

August 22, 2012

*Delivered via electronic mail ([NMSunZiaProject@blm.gov](mailto:NMSunZiaProject@blm.gov)) and U.S. mail (with attachments).*

Adrian Garcia, Project Manager  
Bureau of Land Management, New Mexico State Office  
Attention: SunZia Southwest Transmission Project  
P.O. Box 27115, Santa Fe, NM 87502-0115

**Re: SunZia Draft EIS Comments**

Dear Mr. Garcia:

Please accept and fully consider these comments on the SunZia Draft Environmental Impact Statement (DEIS) on behalf of The Wilderness Society, Sonoran Institute, Audubon Rockies, Western Resource Advocates, New Mexico Wilderness Alliance, Arizona Wilderness Coalition, and Natural Resources Defense Council.

**Introduction**

Our groups support the environmentally responsible development of renewable energy and associated infrastructure, including transmission lines, on public and private lands as a means to reduce threats from climate change and achieve a clean energy future. This type of development is not appropriate everywhere, however, and places with sensitive and important natural and cultural resources should be protected from development of any kind.

**Based on the incomplete information we have now, we think it is possible that there could be benefits to renewable energy from SunZia, but we have serious concerns regarding the relative amount and importance of those benefits, and even greater concerns regarding the environmental impacts SunZia would cause.**

We engage in proposed transmission projects with several goals in mind: 1) gathering and sharing information on how the project will impact regional electricity generation, including potential to increase or decrease renewable energy and fossil fuel-based electricity generation; 2) gathering and sharing information on the likely impacts to the environment and other resources from construction, operation and maintenance of the project; and 3) providing constructive recommendations to managing agencies and project proponents that a) maximize likely benefits to renewable energy production and associated reductions in greenhouse gas emissions from the project, and b) avoid, minimize or off-set impacts from the project.

Though SunZia has been in the BLM National Environmental Policy Act (NEPA) permitting process for several years, a great deal of uncertainty remains regarding a number of key elements of the project, including: the purpose and need/potential renewable energy benefits of the project; the route that will be selected as the BLM-preferred alternative route in the Final EIS (FEIS); and the potential to avoid/minimize/mitigate impacts from construction, operation and maintenance of the project if it is approved. This uncertainty is compounded by the lack of detail on these elements in the DEIS, as well as the project proponent's opposition to the BLM-preferred alternative route in three locations in New Mexico and Arizona.

The other proposed transmission lines in the region also add uncertainty to SunZia. There are at least four other major transmission lines proposed to carry at least some renewable energy west from central and eastern New Mexico (two intrastate, one to Arizona and one to California). It is unclear how these projects all relate to each other, and how their relative benefits and impacts compare.

**These uncertainties notwithstanding, it is clear that all of the potential routes for SunZia would cause significant impacts to important natural resources, and these impacts are cause for significant concern to our organizations.** We are committed to continuing our engagement until these questions can be answered.

Our comments focus on four key issues:

- 1) Purpose and need for SunZia
- 2) Environmental impacts and potential mitigation measures
- 3) Relative merits of other proposed transmission lines in the region
- 4) Need for additional opportunities for public input

#### **I. Purpose and need for SunZia**

The DEIS does not adequately describe or justify the purpose and need for this project. At a minimum, the BLM should address the following in revising this section:

##### **a. Meeting energy needs in New Mexico, Arizona and California**

The DEIS primarily discusses how SunZia will meet specific states' energy demands, relying on data provided by utilities in October 2010. This information has been subsequently updated through various integrated resource plans that detail what new energy resources utilities will likely pursue and factors influencing their mix of these resources.<sup>1</sup>

The DEIS does not adequately discuss how SunZia could facilitate the delivery of electricity products that would meet California's energy needs. Two important issues for SunZia are whether the line would help generators meet California's deliverability requirements for out-of-state renewable energy resources and whether the products shipped on the line would be cost-competitive. This discussion should explicitly consider how ongoing transmission planning and permitting efforts affect SunZia's linkages to California balancing areas, especially given the prioritization of critical congestion issues in this region.<sup>2</sup> Information provided in various Arizona

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<sup>1</sup> For example: APS, <http://www.aps.com/files/variou s/ResourceAlt/2012ResourcePlan.pdf> PNM, [http://www.pnm.com/regulatory/pdf\\_electricity/irp\\_2011-2030.pdf](http://www.pnm.com/regulatory/pdf_electricity/irp_2011-2030.pdf); SRP, <http://www.srpnet.com/about/pdfx/ResourcePlanFY2011.pdf>; TEP, ([http://files.shareholder.com/downloads/UNIS/2014411930x0x557199/806B57DB-06CF-4E46-BB16-124E53DCAC74/2012\\_TEP\\_IRP\\_1.pdf](http://files.shareholder.com/downloads/UNIS/2014411930x0x557199/806B57DB-06CF-4E46-BB16-124E53DCAC74/2012_TEP_IRP_1.pdf)).

