes diverge. The three alternative routes are:
  - **Alternative Route 1**: would cross approximately 60 miles of BLM-administered land and approximately five miles of U.S. Forest Service (FS)-managed land (Gila National Forest);
  - **Alternative Route 2**: would cross approximately six miles of BLM-administered land and approximately 14 miles of U.S. Fish and Wildlife Service (FWS)-administered land (Sevilleta National Wildlife Refuge) within an El Paso Electric Company easement.
  - **Alternative Route 3**: would cross approximately nine miles of BLM-administered land and approximately 11 miles of FWS-administered land (Sevilleta National Wildlife Refuge) within a Tri-State Generation and Transmission easement.
- **Component 4: SunZia West Substation**: A substation to convert power from DC to AC. SunZia intends for one of the two proposed SunZia transmission lines to be AC and the other transmission line to be either AC or DC. The DC line would require equipment at each terminus to convert the power from AC to DC (SunZia West HVDC converter) and

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from DC to AC (SunZia West HVDC converter). The SunZia West Substation is being sited along the permitted SunZia ROW on AZ State land east of Red Rock, AZ, where no Federal ROW is needed.

See the Project Introduction for more information and maps.

**Who is the SunZia Project applicant?**
SunZia Transmission, LLC is the Project applicant. SunZia is part of Southwestern Power Group (SWPG), an independent developer of utility-scale generation and transmission assets with a market focus in the Desert Southwest. SWPG is a wholly-owned subsidiary of MMR Group, a privately-owned construction services firm based in Baton Rouge, Louisiana.

**What is the need for the transmission line? How would it fit into the regional electric grid?**
In 2010, the National Renewable Energy Laboratory identified NM as one of the top 10 wind potential states; however, new transmission infrastructure is needed to tap its wind energy potential. In central NM, near Corona, where SunZia begins, there is more than 4,500 megawatts (MW) of wind energy capacity. The capacity of two 500 kV each transmission lines could transport those megawatts over the 520 miles of the SunZia Project route, to reach AZ and power markets beyond.

**Who is the lead agency? What decision(s) do they have to make?**
The BLM is the lead Federal agency for National Environmental Policy Act (NEPA) compliance. After careful consideration and analysis conducted in an Environmental Impact Statement, the BLM will decide whether to issue a ROW grant amendment for the proposed SunZia Project, and if so, under what terms and conditions. Additionally, as lead Federal agency on this EIS, it is the BLM’s decision to consider and analyze in detail additional route alternatives through the National Environmental Policy Act (NEPA) process other than those requested by the applicant (SunZia).

**What is the National Environmental Policy Act (NEPA)?**
NEPA was passed by Congress in 1969 and signed into law on January 1, 1970. This law established a landmark national environmental policy which, among other things, encourages environmental protection and informed decision-making. It provides the means to carry out these goals by:

- Mandating that every Federal agency prepare a detailed statement of the effects of “major Federal actions significantly affecting the quality of the human environment.”
- Establishing the need for agencies to consider alternatives to those actions.
- Requiring the use of an interdisciplinary process in developing alternatives and analyzing environmental effects.
- Requiring that each agency consult with and obtain comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved.
- Requiring that detailed statements and the comments and views of the appropriate Federal, State, tribal, and local agencies be made available to the public.

The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment (40 Code of Federal Regulations [CFR] 1500.1(a)).

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**What is an Environmental Impact Statement (EIS)?**
An EIS is prepared for major Federal actions that may have a significant effect on the environment. The purpose of an EIS is to identify potential environmental issues related to the project, analyze the project’s impacts on resources, describe alternative actions, disclose impacts to the public, and make informed decisions. The BLM will prepare a Draft EIS and a Final EIS over the course of the NEPA process.

The EIS is a public document, and the public is encouraged to provide input throughout the development of the EIS. In addition to the public, the EIS will inform Federal, State, and local permitting agencies as well as Cooperating Agencies and Native American tribes. Potential amendments to existing agency land use plans will be analyzed as well.

The EIS is not a decision document, but it is intended to provide information to the BLM and other agency decision makers in order to make informed decisions. While the BLM’s decision applies only to the land that it manages, its EIS applies to all potentially affected lands. Decisions on non-BLM land will be made by the property owners.

