



# United States Department of the Interior



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In Reply Refer To:  
FWS/R2/ES-HC/EC/052407

**AUG 21 2012**

## Memorandum

To: State Director, Bureau of Land Management, Albuquerque, New Mexico  
(Attn: Adrian Garcia)

From: **ACTING** Regional Director, Region 2

*Jay E. Nicholas*

Subject: Comments – Draft Environmental Impact Statement, Resource Management Plan Amendments and Plan of Development for the SunZia Southwest Transmission Project, Dated May 2012

This memorandum documents our review of the Draft Environmental Impact Statement (DEIS), Resource Management Plan Amendments (RMPA) and Draft Plan of Development (POD) for the SunZia Southwest Transmission Project, dated May 2012, developed by the Bureau of Land Management (BLM) in accordance with the National Environmental Policy Act of 1969 (NEPA, 42 U.S.C. §4321 *et seq.*). The project includes a right-of-way, in Socorro, Sierra, Luna, Grant, and Hidalgo counties in New Mexico and Cochise, Greenlee, Graham, Pima, and Pinal counties in Arizona, to construct and operate two 500-kilovolt (kV) electric transmission lines. The proposed transmission line route alternatives range between approximately 460 and 530 miles in length. It also requires a right-of-way crossing approximately 163 to 205 miles of BLM lands in Arizona and New Mexico. The remainder of the route would cross lands owned by state, private, or other entities. Proposed new substations would also be constructed in Luna, Hidalgo, and Graham counties. Standard and selective mitigation measures are identified.

### Service Concerns

The Service believes the DEIS is an inadequate analysis and accounting of the potential environmental consequences of the proposed SunZia Southwest Transmission Project. In failing to fully and fairly disclose and discuss the potential significant environmental impacts of the proposed project, the DEIS is not consistent with the purpose of the National Environmental

Policy Act. Alternatives that would have protected against unnecessary effects to the environment and ultimately resulted in protections to sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations were not sufficiently evaluated. The Service also believes that BLM did not honor the intent of the SunZia Transmission Project's Cooperating Agency Memorandum of Understanding or the BLM *Desk Guide to Cooperating Agency Relationships and Coordination with Intergovernmental Partners*. Cooperating Agencies statutory expertise was not sufficiently utilized, as BLM chose to limit communication and engagement. The following list identifies our primary concerns, while the remaining portion of our response provides a detailed accounting of these concerns.

- **Incomplete analysis of potentially affected federal-trust resources**
- **Incomplete analysis and comparison of scoped routes and routes ultimately defined as alternatives in the DEIS**
- **Avian collision-risk analysis flawed and field study inadequate to address migratory bird concerns**

Based on our review of the analysis in the DEIS/RMPA/POD, the Service believes the BLM proposed alternatives, including the preferred alternative, do not adequately analyze and account for impacts to Federal trust and other wildlife resources. Previously scoped routes with potential to address Service concerns were not adequately evaluated, evaluated against poorly analyzed alternatives that were removed from additional consideration, or arbitrarily removed from consideration as alternatives in the DEIS. Existing alternatives should be analyzed based on information provided by the Service, other Cooperating Agencies, the general public, and additional alternatives and mitigation measures formulated that would avoid or further minimize impacts should be considered.

Specifically in New Mexico, the Service believes Subroutes 1A (north of Socorro) and 1B2 (north of San Antonio), where they cross the Middle Rio Grande between Sevilleta and Bosque del Apache National Wildlife Refuges (NWR), are not the least damaging to Federal trust and other wildlife resources, the considerable conservation and management investments made by the Service and numerous other entities with interest in the Rio Grande area. Subsequently, the Service recommends BLM evaluate two additional alternatives. The first recommended additional alternative would be one that crosses the Middle Rio Grande north of Sevilleta NWR and the Bernardo Wildlife Area toward Belen and then turns south at a location west of Sevilleta NWR. The second recommended additional alternative would run south to the east side of the Rio Grande and east of Bosque del Apache NWR and west of White Sands Missile Range, ultimately crossing the Rio Grande preferably below Caballo dam. This second recommendation would require Congressional approval to release BLM's Antelope Wilderness Study Area from future wilderness consideration, as it would have to be crossed to follow the recommended route.