<sup>2</sup>The last completed national transmission congestion study was completed in 2009, available on line: [http://congestion09.anl.gov/documents/docs/Congestion\\_Study\\_2009.pdf](http://congestion09.anl.gov/documents/docs/Congestion_Study_2009.pdf). The 2012 study is underway, and information on pre-study workshops and comments can be accessed: <http://energy.gov/oe/services/electricity-policy-coordination-and-implementation/transmission-planning/2012-national>.

utilities' biennial transmission reports and 10-year transmission plans will be useful in this analysis.  
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### **b. Addressing grid reliability and congestion**

The DEIS does not clearly substantiate current congestion and reliability issues that SunZia will address. To document current or potential future reliability and congestion issues in a clear, credible fashion, the BLM should incorporate the most recent assessments conducted by Western Energy Coordinating Council, Southwest Area Transmission planning group, and Arizona utilities biennial transmission reports.<sup>4</sup> For example, the Arizona Corporation Commission's 2012 (7<sup>th</sup>) Biennial Transmission Assessment (BTA) now being drafted shows Arizona electricity demand forecasts 10 to 16% less than the previous transmission assessment in 2010 (6<sup>th</sup> BTA).<sup>5</sup> It would be helpful to compare available transmission capacity with potential demand in two regions: New Mexico and Arizona, and Arizona and California.

The DEIS does not evaluate the degree to which distributed generation, energy efficiency, demand-side management, or proposed line enhancements and additions may modify or shape congestion and reduce the need for new transmission lines like SunZia (for more information, see attached presentations (Attachments 1 and 2) on WECC's analysis of the impact of energy efficiency, distributed generation, and demand response on transmission and capacity needs.)

Finally, though there is the potential for significant amounts of wind resources to access the line, there is no discussion of how SunZia will manage the introduction of large amounts of this variable resource which may affect reliability.

### **c. Evaluating factors that may influence the energy mix that runs on SunZia**

The DEIS does an inadequate job of describing short- and long-term factors that may influence the energy mix delivered by SunZia. It primarily relies on the status of interconnection requests in SunZia's project area as of September 2011, which provides a "snapshot" of potential SunZia customers. However, a fuller picture could be provided that gives the public a better understanding of the factors that may influence SunZia's financial viability as a transmission project and its ultimate energy mix. Given the current uncertainties and volatility surrounding energy markets, the DEIS should describe, at a minimum, the following factors:

- The forecast demand for new natural gas generation in relevant IRP documents and what, if any, transmission capacity would be needed to accommodate it;
- Planned coal plant retirements in the region and potentially available transmission capacity;
- A description of federal and state policies that could stimulate development of wind and solar energy resources that might access SunZia;

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<sup>3</sup> Prior biennial reports at: <http://www.azcc.gov/divisions/utilities/electric/Biennial.asp>. Information on current biennial reports and 10-year transmission plans: <http://www.azcc.gov/Divisions/Utilities/Electric/BTA-Index.ASP>.

<sup>4</sup> WECC's 10-year plan at: <http://www.wecc.biz/library/StudyReport/Wiki%20Pages/Home.aspx>. SWAT reports and presentations at: [http://www.westconnect.com/planning\\_swat.php](http://www.westconnect.com/planning_swat.php).

<sup>5</sup> At: <http://www.azcc.gov/divisions/utilities/electric/Biennial.asp>.

- Trends in the cost and pricing of renewable and non-renewable resources that may influence development of these resources proximate to SunZia; and
- FERC's May 2011 order regarding SunZia's allocation of ownership rights and capacity to negotiate rates.

The BLM's initial characterization of the SunZia project conveyed the incorrect impression that SunZia would exclusively provide for the transmission of renewable energy power—a claim that few transmission lines could ever make. In this rapidly-changing energy market, exact assessments about the clean energy merits of a proposed transmission project are unrealistic. However, the DEIS could do much more to incorporate readily available information to create a more credible picture of the demand for renewable energy resources, how available transmission capacity constrains their development, and the degree to which SunZia is a viable solution to this issue in the context of region-specific infrastructure policy and market factors. In educating the public about this project's purpose and need, it is incumbent upon the BLM to provide as much information as possible to allow the public to arrive at a thoughtful conclusion about the project's merits.