**Didn’t the BLM already do an EIS and an Environmental Assessment? Why are they doing another SunZia EIS?**
The BLM completed an EIS in 2013 for the SunZia Project and issued a Record of Decision in 2015. The BLM granted SunZia a ROW grant for a 400-foot-wide corridor across 183 miles of BLM land. In 2015, the BLM also conducted an Environmental Assessment on the possibility of undergrounding the line near the DoD’s White Sands Missile Range and found no new significant impact.

In December 2020, SunZia applied to amend the right-of-way grant to (1) accommodate localized route modifications requested by landowners; (2) analyze the effects of access roads and temporary work areas outside the granted right-of-way; (3) reroute eastern-most Segment 4 closer to the generation source, to parallel the Western Spirit 345 kV transmission line, and move the route out of the area north of the WSMR used for military missile testing, operations, and training; and (4) analyze the effects of newly identified SunZia West Substation in Pinal County, Arizona.

**What is the Department of Defense’s (DoD) involvement in this Project?**
One of the ongoing challenges of the SunZia Project has been the location of Segment 4, a segment of the proposed transmission line north of the White Sands Missile Range (WSMR), an area referred to as the Northern Call Up Area (NCUA). This necessitated a plan for undergrounding approximately five miles of the transmission line. The WSMR, approximately 3,200 square miles, is the DoD’s largest domestic range providing support of missile development and test programs critical to national defense and security. The WSMR conducts very-low-altitude test-flight profiles for drones, missiles, and other unmanned vehicles launched from the WSMR or received from launches in other states.

To ensure that SunZia’s activities in the NCUA do not impede WSMR’s test capabilities, SunZia routinely coordinates with the WSMR and DoD. In December 2018, the Assistant Secretary of Defense for Sustainment, Robert McMahon, issued a letter to SunZia reiterating DoD’s concerns with Segment 4 of the 2015 selected route. Secretary McMahon acknowledged the national security benefits from reducing impacts on WSMR operations that could result from SunZia pursuing potential alternative routes that would relocate the Project’s proposed transmission line and associated facilities away from the WSMR NCUA.
Why is SunZia proposing to cross the Cibola National Forest or the Sevilleta National Wildlife Refuge (NWR)?

Because of the extent of Federal land in the region crossed by the SunZia Project and constraints posed by sensitive resources, certain land uses, lands with special designations, and/or rugged terrain, a continuous long-distance path avoiding crossing Federal lands is not feasible.

SunZia conducted a detailed siting study during 2019–2020 that resulted in the network of alternative routes currently being addressed. While the eastern portion of the SunZia Project is able to generally parallel the planned Western Spirit 345-kV transmission line, west of the boundary of Valencia and Torrance counties the route diverges into alternative routes that consider large blocks of lands specially designated with protective management prescriptions, which severely limits opportunities for routing. The alternative routes were developed to avoid the specially designated lands to the extent feasible. For example, Alternative Route 1, the longest route, extends far to the west to go around BLM specially designated areas but would require traversing the Cibola National Forest including an Inventory Rodless Area. Alternative Routes 2 and 3 avoid the BLM & FS specially designated areas and would use existing utility easements that pass north-south through the Sevilleta NWR.

Alternative Route 1 has passed FS’s Second Level Special Use Screening criteria and mitigates conflict with existing and future military training activities already authorized on the Cibola National Forest.

The 2013 EIS dismissed crossing through the Sevilleta NWR stating that a new transmission-line ROW crossing the Sevilleta NWR would conflict with the refuge management policy and restrictions that prohibit commercial uses, as stated in the Sevilleta NWR land grant deed. However, co-location with the existing transmission lines was not considered at the time. El Paso Electric Company (El Paso) has a 345 kV line in a 100-ft easement, and Tri-State Generation and Transmission Association, Inc. (Tri-State) has a 115 kV line in a 50-ft. easement. Due to existing easement widths, only one new SunZia transmission line could be routed within each easement for Alternatives 2 and 3. Thus, the project could result in rebuilding both the El Paso and Tri-State lines. Tri-State and El Paso would notify the FWS with proposed construction activities to replace the existing line infrastructure with one that could accommodate both the existing line and the proposed SunZia line within their existing easements. Tri-State and El Paso would need to request use of refuge lands outside of existing easements for construction and long-term maintenance.