Even with inclusion of these routes as alternatives, there will be potential impacts to Federal trust resources. As such, mitigating alternate designs to any river crossing, such as undergrounding or bridging, need to be included as part of the proposed project. Alternative designs do not have to span the entire riparian area, as currently presented by the DEIS and supporting information.

Significant waterfowl and crane collision concerns are anticipated to be associated with the river channel portion of the riparian area of the alternatives. Additional collision concerns for other migratory birds funneling through the entire riparian area can be minimized for remaining infrastructure sited in the riparian area through use of appropriate pole types (e.g., monopole structures instead of guyed lattice towers) and configuration thus increasing the visibility of the overhead ground and communication wires (e.g., line markers, increasing the diameter of features through alternate materials and designs).

In Arizona, the Service believes Subroute 4C2c is not the least damaging to Federal trust and other wildlife resources, or to the considerable conservation and management investments made by the Service and numerous other entities with interest in the San Pedro River Valley. However, Subroute 4C3 through the Tucson Basin is preferable in that regard. Subroute 4C2c would result in new impacts in the San Pedro River Valley in a large area that is unfragmented and not developed. Similarly, Subroutes 4A and 4B would result in new impacts in the Galiuro Mountains in a large area that is unfragmented and not developed and could result in adverse impacts to aquatic resources in Aravaipa Creek and Turkey Creek, including the endangered spikedace (*Meda fulgida*) and loach minnow (*Tiaroga cobitis*), and the species' critical habitat.

The Service believes mitigation measures, such as undergrounding or a high visibility/marked bridged crossing of the Rio Grande, along with additional alternative routes that site the transmission line's crossing in a better location for reducing impacts to Service Federal trust resources and our partners conservation investments, are important approaches to adequately address potential impacts. The Service also recommends impacts from habitat loss and fragmentation should be evaluated and appropriate offsets proposed.

### **Migratory Birds**

The lack of accurate avian occurrence and distribution information leads us to believe that more information on avian resources should be consulted in the preparation of the FEIS, including the biological and statutory expertise of the Service as a Cooperating Agency. It is unclear to the Service how the species were selected that BLM chose to include in the DEIS for discussion of potential threats and species distribution. We recommend BLM review the national, regional, and Bird Conservation Region (BCR) lists of Birds of Conservation Concern (BCC) at website (<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BCC.html>) to fully evaluate the potential construction and disturbance effects to the bird species listed on the website. These lists identify the bird species that potentially are at the greatest threat regarding construction and disturbance from this project. Species on the BCC list were referenced at times throughout the DEIS, however, other species on these lists that should have been addressed were left off the analysis. We recommend BLM review the website to evaluate effectively the impacts on the avian community within the project's proposed alternatives and preferred alternative. We provide the following specific issues for evaluating effects to avian resources and their habitats for all proposed alternatives.

1. Existing data show that, at the very minimum, 385 bird species have occurred in Socorro County (eBird, <http://ebird.org/content/ebird/>, accessed July 11, 2012). Additional species have been recorded for the county but are not included in this dataset. Of this total, 361 species could be found in riverine habitats similar to the proposed alternative siting of the transmission line. Although many of these species can be considered as uncommon or even rare in riverine habitats

similar to the crossing north of San Antonio, NM, at least 277 species regularly occur in this habitat type. The DEIS should acknowledge and evaluate that crossing the Rio Grande in this area could have the potential to negatively affect well over 200 species of migratory birds.