Finally, to provide increased confidence that the line will principally carry renewable energy, BLM and SunZia should provide continuous, transparent updates on potential subscribers to the line and explicit statements of generation intent for the line in a manner that does not violate the Federal Energy Regulatory Commission (FERC) open access rules. This suggestion was adopted by developers of the Gateway West line who are now posting updated subscriber information online.<sup>6</sup>

## **II. Environmental impacts and potential mitigation measures**

SunZia is a proposal for up to two 500 kV transmission lines running ~500 miles from central New Mexico to between Tucson and Phoenix, Arizona. The potential routes would impact a wide variety of sensitive ecosystems, including the Rio Grande River Corridor, Citizens' Wilderness Inventory units in central and southern New Mexico, the large, unfragmented, and ecologically valuable San Pedro and Aravaipa watersheds east of Tucson, and many more.

The scope of this project demands an extremely careful and robust evaluation of both the potential impacts from various routes as well as mitigation measures that might be employed to avoid, minimize or mitigate impacts. Unfortunately, as described below, the DEIS lacks these details. This lack of detail makes it very difficult to evaluate SunZia, and underscores the importance of our recommendations for additional opportunities for public input in Section IV of this letter. The comments below are based on the best available information at this time.

### **a. Inadequacy of details regarding environmental impacts and mitigation measures in the DEIS**

A comparison between the DEIS for SunZia and the DEIS for the proposed Gateway West transmission line from Wyoming to Idaho illustrates some of the details that should be included in the Supplemental EIS and/or supplemental documents recommended in Section IV.

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<sup>6</sup> Available at: <http://www.pacificorp.com/tran/tp/eg/gw.html>

The Gateway West DEIS details more specific information about numerous potential impacts of the project, including numbers of acres and the type of vegetation that are impacted, as well as the planned widths of access roads that will be constructed. NEPA requires BLM to complete these types of analyses and present this information in the DEIS so that the public can understand the potential impacts of the proposed project, and so that mitigation measures that the agencies devise can be better tailored to minimize impacts to affected wildlife species and landscapes.

The two DEISs differ not only in the level of descriptive specificity, but also in the level of biological analysis conducted prior to DEIS completion. The SunZia DEIS relies on remote assessment of biological impacts, using literature reviews and geospatial data to estimate the likelihood of overlap with species and potential impacts upon them. In contrast, the Gateway West DEIS, in response to concerns raised by BLM and USFS biologists during scoping, improves upon this level of analysis by also beginning with a literature review but going on to describe a variety of upfront biological field surveys (Gateway West DEIS 3.10-8 and 3.11-11). These were used to identify, for example, locations of burrowing owl and raptor nests and Columbian sharp-tailed grouse and greater sage-grouse leks, among other important biological resources. Furthermore, the Gateway West DEIS includes clear lists of detailed issues raised during scoping (Gateway West DEIS 3.10-4 and 3.11-4), which help frame and structure the subsequent impacts analyses and help clarify what analysis gaps remain. The SunZia DEIS lacks such a feature and only describes scoping issues in general terms, for example: “[A] large volume of scoping comments identified environmental resources within the study area; especially relating to migratory birds, listed species, habitat fragmentation, preservation of wilderness and wilderness-like areas, cultural resources, aesthetics, private property, property values, and local economies” (SunZia DEIS 4-245).

Another way that the type of analysis included in the Gateway West DEIS exceeds that included in the SunZia DEIS is with the discussion of impacts and mitigation to the ESA candidate species yellow-billed cuckoo. The Gateway West DEIS acknowledges that construction impacts in suitable riparian habitat could disturb the bird, and proposes to mitigate that impact through having “a preconstruction survey for the yellow-billed cuckoo [that] must be conducted at any proposed crossing of suitable habitat. If birds are detected within 1 mile of the centerline (within existing habitat), construction must not occur until the young have fledged or the nest is abandoned.” (Gateway West 3.11-79) In contrast, the SunZia DEIS states “construction activities within riparian areas should take place outside of the nesting period for the cuckoo, which is approximately May through September.” (SunZia 4-74) The Gateway DEIS looks at a finer scale of impacts to the species – surveys are proposed to be conducted to ensure that the species wouldn’t be impacted. The SunZia DEIS has a general plan to just avoid the area for a few months and start construction in September, with no requirement to complete field surveys to confirm whether or not birds are nesting there.