Co-location is now being analyzed in detail in light of the following:
- The number of large, specially designated areas in the Segment 4 reroute study area posing constraints to siting the proposed transmission lines and associated facilities.
- The discussions with the DoD regarding the White Sands Missile Range Northern Call-Up Area (see What is the Department of Defense’s Involvement in this Project? above).

What is the process for preparing an Environmental Impact Statement (EIS)? How far into the process is the BLM?

There are several steps involved in preparing an EIS, as defined by the National Environmental Policy Act. See the diagram below for a visual representation of the process. The EIS process begins with the publication of a Notice of Intent in the Federal Register. That notice initiates the scoping period, during which agencies, groups, and the public can give feedback and submit their comments for review. The BLM and their Cooperating Agencies (see How will other Federal and non-Federal agencies participate in the Project? below) then use the information derived from the public scoping comments to identify potential resource concerns, project
modifications, additional alternative routes/segments, and environmental mitigation measures. The process is documented, and the impacts are disclosed in a Draft EIS. After public review of the Draft EIS, comments are considered and incorporated into the Final EIS and a Notice of Availability is published by the Environmental Protection Agency in the Federal Register. The EIS process ends with the issuance of the Record of Decision (ROD). The ROD approves, approves with stipulations, or does not approve the proposed action.

The BLM initiated scoping on June 4, 2021.

If the BLM does not grant a ROW amendment, can SunZia still build the transmission line?
Yes. SunZia would carry forward with building the route permitted in 2015 if BLM does not grant a ROW amendment that uses a Segment 4 alternative route. In the map below, the orange dashed line represents the 2015 permitted route and the three pink lines represent the three Segment 4 alternative routes. (Note: Segment 4 lies between Corona, Belen, and Socorro, NM. This can also be seen on the map below.)
The map above shows Segment 4 Alternative Routes. The map below shows the entire permitted 2015 route.

What would the transmission line look like?
The transmission line structures would measure about 155 feet tall. Tower heights would vary from 100 to 170 feet in height, depending on terrain. The distance between structures may range from 1,200 to 1,600 feet (3-4 structures per mile). The ROW grant area would generally measure approximately 400 feet wide. The proposed structures would include a combination of guyed and self-supporting steel tubular and lattice structures.

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For routes across Sevilleta NWR, the proposed alternative to co-locate with Tri-State's easement would replace Tri-State's existing 115 kV transmission line structures with double-circuit, monopole (single pole) structures that support both the Tri-State line and the proposed SunZia line in a vertical configuration. The new transmission line structures would measure on average 165-200 feet in height compared to the existing Tri-State structures, which are between 60-80 feet in height. El Paso has not yet approached the FWS with its intent to re-build its transmission line. The type of transmission line structures used would depend on site-specific engineering design and land use constraints.

**How will the interests of tribal governments be taken into consideration?**

Tribal consultation is required under the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA) when undertakings have the potential to affect properties significant to Native American tribes. The BLM has initiated tribal consultation with 25 tribal governments. All consultation the BLM carries out will be in compliance with Section 106 of the NHPA and its implementing regulations. During the previous EIS process, the BLM consulted with 11 tribes and developed a Programmatic Agreement (PA) to address treatment of historic properties. This PA will likely be amended to fit the current EIS process.

**How will other Federal and non-Federal agencies participate in the SunZia Project?**

Per National Environmental Policy Act (NEPA) guidelines, Cooperating Agencies (or Cooperators) are defined as agencies with legal jurisdiction and/or special expertise relating to the Project. The BLM invited 41 Federal, State, and local government agencies to participate in the SunZia Project as Cooperating Agencies. Eighteen agencies have accepted the invitation to become Cooperators. These agencies will participate in the NEPA process to the level appropriate for their jurisdiction or expertise, provide information within their expertise, assist with analysis as requested by BLM, participate in meetings, and review Administrative Drafts of EIS documents.