2. The New Mexico Ornithological Society (NMOS) has made available in electronic form a searchable database of avian records that have been published in the NMOS Field Notes. This data set is housed at the University of New Mexico and is made available free to the public by Natural Heritage New Mexico (<http://nhnm.unm.edu/partners/NMOS/>). Based on these and other data, the search effort conducted for ornithological data for the DEIS was inadequate in regard to avian distribution and abundance data. For example, the DEIS (pg. 3-92) states “The Piping Plover is a rare spring migrant to New Mexico that has most often been observed at the Bosque del Apache NWR south of Socorro (BISON-M 2008). There are no other areas within the study corridor where this species is anticipated to potentially occur.” Actually there are 8 records of piping plover from five counties in New Mexico, seven of which are listed in the NMOS database, yet only one of those occurred at Bosque del Apache NWR. 3. A substantial and readily available amount of avian information can be accessed through the Middle Rio Grande Biological Survey Final Report (Hink and Ohmart 1984), which should be referenced in the DEIS. Hink and Ohmart (1984) showed avian densities of up to 2,482 birds per 100 acres during the fall season 1982 in an area 20 miles north of the preferred alternative, but in similar habitat to the preferred alternative crossing site. This is one of the highest densities recorded for any habitat in the Southwest, highlighting the sensitivity and importance of the riparian habitats adjacent to the preferred alternative crossing of the Rio Grande.

4. Between 2000 and 2007, avian surveys were conducted by the U.S. Forest Service Research Station (Albuquerque) within riparian habitat one mile north of the preferred alternative site. Their data documented over 80 species of birds in the area during the breeding season. Many of these are nocturnally-migrating neotropical migratory birds which will be using the area in fairly high densities relative to upland sites adjacent to the preferred alternative crossing.

5. On page 3-93 of the DEIS it states “The Yellow-billed Cuckoo may also occur along the Rio Grande within the study corridor.” A search of the NMOS Field Notes database reveals 390 Yellow-billed Cuckoo (*Coccyzus occidentalis*) records for the state, but more significantly, a total of 15 records exist within the riverine habitat along the Rio Grande in Socorro County, where the preferred alternative project is proposed. Additional research from Hink and Ohmart (1984) show densities of Yellow-billed Cuckoos up to 29 per 100 acres 20 miles to the north in habitats similar to those in the preferred alternative crossing. More recently, work conducted at the U.S. Forest Service Research Station documented this species’ presence in three years of the eight year study.

6. The Service does not support the alternative to route the transmission line corridor within the Lower San Pedro River Valley from The Narrows northward to San Manuel. The San Pedro River is the last undammed desert river in the American Southwest. As such, it retains a functioning riparian ecosystem which supports millions of birds during their full life-cycle of breeding, wintering and migration seasons. The San Pedro River Valley has recorded over 400 species of birds within the watershed, nearly 45 percent of the 900 total species from North America. In 1993, LIFE magazine gave the San Pedro the title of one of “America’s Last Great Places,” and the unfettered viewscapes within the Lower San Pedro River Valley are considered among the best in the entire western United States.

Of the 37 total species on the FWS BCC list within BCR 34, 31 have been recorded from the Lower San Pedro River Valley, including such high-profile species as Bald Eagle, Common Black-Hawk, Peregrine Falcon, Yellow-billed Cuckoo, Northern Beardless-Tyrannulet, Bell's Vireo, Gray Vireo, Yellow Warbler (*sonorana* ssp.), and Chestnut-collared Longspur. Southwestern Willow Flycatcher and Bell's Vireo additionally are more abundant within this stretch than in the world-renowned San Pedro Riparian National Conservation Area to the south, and occur at exceptionally high abundance regionally. Bell's Vireo is an Audubon Watch List (Red) listed species because of long-term declines indicated by the North American Breeding Bird Survey (down 60 percent from 1965-2004 in Arizona, trend line down 2.67 percent per year,  $p=0.002$ ). The National Audubon Society conducted bird surveys within the Lower San Pedro River immediately adjacent to the proposed corridor route and detected an extremely high density of 4.3 to 10.3 Bell's Vireos per linear kilometer. This was one of the qualifying criteria for the advancement of this State-level Important Bird Area (IBA) designation to Global IBA status by the National IBA Technical Committee (fide Scott Wilbor). Gray Hawk nesting density is notably high as well in this small reach of the San Pedro River (0.67 nest territories/linear km, an estimated eight nest territories just on the small BHP Billiton mining property alone). Tropical and Thick-billed Kingbird both nest within the area adjacent to the proposed transmission corridor, both of which are uncommon to rare breeding species within the U.S., with only scattered breeding locations in southern Arizona where very specific habitat conditions occur.