Analysis of potential impacts to golden eagles and potential mitigation measures is also inadequate in the SunZia DEIS. The description of impacts and mitigation measures includes no details regarding the specific impacts that are expected and when construction would be avoided. For example, the DEIS state, “impacts to Golden Eagles could include construction disturbance of breeding or nesting behavior, potentially resulting in nest abandonment. Seasonal avoidance of construction in Golden Eagle nesting areas would minimize disturbance of the birds.” (4-72)

The inadequacy of these details underscores the importance of our recommendations in Section IV for additional analysis and publication of a Supplemental EIS and/or supplemental documents for public review and comment prior to publication of a FEIS.

### **b. Environmental impacts**

Our groups have submitted scores of pages of comments detailing the important natural resources and values in these areas that would be impacted by SunZia, and we incorporate those comments by reference. Other groups have also submitted hundreds of pages of additional comments with additional details.

We do not repeat that information in these comments. Rather, we have highlighted areas of ongoing concern and new issues that have arisen since we submitted scoping comments in 2010. We also propose actions that are needed to address these impacts.

#### New Mexico impacts

- **Rio Grande River Corridor:** the Rio Grande River corridor, and in particular the Middle Rio Grande, is a critical flyway for migrating birds and many other species. For this reason, we recommended in scoping comments that BLM use an alternative that would run down the east side of the White Sands Missile Range (WSMR) and cross the Rio Grande River near Las Cruces, where impacts would be much lower. The routes east of the WSMR have been dropped from consideration in the DEIS. All of the remaining alternatives would cross the Rio Grande in the Middle Rio Grande region between the Bosque del Apache and Sevilleta National Wildlife Refuges, an area that is particularly important for wildlife. Audubon New Mexico has significant expertise on these issues and is submitting detailed comments including information on the importance of this area for wildlife habitat and the likely impacts of SunZia. Though these impacts may be impossible to fully mitigate, Audubon New Mexico's comments also include recommendations on mitigation measures that should be employed if SunZia is approved and built in this area. We support the information and recommendations in Audubon New Mexico's comments and ask that BLM fully consider and address them.
- **Citizens' Wilderness Inventory units:** many of the potential routes would intersect Citizens' Wilderness Inventory (CWI) units inventoried by the New Mexico Wilderness Alliance (NMWA). These areas have been found by NMWA to have "wilderness characteristics," including naturalness, solitude and the opportunity for primitive recreation. Beyond these core values, these lands also provide important wildlife habitat, cultural and scientific resources, invaluable ecosystem services including clean air and water, important economic benefits, and many other resources and values. The sensitive nature of these lands and their resources and values makes protection critical and transmission development on them inappropriate. The CWI units intersected by the SunZia routes in New Mexico (by SunZia subroute number) are:
  - E101: Cibola Canyon, Stallion, Sierra de la Cruz
  - E133: Veranito
  - A111 and A112: Padillo Gonzales
  - E90 and A90: Stallion
  - A160: Chupadera Wilderness Addition

- E211: Magdalena Mountains 2
- A161B: Magdalena Mountains 3
- A270: Penasco Canyon
- A430: Sierra de las Uvas
- A361 and A400: Nutt Mountain
- A481: Goodstight Mountains
- A430 and A500: Massacre Peak
- B150a: Lordsburg Playas North

GIS data for the NMWA CWI units is attached (Attachment 3).