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<td>Luna County, NM</td>
<td>Belen, NM</td>
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<tr>
<td>Pinal County, AZ</td>
<td>Graham County, AZ</td>
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**What is scoping?**

Public scoping is the process Federal agencies use to identify public issues and concerns relating to actions on Federal lands. Scoping is the process of identifying the range of issues, management concerns, and preliminary alternatives that should be addressed in the EIS. The public scoping period is the first opportunity for public involvement on a proposed action. The Notice of Intent to develop an Environmental Impact Statement, published in the *Federal Register*, opened a 30-day public scoping period. During scoping, the BLM will hold three...
virtual public meetings to provide the public with information and to solicit comments and input on the proposed action. The scoping period began on June 4, 2021 and will end on July 6, 2021.

What are the opportunities for public involvement?
During scoping, the BLM will hold three virtual public meetings to inform the public and solicit comments (see dates and times below). After the Draft Environmental Impact Statement (EIS) is published, there will be a 90-day public review and comment period. The BLM will hold either virtual or in-person public meetings during the comment period. Upon publication of the Final EIS, there will be a 30-day availability period for the Final EIS during which implementation cannot occur, as well as a concurrent 30-day period when members of the public may file protests for the proposed RMP amendments. All proposed BLM RMP amendments and revisions must also undergo a 60-day Governor’s consistency review prior to final approval.

The meetings will be held on the following dates:
- June 22 at 1-5 PM MST
  Register: https://swca.zoom.us/webinar/register/WN_JY18ZduTTveBKDsS6AgGww
- June 23 at 6-8 PM MST
  Register: https://swca.zoom.us/webinar/register/WN_wOum4gDgTVOKfENGh2VizA
- June 24 at 6-8 PM MST
  Register: https://swca.zoom.us/webinar/register/WN_RnnEJ2z1RtGbox6XWDvI7g

How can I submit a comment?
You can submit comments in the following ways:
- Submit written comments online at the Project’s ePlanning site: https://eplanning.blm.gov/eplanning-ui/project/2021785/510
- Call the Project hotline at 1-888-939-2510
- Mail written comments to the BLM NM State Office:
  Attn: Adrian Garcia
  301 Dinosaur Trail
  Santa Fe, NM 87501

How will the BLM use my comments?
The BLM will use substantive comments to help the BLM Interdisciplinary Team identify issues and refine the proposed action, develop measures to mitigate potential negative effects, and develop alternatives to the proposed action that meet the agencies’ purpose and need and address key issues. Substantive comments 1) avoid opinions and are specific, 2) describe the significance of the impacts and how the impacts affect you, others, places, and activities, 3) provide any new information relevant to the project, and/or 4) discuss modifications to existing alternatives or suggest other reasonable alternatives with justification. Substantive comments can create change within the project, provide alternatives or mitigation options, change the analysis of the project, and help the BLM make more informed decisions.

How can I stay informed on the SunZia Project?
- Visit the Project’s ePlanning site: https://eplanning.blm.gov/eplanning-ui/project/2021785/510
- Contact Adrian Garcia, Project Manager, at the BLM New Mexico State Office at (505) 934-2199 or agarcia@blm.gov for any specific Project inquiries or to add your name to the email or mailing list.
- Persons who use a telecommunications device for the hearing impaired may call the Federal Relay Service at 1-800-877-8339 to leave a message or question.
Where else can I learn about the National Environmental Policy Act (NEPA) process?
Please see the following websites for more information on NEPA and Environmental Impact Statements:

- The Council on Environmental Quality’s (CEQ) Citizen’s Guide to NEPA
- The BLM’s NEPA Handbook
- The CEO’s Forty Most Asked Questions Concerning NEPA Regulations
Welcome
Public Scoping Meeting Presentation

- Learn about the SunZia Southwest Transmission Project
- Understand the NEPA process
- Learn how to provide effective scoping comments