We recommend BLM include mitigation of unavoidable impacts to Federal trust resources, including migratory birds and their habitat, for the preferred and proposed alternatives intersecting major bird migration corridors along the Rio Grande and San Pedro River. Specifically, there should be detailed discussions of the measures used to avoid or minimize and compensate for impacts to birds through the application of Avian Protection Plan Guidance (APLIC and USFWS 2005), Avian Power Line Interaction Committee guidance (APLIC 1994 with anticipated 2012 update, APLIC 2006) and BLM's commitments under the Executive Order 13186 Memorandum (2010) "Responsibilities of Federal Agencies to Protect Migratory Birds."

### **Conservation Initiatives and Investments**

The Service believes potential impacts to conservation initiatives and investments made by the Service and other Federal, state and nongovernmental organizations with specific focus on the Rio Grande, San Pedro River, and other segments of the proposed SunZia transmission project were not adequately evaluated, analyzed, or documented in the DEIS. Specifically, the North American Wetlands Conservation Act (NAWCA) grants program was not considered in the evaluation and analysis of the preferred and proposed alternatives in the DEIS. Please reference the following website for further information on the NAWCA grant program:

<http://www.fws.gov/birdhabitat/Grants/NAWCA/index.shtm>. The NAWCA of 1989 provides matching grants to organizations and individuals who have developed partnerships to carry out wetlands conservation projects in the United States, Canada, and Mexico for the benefit of wetlands-associated migratory birds and other wildlife. The NAWCA was passed, in part, to support activities under the North American Waterfowl Management Plan, an international agreement that provides a strategy and projects for the long-term protection, restoration and enhancement of wetlands and associated upland habitats needed by waterfowl and other

migratory birds in North America. The Service's Division of Bird Habitat Conservation is responsible for facilitating the NAWCA Grants Program.

Since 2001, multiple NAWCA grant wetland conservation projects, totaling over 7,504 acres and investments reaching approximately \$9.5 million (grants and match), have been established along the Middle Rio Grande in close proximity to the preferred and proposed SunZia transmission alternative routes. Portions of subroutes 1B1 and 1B2 of the proposed alternative north of San Antonio where it approaches the Middle Rio Grande on the east side of the river, will cross approximately one mile of a proposed property for a 2012 NAWCA grant. Based on a 400 foot right-of-way and a one mile crossing of the proposed NAWCA project, direct impacts of approximately 48.5 acres would occur and a higher number of acres would be impacted indirectly, significantly affecting the intended wildlife and habitat conservation efforts. If a SunZia right-of-way crosses through an existing NAWCA acquisition, disposal instructions will have to be issued, this may include a calculation of the attributable share amount requiring compensation.

The Service recommends these types of efforts be compiled and further analyzed as part of evaluating appropriate project route alternatives. We recommend the following generalized list of conservation initiatives and investments be evaluated and analyzed for the preferred and proposed alternatives included in the EIS:

#### New Mexico, Rio Grande

- Service's Partners for Fish and Wildlife program implemented habitat conservation activities on private lands including 83 wetland/riparian acres and 137 upland acres through private landowner agreements.
- Conceptual Restoration Plan: Active Floodplain of the Rio Grande, San Acacia to San Marcial, New Mexico (Save Our Bosque Task Force 2004)
- Middle Rio Grande Bosque Initiative
- America's Great Outdoors Middle Rio Grande Conservation Initiative
- North American Wetlands Conservation Act Grants

#### Arizona, San Pedro River, Aravaipa Creek

- Service's potential National Wildlife Refuge and other conservation efforts in the watershed of the Lower San Pedro River Collaborative Conservation Initiative
- The Nature Conservancy conservation easements
- Audubon's globally important bird areas
- Bureau of Reclamation mitigation properties and their management, such as 3 Links Farm and Spirit Hollow (more than \$1.5 million and counting)
- Service's Partners for Fish and Wildlife program implemented habitat conservation activities on private lands including 272 wetland/riparian acres and 70 upland acres through private landowner agreements and up to \$80,884 in Federal matching funds. The projects ranged from fencing to enhance and protect riparian habitats for migratory birds, wildlife and aquatic species; and revegetation of riparian and wetland habitats
- Saguaro-Juniper Corporation
- Salt River Project - Mitigation lands for Roosevelt Lake Habitat Conservation Plan

- ASARCO settlement of natural resource damages resulting in restoring and rehabilitating wetland, riparian and upland habitat sites.