### Arizona impacts

- **Aravaipa Canyon:** Aravaipa canyon is a remote area with significant environmental resources that could be impacted by SunZia. Aravaipa is part of a significant set of roadless areas running from the Apache Reservation down to Cochise County in a 100 mile long swath. An analysis by The Nature Conservancy found that the Aravaipa Canyon region is the second largest unfragmented area in the Arizona and New Mexico region, second only to the Grand Canyon. Impacts to these resources and the Aravaipa Creek watershed are of serious concern. Specific impacts of concern include:
  - *Direct habitat fragmentation* caused by installation of the transmission line and any associated roads and infrastructure;
  - *Indirect habitat fragmentation* caused by:
    - *Increased access.* The creation of an infrastructure corridor of any kind (even with helicopter installation of transmission towers) is likely to increase human access and use, especially through off-road vehicle use, including illegal off-road vehicle use. If a road or trail is built for construction, operations and maintenance of the line, these impacts will likely be increased greatly. Experience with access along other Rights of Way has shown that controlling human access is extremely difficult.
    - *Invasive species.* Disturbance is known to provide increased spread of invasive species and associated habitat impacts.
    - *Preventing use of fire as a habitat management tool.* Natural fires and controlled burns are critical to maintaining the habitat in the Aravaipa Canyon region. However, fire is generally suppressed as both a reliability and health and safety risk near existing transmission lines. There are federal, state, and local regulations and plans that require projects to comply with fire suppression and prevention around power lines. The North American Electric Reliability Council standards and Institute of Electrical and Electronics Engineers standards apply to all transmission lines that are critical for electrical reliability in the region. The Sunrise Powerlink project has mitigation measures (BIO-APM-9, Sunrise Powerlink FEIS B-110) that involve brush clearing around the transmission tower structures for fire protection that adheres to those national standards as well as to US Forest Service land management plans and California Code of Regulations. (Sunrise Powerlink FEIS D.15 47-52) SunZia plans to suppress fire through buffer zones of at least 100 feet around conductors and vegetation treatment. (SunZia DEIS 4-107,108).

- *Erosion and other watershed impacts to Aravaipa Creek and its tributaries, as well as the San Pedro River.*
- **San Pedro Valley:** The San Pedro Valley has significant habitat value for avian and mammal species and has been a conservation priority for both public agencies and NGOs for several decades. The biological resources in this valley are particularly rich due to the convergence of the Sonoran and Chihuahuan deserts and the presence of numerous Sky Islands which act as connectors between the temperate Rocky Mountains and the semi-tropical Sierra Madres. Impacts to these resources and the San Pedro River and watershed are of serious concern. Specific impacts of concern include:
  - *Direct and indirect habitat fragmentation.* Many of the same impacts described for the Aravaipa Canyon route would occur with the San Pedro Valley route. The overall fragmentation impacts would be worse for the Aravaipa route because the Aravaipa region is currently the second largest unfragmented area in the Arizona and New Mexico region.
  - *Erosion and other watershed impacts to the San Pedro River.*
  - *Impacts to the recently proposed Lower San Pedro National Wildlife Refuge.*
  - *Impacts to parcels of land that are currently being managed protectively to mitigate for impacts from other development.*
- **Citizen-Proposed Wilderness units:** subroutes B153a and B153b intersect the corner of the Pinaleños Citizen-Proposed Wilderness (CPW) unit. The inventory of Arizona CPW units is maintained by the Arizona Wilderness Coalition (AWC), and these units have the same values as the CWI units described above. SunZia should not intersect the Pinaleños CPW unit or other CPW units. GIS data for the AWC CPW units is attached (Attachment 4).

### c. Mitigation measures

The scale and intensity of likely impacts from SunZia demand a robust and comprehensive approach to mitigation if the project is approved and constructed. These efforts must include all the steps in the mitigation hierarchy, including avoiding impacts wherever possible, minimizing unavoidable impacts through the use of best management practices on-site, and off-setting remaining impacts through off-site, compensatory mitigation.

As part of its NEPA analysis, BLM must evaluate the direct, indirect and cumulative impacts of the SunZia project, regardless of whether those impacts occur to federal lands or lands owned by states. “Case law interpreting NEPA has reinforced the need to analyze impacts regardless of geographic boundaries.” Council on Environmental Quality Guidance on NEPA Analyses for Transboundary Impacts<sup>7</sup> (July 1, 1997), citing, *Sierra Club v. U.S. Forest Service*, 46 F.3d 835 (8th Cir. 1995); *Resources Ltd., Inc. v. Robertson*, 35 F.3d 1300 and 8 F.3d 1394 (9th Cir. 1993); *Natural Resources Defense Council v. Hodel*, 865 F.2d 288 (D.C. Cir. 1988); *County of Josephine v. Watt*, 539 F.Supp. 696 (N.D. Cal. 1982). BLM is also obligated to evaluate mitigation for such effects. 40 C.F.R. § 1502.16 Accordingly, in evaluating mitigation measures, BLM should evaluate how to mitigate impacts on these other lands. The mitigation measures required for the Desert Sunlight solar project

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<sup>7</sup> Available at: <http://www.gc.noaa.gov/documents/transguide.pdf>



approved by BLM in 2011 provide an example of mitigation for both air quality and water quality impacts to non-federal land and landowners.<sup>8</sup>