Project Overview

- The proposed SunZia Southwest Transmission Project (Project) comprises two 500 kilovolt (kV) transmission lines located across approximately 520 miles of Federal, State, and private lands between central New Mexico and central Arizona.
- The purpose of the Project is to transport up to 4,500 megawatts of primarily renewable energy from New Mexico to markets in Arizona and California.
- The Project was evaluated through the National Environmental Policy Act (or NEPA) process starting in 2009 and approved in 2015, which included an evaluation of a mitigation proposal to address issues associated with White Sands Missile Range. To accommodate ongoing concerns of the DoD and to take advantage of an opportunity to partially parallel the Western Spirit 345 kV Transmission Line, SunZia Transmission LLC (project applicant or proponent) is proposing to evaluate a new alignment in New Mexico.
- SunZia has submitted an application to amend their existing BLM ROW grant.
- BLM has determined an environmental impact statement (EIS) will be required to evaluate impacts from the proposed action. The actions being evaluated in the EIS comprise only those project elements that have changed from the 2015 Selected Alternative.
NEPA Process

- National Environmental Policy Act (NEPA)
- Notice of Intent (NOI) to prepare EIS published in Federal Register on June 4, 2021
- Public scoping period ends July 6, 2021
- Draft EIS published late 2021
- Public comment period early 2022
- Final EIS published late 2022

Project Lead Agency, Cooperating Agencies, and Project Proponent/Applicant

- **Lead Agency**
  - Bureau of Land Management (BLM)

- **Cooperating Agencies**
  - United States Fish and Wildlife Service (USFWS)
  - United States Forest Service (USFS)
  - United States Department of the Army, Fort Huachuca
  - Department of Defense (DoD), White Sands Missile Range
  - Arizona Game and Fish Department
  - Arizona State Land Department

- **Cooperating Agencies (continued)**
  - New Mexico Department of Game and Fish
  - New Mexico Office of Military Base Planning and Support
  - New Mexico State Land Office
  - Graham and Pinal Counties, AZ
  - Grant, Lincoln, Luna, Socorro Counties, NM
  - Belen, NM

- **Project Proponent/Applicant**
  - SunZia Transmission, LLC
Lead Agency Role

- BLM is required to respond SunZia’s application to amend their existing rights-of-way (ROW) grant and is authorized to grant ROW on public lands for systems of generation, transmission, and distribution of electrical energy under Federal Land Policy and Management Act of 1976 (FLMPA) Section 501(a)(4).

- BLM’s Decisions:
  - Whether to grant, grant with conditions, or deny the application for an amended ROW.
  - Whether or not to amend any of the existing RMPs.

Cooperating Agency Decisions: USFS

- One of the proposed alternatives to the 2015 selected route would cross ~5 miles of USFS-managed lands (Cibola National Forest).
- USFS Decisions:
  - Whether to issue a Special Use Authorization
  - Terms and conditions of the authorization
  - Whether or not to amend the Land and Resource Management Plan
- Authority: National Forest Management Act (NFMA) (16 USC 1601-1614)
- Per the USFS regulations in 36 CFR 218, concurrent with release of the Final EIS, the USFS will issue a draft ROD outlining the USFS decision and the terms and conditions of the Special Use Authorization for an objection filing period.
Cooperating Agency Decisions: USFWS

- Two of the proposed alternatives to the 2015 selected route would cross the Sevilleta National Wildlife Refuge
- USFWS Decisions:
  - Whether to amend existing Tri-State / EPE Special Use Permits crossing the Sevilleta National Wildlife Refuge
  - Permitting and compliance requirements related to Tri-State and EPE reconstruction proposals.
  - Whether or not to amend the 2000 Comprehensive Conservation Plan

Other Cooperating Agency Decisions

- Federal:
  - Environmental Protection Agency: National Pollutant Discharge Elimination System (NPDES) and other permits
  - Army Corps of Engineers: Section 10, Section 404, and floodplain use permits
  - Federal Aviation Administration: Section 1101 Air Space Permit
- States:
  - ROW permits for state lands as well as subsequent environmental permitting (air, water, hazardous materials), highway transportation permits, plant collection permits, wildlife survey permits
- Local:
  - County and/or city ROW permits as well as encroachment permits, special use/conditional use permits transportation/access permits, construction/dust control/grading/drainage permits
Proposed Action Description

Proposed project changes comprise four components

1. Localized route modifications in 5 areas along the 2015 selected route in New Mexico
2. Changes to access roads and temporary work areas on federal lands
3. Three reroute alternatives near Socorro, New Mexico designed to address DOD concerns about While Sands Missile Range, partially parallel the Western Spirit 345 kV Transmission Project, and move the eastern substation closer to proposed wind-generation projects.
4. The addition of a substation (SunZia West) on lands managed by the Arizona State Land Department.