### **Specific Draft EIS Comments**

Page 1-5, 2<sup>nd</sup> Paragraph – Although the Service recognizes and supports the Administration’s and the Secretary of Interior’s emphasis on energy and associated infrastructure projects, we take the following quote to mean that the Secretary has indicated a balanced approach to the facilitation of energy developments is a responsibility of all Department of Interior agencies and employees.

“Renewable energy is a key part of keeping America competitive, creating jobs, and winning the future for our children,” said Secretary Salazar. “At the Department of the Interior, we have a responsibility to ensure that solar, wind and geothermal projects are built in the right way and in the right places so they protect our natural, cultural and wildlife resources. Taken together, today’s initiatives are another positive step toward making sure we are building a clean energy economy that is smart from the start.” Secretary Salazar February 8, 2011.

Page 2.4.6 - How will overhead ground wires be marked?

Page 3-71, 2<sup>nd</sup> bullet - The form of the citation should be reviewed. The Bald and Golden Eagle Protection Act should be cited as 16 U.S.C. 668-668c. Citation to the associated regulations should adhere to the section of the Code of Federal Regulations.

Page 3-100 - Impacts to the Socorro spring snail should be discussed in more detail. Given the species low abundance and geographic isolation there was insufficient evaluation of avoidance of documented species sites and protection of the species. The Biological Resources section did not include a discussion of conservation easements. This should be developed further to highlight the conservation dollars that have been spent outside of federal and state lands for protection and enhancement. Impacts to these lands should be in the analysis.

Page 4-62, 3<sup>rd</sup> Paragraph - As described, the “Effects to aquatic species were mapped as potentially occurring where the project centerline would cross major drainages or areas of steep slope within watersheds where those species occur.” Sediment is an issue for many aquatic species at some stage of their life cycle and may also indirectly affect adjacent riparian ecosystems for terrestrial species. Sediment movement can occur and impact downstream aquatic resources in many areas, not just in areas subjectively identified as “of steep slope.” In addition, sediment movement and accumulation can affect stream morphology, affecting both aquatic and riparian habitat and associated species.

Page 4-65, 2<sup>nd</sup> and 3<sup>rd</sup> Paragraph - It is not clear if vegetation would be managed post-construction, through the life of the project, in the manner indicated in this paragraph. Please clarify if BLM has the authority to include enforceable conditions in the associated right-of-way grant or if some other approach would be utilized. There can be repeated and/or ongoing impacts to fish and wildlife from vegetation management. We recommend that means to effectively mitigate those impacts through the life of the project be identified.

Page 4-67, 4<sup>th</sup> Paragraph - Potential impacts to sandhill cranes (*Grus canadensis*) between Willcox Playa and the farmlands north of Interstate 10 in the Sulfur Springs Valley should be included.

Page 4-67 - The avian study has been discussed several times and although a reasonable baseline for bird movements it falls short of being a strong tool to analyze the impact of the lines on potential mortality. There are large gaps of time between sampling periods at each site thus, it must be assumed that each sample day is representative of daily movement; however weather, disturbance, shifts in food, etc. play a huge role within and among days. There is also concern with how distance between the birds and the wires were determined. Measurements were taken with range finders which have an increasing amount of error with increasing distance which could impact analysis of encounter rates. The strengths and shortfalls of the study should be further discussed with the Service's Region 2 biometrician.

Page 4-69, 2<sup>nd</sup> Paragraph - We recommend including a discussion about how construction of speed limits will be enforced for speed limits to be considered as meaningful mitigation.

Page 4-69, 3<sup>rd</sup> Paragraph - The meaning of the sentence "Although erosion would be effectively controlled with those methods, an elevated risk of erosion may remain in some disturbed areas" is not clear.