We recommend a suite of mitigation measures that may apply in numerous places along SunZia below. **However, we want to emphasize that given the very significant impacts from SunZia along some parts of the route, it may be impossible to fully mitigate some impacts. Further, given our outstanding questions regarding the purpose and need for SunZia and our serious concerns about the impacts of SunZia, we emphasize that all of these recommendations are only applicable if the BLM chooses an action alternative as the preferred alternative in the Final EIS.**

### Avoidance

- **Route selection:** If the BLM chooses an action alternative as the preferred alternative in the FEIS, the BLM should select a final BLM-preferred route that avoids as many impacts as possible. As noted above, avoiding impacts may be impossible in some areas where limited viable route options remain (such as in the Tucson area). Based on the information we have now, and among the routes included in the Draft EIS, we have identified the following subroutes that would have (relatively) lower impacts:
  - *Rio Grande River crossing:* as noted in Section II (b) of these comments, Audubon New Mexico is submitting detailed comments on the Rio Grande River crossing and we support their recommendations on this issue.
  - *Avoidance of CWI units in New Mexico:* SunZia should not cross CWI units. In some cases all of the routes in the DEIS would cross CWI units, increasing the importance of minimizing and off-setting impacts if they cannot be avoided. Among the routes presented in the DEIS, the BLM should select the following subroutes as the BLM-preferred route in the FEIS:
    - I-25 crossing north of Truth or Consequences: the BLM should select subroute A260 to avoid intersecting the Penasco Canyon CWI unit (subroute A260 are in the BLM-preferred route in the DEIS).
    - Subroutes north of the proposed Midpoint Substation: the BLM should select subroutes A400, A440, A530, and A520 to avoid intersecting the Nutt Mountain, Sierra de las Uvas, and Goodstight Mountains CWI units (subroutes A400, A440, A530, and A520 are in the BLM-preferred route in the DEIS). The BLM should also adjust subroute A400 to avoid the Nutt Mountain CWI unit (subroute A400 currently runs along the edge of the Nutt Mountain CWI unit). The BLM should also adjust subroutes A440 and A530 to avoid the Massacre Peak CWI unit (subroutes A440 and A530 run along the edge of the Massacre Peak CWI unit).
    - Lordsburg Playa area: the BLM should select subroutes B160a and B160b to avoid intersecting the Lordsburg Playas North CWI unit (subroutes B160a and B160b are in the BLM-preferred route in the DEIS).

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<sup>8</sup> Available at:

[http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/palmsprings/desert\\_sunlight.Par.39828.File.dat/ROD%20appendix%201%20protest%20resolution.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/palmsprings/desert_sunlight.Par.39828.File.dat/ROD%20appendix%201%20protest%20resolution.pdf)

- *Avoidance of CPW units in Arizona:* SunZia should not cross CPW units. The BLM should adjust subroutes B153a and B153b to avoid intersecting the Pinalenos CPW unit.
- **Route micro-siting:** As described in Section IV below, the BLM should include detailed maps of the BLM-preferred route in the FEIS, as well as a draft Construction, Operation and Maintenance Plan. The BLM should analyze specific impacts along the BLM-preferred route in the FEIS and adjust the route through micro-siting to avoid impacts to sensitive resources.

### Minimization

If the BLM chooses an action alternative as the preferred alternative in the Final EIS, the BLM should require use of Best Management Practices (BMPs) on-site to minimize impacts. There are numerous resources with additional information on best practices for mitigation for transmission line planning and development. These include, but are not limited to the following:

- The Avian Power Line Interaction Committee’s “Suggested Practices for Avian Protection on Power Lines” *available at:* [http://www.aplic.org/uploads/files/2643/SuggestedPractices2006\(LR-2\).pdf](http://www.aplic.org/uploads/files/2643/SuggestedPractices2006(LR-2).pdf);
- Edison Electric Institute’s “Mitigating Bird Collisions with Power Lines” *available at:* [http://www2.eei.org/products\\_and\\_services/descriptions\\_and\\_access/mitigating\\_birds.htm](http://www2.eei.org/products_and_services/descriptions_and_access/mitigating_birds.htm)
- Western Resource Advocates’ “Smart Lines” report, *available at:* <http://www.westernresourceadvocates.org/energy/smartlines.php>; and
- Wild Utah Project’s “Best Management Practices for Siting, Developing, Operating and Monitoring Renewable Energy in the Intermountain West” *available at:* <http://wildutahproject.org/files/images/BMP%20for%20Renewable%20Energy-2012-WUP.pdf>

In addition to these broadly applied BMPs, the BLM should also require the use of the following minimization techniques where applicable:

- **Helicopter installation:** Helicopter installation has been used to limit impacts in construction of numerous transmission lines, including the Sunrise Powerlink. The American Electric Power Company was the first to use helicopters in large-scale transmission line construction in 1960, and the use of this approach has continued in other projects. Helicopter installation can provide the benefit of eliminating the need to build roads or trails and eliminating the need to use vehicles or off-road vehicles to access tower pad sites for construction, operation and maintenance of the transmission line. In the Sunrise Powerlink project, helicopters, specifically the Erickson air crane, were used to install the transmission tower structures for an estimated 70% of the transmission route, which eliminated the need for cranes and road construction. In addition, the use of micropile foundations to drill holes for the tower structures and reduce the use of cement greatly reduced impacts to the site locations. The BLM should require helicopter installation with no construction of roads or trails and no use of vehicles or off-road vehicles to access tower pad sites in areas where habitat fragmentation is major concern. Specifically, the BLM should require the use of helicopter installation for all subroutes going through the Aravaipa and San Pedro watersheds if SunZia is approved and the final route traverses these areas.

- **Minimizing road and trail construction:** where significant impacts exist but do not require helicopter installation, the BLM should require that road and trail construction be minimized, and that any temporary roads be fully reclaimed.
- **Limiting access to any roads and trails that are constructed:** where roads and trails are constructed, aggressive measures should be taken to limit access, including fencing, locked gates, use of natural terrain features to limit access, and security patrols.
- **Use of bird diverters:** The BLM should require the use of bird diverters and other mitigation measures to decrease the likelihood of bird strikes in areas of known heavy bird use. These include, but are not limited to:
  - The Rio Grande River crossing
  - The Aravaipa Canyon region
  - The San Pedro Valley

### Off-site, compensatory mitigation

Because SunZia will cause significant impacts that cannot be fully avoided or minimized, on-site, the BLM should require a comprehensive off-site, compensatory mitigation plan. Compensatory mitigation plans have been required for several transmission lines, including the Sunrise Powerlink. San Diego Gas & Electric (SDG&E), the Sunrise Powerlink project proponent, provided funding to purchase and manage nine parcels of unique mitigation lands of nearly 10,000 acres of sensitive habitat in San Diego and Imperial Counties. These lands would compensate for impacts to sensitive vegetation and wildlife species during construction, operation, and maintenance of the project. In addition, at least 185 acres of offsite mitigation lands were purchased and will be managed by SDG&E to offset impacts in the Cleveland National Forest (Sunrise Powerlink Habitat Acquisition Plan and Habitat Management Plan, page 2).<sup>9</sup>

The compensatory mitigation plan for the SunZia project should include, but not be limited to, the following elements:

- **Purchase and permanent protection of private or State Trust lands:** the BLM should require the applicant to purchase land of high conservation value and protect it through a conservation easement or another mechanism that affords permanent protection from development of any kind. This should be required for impacts to numerous areas along the routes, including but not limited to:
  - *CWI and CPW units intersected by SunZia routes in New Mexico and Arizona:* if the BLM-preferred alternative in the FEIS includes any routes that intersect CWI or CPW units, the BLM should require purchase and protection of lands as mitigation.
  - *The Aravaipa and San Pedro watersheds and region:* There are nearby state trust lands that have been previously identified as having significant conservation values, including approximately 36,000 acres in the Catalina-Galiuro corridor, which could be subject to conservation acquisition as part of a mitigation strategy.
- **Administrative protection of BLM or Forest Service lands:** the BLM and Forest Service should amend relevant land use plans to add administrative protective designations to land

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<sup>9</sup>Available at:

[http://www.cpuc.ca.gov/environment/info/aspn/sunrise/otherdocs/Habitat\\_Acqsn\\_Habitat\\_Mgmt\\_Plan\\_092110.pdf](http://www.cpuc.ca.gov/environment/info/aspn/sunrise/otherdocs/Habitat_Acqsn_Habitat_Mgmt_Plan_092110.pdf)

of high conservation value. The management prescriptions for these protected areas should preclude development of any kind. These protections could include:

- *Area of Critical Environmental Concern designations*
- *Managing BLM-identified lands with wilderness characteristics to protect those characteristics*
- *Special Recreation Management Area designations with a focus on non-motorized use*

### **III. Relative merits of other proposed transmission lines in the region**

There are numerous other proposed transmission lines in the region that may also carry renewable energy. These proposals include:

- Southline from Las Cruces, NM to Tucson, AZ;
- Centennial West Clean Line from central NM to the Los Angeles, CA area;
- Lucky Corridor from eastern NM to near Taos, NM; and
- Power Network NM from the same wind resource area where SunZia would originate (northeast of Corona, NM) to the Rio Puerco substation northwest of Albuquerque, NM.