*Project changes in Arizona include Components 2 and 4. Project changes in New Mexico include components 1, 2, and 3.*
Component 1: Localized Route Modifications

- Five potential route modifications in Hidalgo, Luna, Sierra, and Socorro Counties, New Mexico
  - Route Modification 1 – Mavericks Area
  - Route Modification 2 – SunZia South Area
  - Route Modification 3 – Macho Springs Area
  - Route Modification 4 – Las Palomas Creek Area
  - Route Modification 5 – Highlands Area
- Proposed to address a range of issues, including challenges in obtaining a private landowner easement, and topography.
- All route modifications would be located on BLM lands within the BLM Las Cruces DO and Socorro FO, as well as New Mexico State Lands and private lands.

Localized Route Modification 1 - Mavericks Area
Component 2: Access Roads and Temporary Work Areas Outside the Granted ROW

- Addition of ROW for existing and new access roads and temporary work areas that fall outside the permitted 400-foot-wide corridor on Federal lands across both States
- Located in Hidalgo, Luna, Sierra, and Socorro Counties, NM, Greenlee, Graham, Cochise, Pima, and Pinal Counties, AZ
- Environmental review encompasses BLM lands within the Las Cruces DO, Socorro FO, Safford FO, Tucson FO as well as Arizona and New Mexico State Lands and private lands
Component 3: Segment 4 Reroute

Three alternatives to the 2015 selected route located in Socorro, Torrance, and Valencia Counties, NM

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Component 3: Segment 4 Reroute

Three alternatives to the 2015 selected route were proposed to address DOD concerns regarding White Sands Missile Range, partially parallel the Western Spirit 345 kV Transmission Project, and move the eastern substation closer to proposed wind-generation projects.
Component 3: Segment 4 Reroutes

Common to all three reroute alternatives are approximately the first 65 miles, from the SunZia East Substation to where the routes diverge.

Component 3: Segment 4 Reroute
Cibola National Forest Alternative

One proposed alternative to the 2015 selected route, Reroute Alternative 1, would cross approximately 30 miles of BLM-administered land and approximately 5 miles of USFS-managed land (Cibola National Forest).
Component 3: Segment 4 Reroute
Sevilleta National Wildlife Refuge Alternatives

- Two of the proposed routes which are alternatives to the 2015 selected route would cross the Sevilleta National Wildlife Refuge (Refuge) using:
  - existing El Paso Electric Company (EPE) ROW - Alternatives 2
  - and/or Tri-State Generation and Transmission Association, Inc. (or Tri-State) ROW – Alternative 3.
- The Refuge is administered by the U.S. Fish and Wildlife Service (USFWS).
- SunZia would coordinate with EPE and Tri-State to replace their existing structures with larger structures that can accommodate both existing and proposed SunZia lines.
- Due to existing easements widths, only one new SunZia transmission line could be routed within each easement. Thus, the project could result in rebuilding both the EPE and Tri-State lines.

Component 3: Segment 4 Reroute
Reroute Alternative 2

- cross ~ 6 miles of BLM-administered land
- cross ~14 miles of the Refuge within EPE’s 100-foot-wide easement.
- Would replace the existing structures with new monopole or lattice structures that would accommodate the existing 345 kV transmission line and the proposed SunZia 500 kV transmission line vertically on one set of structures.
Component 3: Segment 4 Reroute
Reroute Alternative 3

- cross ~ 9 miles of BLM-administered land and
- cross ~ 11 miles of the Refuge within Tri-State’s 50-foot-wide easement.
- Would replace existing structures with double-circuit, monopole structures to support the existing 115 kV transmission line
  transmission proposed SunZia 500 kV transmission line vertically
  on one set of structures.