Page 4-72, 3<sup>rd</sup> Paragraph - More detail is needed on golden eagle (*Aquila chrysaetos*) surveys to assess the adequacy of the surveys and mitigation based on those surveys.

Page 4-73, 5<sup>th</sup> Paragraph - Please review the conclusion that mitigation measures "should be sufficient to eliminate direct effects" to Yuma clapper rails (*Rallus longirostris yumanensis*). This may be overstated, especially considering the close proximity of the proposed alignment to Picacho Reservoir. Based on research, bird diverters are not 100 percent effective.

Page 4-74, 4<sup>th</sup> Paragraph - If helicopter construction is employed, flight path noise effects to Mexican spotted owls (*Strix occidentalis lucida*) should be addressed. Such effects could be avoided if flight paths avoid Mexican spotted owl habitat.

Page 4-75, 4<sup>th</sup> Paragraph - To conclude absence of Southwestern willow flycatchers (*Empidonax traillii extimus*), surveys must be rigorous, performed by permitted individuals adhering to a defined protocol. An alternate approach is to assume presence in all potential habitat and avoid construction or other disturbance during the nesting season.

Page 4-76, 4<sup>th</sup> Paragraph - The Service recommends and supports use of alternate structure types as described in selective mitigation measure (SE) 7 to avoid creating nesting and perching opportunities for ravens (*Corvus spp.*) in Sonoran desert tortoise (*Gopherus morafkai*) habitat. Raven predation on hatchling and juvenile tortoises has the potential to affect tortoises over a much larger area than a small increase in footprint impacts from additional structures, as indicated on page 2-49. This section states the use of an alternate structure type would result in an increase in structures and subsequently an increased footprint of the development.

Page 4-77, 4<sup>th</sup> Paragraph - Mitigation measures for Gila chub (*Gila intermedia*) should more closely parallel those for northern Mexican gartersnake (*Thamnophis eques megalops*). The last sentence of the paragraph mentions SE 8 (spanning sensitive features) to support a conclusion



that such measures would “minimize potential effects” to stream waters. That sentence follows a sentence stating “the lower crossing may ... require that a pair of towers be sited within designated critical habitat.” Please review primary constituent elements of critical habitat for the Gila chub published by the Service on November 2, 2005 (70 FR 66664). Critical habitat involves more than the stream waters and the mitigation should address all primary constituent elements.

Page 4-78, 1<sup>st</sup> Paragraph - We recommend additional information be included on the distance from the Link C-170 crossing of the Turkey Creek watershed to the wet portion of Turkey Creek for an adequate analysis, replacing the phrase “far into the headwaters” as described in the existing text. Effects to roundtail chub (*Gila robusta*) should include effects in Turkey Creek as well since the species was documented in the creek in fall 2011 surveys. Roundtail chub are the subject of a positive 12 month petition finding published by the Service on July 7, 2009 (74 FR 32352) and are now a candidate species.

Page 4-78, 5<sup>th</sup> Paragraph and Page 4-79, 1<sup>st</sup> Paragraph - Similarly, more information should be included on the distance from the Link C-170 crossing of the Turkey Creek watershed to the designated critical habitat and wet portion of Turkey Creek for an adequate analysis. Please review primary constituent elements of critical habitat designations for spikedace and loach minnow published by the Service on February 23, 2012 (77 FR 10910).

Page 4-79, 3<sup>rd</sup> Paragraph - The discussion of properly designed road crossings of streams to reduce impacts to Gila topminnows (*Poeciliopsis occidentalis occidentalis*) at Turkey Creek is not clear based on the discussion of effects for Gila chub, spikedace, and loach minnow for the same area. For those taxa the discussion is in regard to effects from crossing through the upper portion of the watershed of Turkey Creek which is more plausible based on our review of images provided through the BLM project website.

Page 4-89, 3<sup>rd</sup> Paragraph - We recommend that more information be included on the reach of the transmission line alignment (e.g. mile to mile or station to station) where mitigation measure SE 15 (bird diverters) is proposed to allow an analysis of the sufficiency of the proposed measure in reducing collision impacts to sandhill cranes and waterfowl in the Willcox Playa area.