It is unclear how these projects all relate to each other, and how their relative benefits and impacts compare. All of these proposals are at much earlier phases of the permitting process than SunZia, with only Southline having initiated the NEPA process and completed scoping. For this reason, we have even less information about these proposals than we do about SunZia.

Even with our limited information, however, it is apparent that some of these proposals could provide some of the same purpose and need/benefits that SunZia purports to provide. That said, the differences between the proposals and the potential that there could potentially be benefits to constructing all of them indicates that they should not simply be considered “interchangeable”.

One thing that is clear is that some of the specific impacts that SunZia would cause could be avoided with these proposals – for example, none of these projects propose routes through the Aravaipa Canyon region or the San Pedro Valley.

That said it is likely that all of these proposals will face significant challenges related to siting and impacts, and any of them could face fatal flaws related to impacts, interconnection, financing, or other issues. These challenges could be equal to or greater than those facing SunZia – or they could be less than those facing SunZia.

We include discussion of these other proposals to emphasize that in general, managing agencies like the BLM, transmission developers, transmission planners like the Western Electricity Coordinating Council, stakeholders, and others involved in transmission and electrical generation planning should work to advance projects that provide the most benefits with the fewest environmental and other costs.

We do not have enough information on these other proposals to make a judgment at this time regarding whether any of them might provide similar purpose and need/benefits at lower environmental and other costs than SunZia. We urge careful consideration of all options as more information is developed and these other proposals advance further. Further, we urge that if and

when a decision can be made, that managing agencies advance projects that provide the most benefits and fewest environmental and other costs.

#### **IV. Need for additional opportunities for public input**

Because of SunZia's significant environmental and community impacts and uncertainty related to the final route selected, and because of the inadequate details in the DEIS described in Section II (a) of this letter, we strongly encourage the BLM to release either a Supplemental EIS and/or one or more supplemental documents for public review and comment prior to the release of a Final EIS. The Supplemental EIS and/or supplement documents should provide, at a minimum, the following information:

1. Detailed maps of the final BLM-preferred route. These maps should be detailed enough to allow for public comments addressing impacts on the likely location of transmission towers, access roads, and associated construction, operation, and maintenance activities proposed for the project.
2. A detailed draft Construction, Operation, and Maintenance plan that describes proposed on-site features and activities designed to mitigate the project's environmental and community impacts from the final BLM-preferred route.
3. A detailed draft off-site mitigation plan that describes proposed land protection and restoration goals—including, but not limited to, specific land acquisition, land exchanges, conservation designations, and associated mitigation funding commitments—to mitigate the project's environmental and community impacts from the final BLM-preferred route.

Release of the Supplemental EIS and/or supplemental documents should be accompanied by a public review and comment period of at least 90 days and public meetings where the public is granted the opportunity to provide oral comments and have these included in the public record.

#### **Conclusion**

In closing, we want to reiterate that based on the incomplete information we have now, we think it is possible that there could be benefits to renewable energy from SunZia, but we have serious concerns regarding the relative amount and importance of those benefits, and even greater concerns regarding the environmental impacts SunZia would cause.

In addition to the above recommendations, our organizations are committed to continuing to explore the full range of mitigation strategies that may help minimize this project's environmental and community impacts. To that end, we will be providing the BLM, project proponents, and members of the public with additional information and recommendations throughout the process of finalizing the project's EIS and ROD. We invite continued dialogue and suggestions from the BLM, project proponents, and members of the public as to how we could be most helpful in this regard.

Sincerely,

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### **Attachments**

- Attachment 1: 2011 TEPPC Study Program – Study Results. *PC4 - High Energy Efficiency, Distributed Generation and Demand Response*. Keegan Moyer, Associate Staff Engineer, WECC. July 12th, 2012
- Attachment 2: High DSM/DG Case: Approach for DG Estimates. Arne Olson, Energy and Environmental Economics (E3) on behalf of Lawrence Berkeley National Laboratory (LBNL). November 11, 2011
- Attachment 3: GIS data for New Mexico Wilderness Alliance Citizens' Wilderness Inventory units (on CD-ROM)
- Attachment 4: GIS data for Arizona Wilderness Coalition Citizen-Proposed Wilderness units (on CD-ROM)