Component 3: Segment 4 Reroute
ROW Elements

- Expected ROW configuration for Alternative 1 would include 2 parallel transmission lines within a 400-foot-wide ROW.
- Expected ROW configuration for Alternatives 2 and 3 would place existing and proposed lines on single structures located with the existing 100-foot-wide and 50-foot-wide easements, which would not be widened.
- Structures could include guyed and self-supporting steel tubular and lattice structures, with an average height of 135 feet and an average span of 1200-1600 feet (3-4 structures per mile). The monopole structures proposed under Alternative 3 would average 165-200 feet in height. The existing Tri-State structures are between 60-80 feet in height.
- Each of the alternatives would also require access roads and temporary work areas, including pulling-and-tensioning sites and concrete batch plants.
Component 4: SunZia West Substation

- The SunZia West Substation would be located east of Red Rock, AZ (Pinal County).
- The substation siting area would be located on Arizona State Lands adjacent to the permitted SunZia ROW.

Component 4: SunZia West Substation

- The substation would convert power from DC to AC.
- The substation siting area is approximately 80 acres, of which 47 acres would be outside of the permitted right of way.
- The substation footprint would be approximately 20 acres.
Resources to be Considered in the EIS

EIS analysis will tier to the analysis contained in the 2013 EIS, and augment as needed to address changed circumstances or new analysis areas.

Anticipated EIS topics include

- Climate and Air Quality
- Earth Resources (Minerals, Geology/Geological Hazards, and Soils)
- Paleontological Resources
- Water Resources
- Biological Resources (Wildlife, Vegetation, Noxious/Invasive Weeds, Special-Status Species)
- Wildland Fire Ecology and Management
- Cultural Resources and Tribal Concerns Visual Resources
- Land Use and Recreation
- Special Designations
- Wilderness, Wilderness Study Areas, and Lands with Wilderness Characteristics
- Socioeconomics and Environmental Justice
- Health and Safety and Hazardous Materials

Proposed Land Use Plan Amendments

- Each agency will evaluate conformance of the SunZia project with their existing land use plan. If the project is not in conformance, a land use plan amendment could be warranted.
- Potential amendments identified for the SunZia project include adjustments to ROW avoidance or exclusion areas and visual resource management classifications in the BLM Soccoro and Mimbres FO Resource Management Plans (RMPs). Amendments to the Cibola National Forest Plan and Sevilleta National Wildlife Refuge Comprehensive Conservation Plan may also be required.
- The EIS would evaluate impacts from any potential amendments. Based on the analysis, each affected agency would decide whether to approve the proposed amendments.
Public Scoping- We Want To Hear From You!

- Public scoping is a vital component of the NEPA process, and serves to include agencies, stakeholders, and interested public in the decision-making process.
- The purpose of the SunZia scoping process is to seek input on resource issues and alternatives to be analyzed in the Draft EIS.
- Feedback received during the public scoping process will help the BLM determine relevant issues that will influence the scope of the environmental analysis and guide the process for developing the Draft EIS.

Keys to Making Effective Public Scoping Comments

- The most effective scoping comments identify or suggest:
  - resource issues that may require environmental review
  - reasonable alternatives to the proposed action
  - analysis methodologies or data sources
  - potential mitigation (ways to further reduce or avoid environmental impacts)
- Comments must be timely (received by due date indicated in NOI)
Methods for Providing Scoping Comments

Formal scoping comments may be submitted by any of the following methods:

- **Electronically through the BLM’s ePlanning website:**
  https://eplanning.blm.gov/eplanning-ui/project/2011785/510

- **Mailing or hand-delivering comments to**
  BLM New Mexico State Office
  Attn: Adrian Garcia, Project Manager SunZia Southwest Transmission Project
  301 Dinosaur Trail
  Santa Fe, NM 87508

- **Recording a telephone message at 1-888-959-2510**
  Scoping comments are due on or before July 6, 2021

Thank you for watching this presentation.

If you have additional questions about the project, or would like assistance, please contact Adrian Garcia, Project Manager, BLM New Mexico State Office

- **Phone:** (505) 954-2199
- **email:** agarcia@blm.gov