Page 4-99, 2<sup>nd</sup> Paragraph - At the San Pedro River crossing, SE 15, installation of bird diverters should be added to the measures identified. The San Pedro River is an extremely important corridor for birds.

Page 4-295, 5<sup>th</sup> Paragraph - Picacho Reservoir issues, including Yuma clapper rail and southwestern willow flycatcher, should be added to potential cumulative effects from the Pinal Central-Tortolita Transmission Line based on our review of the Application for a Certificate of Environmental Compatibility to the Arizona Corporation Commission for that project, as the alignment appears identical to the SunZia alignment between the Pinal Central and Tortolita Substations.

Page B1-241, 5<sup>th</sup> Paragraph - Add that Cienega Creek is designated critical habitat for the Gila chub in the project area (70 FR 66664, November 2, 2005).

Page B1-242, 5<sup>th</sup> Paragraph - Based on fall 2011 surveys, roundtail chub are also found in Turkey Creek, a tributary to Aravaipa Creek. The project alignment crosses the upper end of the Turkey Creek watershed.

Page B1-245, 5<sup>th</sup> Paragraph - Based on fall 2011 surveys, spokedace are also found in Turkey Creek, a tributary to Aravaipa Creek. The project alignment crosses the upper end of the Turkey Creek watershed. A portion of Turkey Creek is designated as critical habitat for the spokedace (77 FR 10910, February 23, 2012).

Page B1-248, 3<sup>rd</sup> Paragraph - Based on fall 2011 surveys, loach minnow are also found in Turkey Creek, a tributary to Aravaipa Creek. The project alignment crosses the upper end of the Turkey Creek watershed. A portion of Turkey Creek is designated critical habitat for the loach minnows (77 FR 10910, February 23, 2012).

Page H-34 - On the row for Subroute 1A add Rio Grande silvery minnow (*Hybognathus amarus*) with critical habitat. On the row for Subroute 1A1 add Rio Grande silvery minnow with critical habitat.

### **Specific Comments Regarding the Rio Grande Crossing**

2012 surveys report nesting flycatchers in the vicinities of both Rio Grande crossing alternatives, which could be adversely affected.

2012 surveys for the candidate species Yellow-billed Cuckoo reported detections throughout the Rio Grande riparian area in Socorro County, including within the vicinities of both Rio Grande crossing alternatives. Currently, the Service is making a listing determination on the cuckoo and potential designated critical habitat.

The Pecos sunflower (*Helianthus paradoxus*) is federally listed as threatened and is known to occur adjacent to the Rio Grande on private land about 4 miles north of the proposed south Rio Grande crossing and 8 miles south of the proposed north Rio Grande crossing. At least one additional population of Pecos sunflower has been naturally established on that same private land from the original population which verifies that the seed is spreading. Additionally, the La Joya Wildlife Area, located approximately 15 miles north of the proposed north Rio Grande crossing, has populations of Pecos sunflower. A population of Pecos sunflower has recently been established on private land north of Bosquecito, NM. We recommend including discussions of the Pecos sunflower in the EIS. Surveys for Pecos sunflower should be conducted throughout the Project study corridor, as appropriate. We recommend mitigation measures be considered.

Any type of river crossings and associated ground disturbance (clearing and berm development) that prevent flow back to the river should be minimized to prevent potential fish entrapment during overbank flooding.

An Avian Protection Plan should be developed for the SunZia transmission project and associated distribution lines used to power associated project features (e.g., signal relay stations).

Consultant response to Service Administrative Draft Environmental Impact Statement (ADEIS) comment number 65 refers to selective mitigation measure number 14; Table 2-11 Selective Mitigation Measures is not fully legible.

Consultant response to Service ADEIS comment #66 does not address comment on not constructing new roads within the riparian habitat. Comment number 66: No new roads should be constructed within the riparian area of the Rio Grande.

Consultant response to Service ADEIS comment number 68 regarding risk to special-status birds (cuckoo) “cannot feasibly be estimated” should be clarified as suggested by the BLM responder. The consultant response included the statement “The issue is further compounded in that the species under discussion are regionally rare (and in the case of the Yellow-billed Cuckoo, often silent during migration).” This should be revisited given the results of the 2012 cuckoo survey.

### **Specific Draft POD Comments**

Page 5-3, Section 5.4.2, Lines 24 and 25 – Does this section include riparian zones? If so, then the amount of ground disturbance will be quite significant through the riparian zones and the associated impacts to designated critical habitat (e.g., at the Middle Rio Grande crossing) and potentially occupied nesting habitat of migratory birds.

Page 5-3, Section 5.4.2, Lines 28 and 29 - Is the proponent or their contractor authorized to conduct actions, such as chemical treatment, outside the right-of-way area?

Page 5-4, Section 5.6, Lines 11-13. - The Service recommends specific details of proposed bird flight diverters be discussed at length in the POD.

Page 6-3, Table 6-1, Mitigation Measure 14 - This should include “operations” as impacts to protected wildlife (e.g., ESA, MBTA and/or BGEPA protected) that could occur during the operations such as repairs, maintenance and vegetation management operations/activities.

Page 6-6, Table 6-1, Mitigation Measure 25 - The discussion of buffers for eagles should be developed in consultation with the Service’s Region 2 Migratory Bird Permitting Office staff. A permit may be required for disturbance activities in proximity to eagle nest and roosting areas.

Page 6-7, Table 6-1, Mitigation Measure 29 - This should include a discussion on the development of an Avian Protection Plan, and commitments BLM will implement based on the Executive Order 13186 Memorandum of Understanding signed by BLM and the Service.

Page 6-10, Table 6-2, Mitigation Measure 7 - The selective mitigation measures to be implemented to avoid or minimize and compensate avian conflicts should be its own selective mitigation measure with more detailed discussion of the approaches proposed.

Page 6-11, Table 6-2, Mitigation Measure 9 - The materials provided by SunZia engineer contractor through Adrian Garcia (email July 6, 2012) suggests a different approach is going to be taken, as compared to mitigation measure 9, with offset tower spacing on the two different lines.

Page 6-12, Table 6-2, Mitigation Measure 12 - For this to be a mitigation measure, the specific date ranges need to be specified. Also, timing stipulations do not eliminate all potential disturbances of wildlife. The loss and fragmentation of habitat is still a negative effect.

Page 6-13, Table 6-2, Mitigation Measure 15 - No information included supports the notion that one inch overhead ground wires are sufficient to reduce or eliminate collision mortality.

Additionally, it is not a selective mitigation practice if the size of the line is already at one inch because of the optical fiber communication cable and the existing overhead ground wire.

A discussion of Avian Protection Plan and APLIC publications on electrocution and collision manuals is needed.

Page 6-18 and 6-19, Section 6.2.9.1 - There should be a discussion about the potential impacts of avian collision mortality at important river/stream crossings and impacts to migratory birds from loss and fragmentation of habitat.

Page A1-2, Section 3.3 - This should include areas identified in the Service's Biological Opinion, as well as terms and conditions and reasonable and prudent measures, not just information from the Biological Assessment.

Page A2-2, Table A2-1 - Distances need to be specified; using "near flagged items" is not descriptive enough.

Page A9-1, Lines 5-9 – This section should also discuss Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act and Executive Order 13186 Memorandum of Understanding between BLM and the Service.

In keeping with our trust responsibilities to American Indian Tribes we will notify the potentially affected Tribes by copy of this memorandum.

Thank you for the opportunity to provide comments on this draft environmental impact statement. We encourage you to coordinate the review of this project with the Arizona Game and Fish Department and New Mexico Department of Game and Fish. We respectfully request that BLM hold regular Cooperating Agency meetings, at a minimum every month, to ensure full engagement and discussion of the SunZia project's NEPA process.

Should you require further assistance or if you have any questions, please contact acting Regional Director Joy Nicholopoulos at 505-248-6283.

### **Literature Cited**

- Avian Power Line Interaction Committee (APLIC). 1994. Mitigating Bird Collisions with Power Lines: The State of the Art in 1994. Edison Electric Institute and APLIC, Washington, DC.
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