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February 1, 2016

Arizona Corporation Commission

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Acting Chairman Doug Little
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

Re: Docket No. L-00000YY-15-0318-00171, SunZia Transmission Line Siting

Dear Acting Chairman Little and Members of the Commission:

Please accept these comments on behalf of members and supporters of Sierra Club. Sierra Club participated in the planning process and submitted public comments to the Bureau of Land Management and the Arizona Power Plant and Transmission Line Siting Committee. We incorporate by reference the comments submitted to the Arizona Power Plant and Transmission Line Siting Committee and the Bureau of Land Management (BLM) on the Draft Environmental Impact Statement for the Proposed SunZia Transmission Project submitted by these respective groups.

Sierra Club has members who use public lands and rivers affected by the proposed action for activities such as hunting, hiking, camping, bird watching, nature viewing, and other forms of outdoor recreation and enjoyment.

Sierra Club's mission is "to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; and to educate and enlist humanity to protect and restore the quality of the natural and human environments." Sierra Club has more than 2.4 million members and supporters nationwide, including more than 35,000 members and supporters of the Grand Canyon Chapter. Our members have significant interests in the proposed SunZia Project and its impacts on natural resources. Many of our members enjoy watching wildlife, hiking, backpacking, and other outdoor and educational activities on lands that may be adversely affected by the Sunzia Project. Some of our members live near the affected lands.

Sierra Club is committed to helping reduce greenhouse gas emissions and limiting global climate change and disruption. Three of the four Sierra Club priority campaigns, Beyond Coal, Beyond Oil, and Beyond Natural Gas are related to transforming the nation's electricity sources from polluting fossil fuels to clean renewable energy and reducing energy use through efficiency and conservation are all essential to meeting our carbon reduction goals. Sierra Club members are working to rapidly increase our nation's energy efficiency and the use of renewable energy resources by advocating for improved appliance and building efficiency and standards to promote them, as well as a rapid ramp-up of distributed generation (mainly rooftop solar), community scale and large-scale renewable energy projects, including solar, wind, and geothermal generating plants. All of these will



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be necessary to meet our greenhouse gas reductions goals. In the short term, some proposals for large-scale renewable and associated transmission lines will be needed. We seek to minimize any impacts of that proposed transmission on wildlife, air and water quality, and other important environmental values.

Sierra Club has participated in the planning process for the Sunzia Project since BLM initiated the process in 2008. Members and staff have participated in public meetings; we, along with many of our conservation partners, submitted several sets of scoping comments on the project in 2009 as well as a final set of scoping comments in 2010, and comments on the Draft EIS/RMP in 2011 [See SunZia Project FEIS/RMPA, Appendix J, Comment ID Number 1600, Page J-159], and also objected to the Final Environmental Impact Statement in late 2014, along with several other parties.

According to ARS § 40-360.06, there are several relevant criteria to consider before issuing a Certificate of Environmental Compatibility (CEC) for this transmission line. You must consider a number of factors relative to the proposed including, but not limited to, the following.

- Existing plans of the state, local government and private entities for other developments at or in the vicinity of the proposed site.
- Fish, wildlife and plant life and associated forms of life upon which they are dependent.
- Existing scenic areas, historic sites and structures or archaeological sites at or in the vicinity of the proposed site.
- The total environment of the area.
- Any additional factors which require consideration under applicable federal and state laws pertaining to any such site.

The statute states relative to the Line Siting Committee, "The committee shall give special consideration to the protection of areas unique because of biological wealth or because they are habitats for rare and endangered species."

The Arizona Corporation Commission can deny, approve, or approve with conditions this CEC based on these factors. The Commission can determine that the harm far outweighs the need. The BLM looked at more than 500 miles of the proposed transmission line across Arizona and New Mexico and, in our opinion, the real and significant impacts to the San Pedro got lost in the mix. The Commission can and must consider those. The Commission can and should deny approval of this line siting.

The Proposed Route:

From the Willow-500 kV Substation, the route heads southwest and crosses the Sulphur Springs Valley 7 miles north of the Town of Willcox, and continues along a 345 kV transmission line corridor, generally parallel to and north of the I-10. The route crosses the San Pedro River approximately 11 miles north of Benson, turns northwest, and it continues at a distance ranging from 2 to 6 miles west of the San Pedro River through portions of Cochise and Pima counties. The route continues northwest along a pipeline corridor into Pinal County, turns west at a point 5 miles northwest of San Manuel, then proceeds westerly, north of Oracle and the Santa Catalina Mountains, and along portions of 115 and 500 kV transmission line corridors, north of the Tortolita Mountains. The route

turns north from a point near the Tortolita Substation toward SR 79, and then west, north of the Picacho Mountains, to its termination at the Pinal Central Substation located 8 miles north of Eloy, in Pinal County.

A portion of the route cuts northward through the Lower San Pedro River Valley. The Lower San Pedro River Valley supports one of the last major free-flowing rivers in the desert Southwest and, as such, provides important habitat for many species. The San Pedro River Valley provides habitat for a great diversity of avifauna and is a hemispherically-important migratory flyway, providing a key migration corridor for neotropical birds. It is internationally recognized as a globally important birding area and an important tourist destination.

The Lower San Pedro River is an Important Bird Area of Global Significance as recognized by BirdLife International. The San Pedro River Valley provides habitat for a great diversity of birds, including nesting raptors such as gray hawk (*Asturina nitida*=*Buteo nitidus*), Mississippi kite (*Ictinia mississippiensis*), common black hawk (*Buteogallus anthracinus*), and zone-tailed hawk (*Buteo albonotatus*). Western yellow-billed cuckoos (*Coccyzus americanus occidentalis*), a federally-listed threatened species with critical habitat designation pending, including areas proposed along the SunZia route, nest in numbers on the lower reaches of San Pedro River. The high importance of the lower San Pedro River for the recovery of the southwestern willow flycatcher (*Empidonax traillii extimus*) contributed to its designation as critical habitat for the species. The Lower San Pedro is important to State Species of Conservation Concern, including western yellow-billed cuckoo, belted kingfisher, red-naped sapsucker, southwestern willow flycatcher, tropical kingbird, thick-billed kingbird, western purple martin, gray hawk, common black hawk, zone-tailed hawk, and Mississippi kite.

This hemispherically-important migratory flyway provides a key migration corridor for neotropical birds. During spring migration the riparian zone of the San Pedro provides food and cover for birds and is one of the most important pathways in the region for passerines on their journey north. The Lower San Pedro River is a globally important destination for ecotourists.

The San Pedro River Valley also supports one of the greatest diversity of mammal species in North America, including mountain lion, black bear, coatimundi, javelina, fox, coyote, badger, four skunk species, mule and white-tail deer, ringtail, raccoon, bobcat, beaver, porcupine, black-tailed prairie dog and 24 species of bats, as well as many other lesser known mammal species.

During the last 20 years, the high quality, unfragmented riparian habitat of Lower San Pedro River Valley has resulted in many lands being acquired for biological mitigation purposes. Recently, the lower San Pedro River Valley has been proposed by the U.S. Fish and Wildlife Service (USFWS) for the establishment of a new National Wildlife Refuge and Collaborative Conservation Initiative. This is a proposal that involves "... interested landowners, land managing agencies, local communities, nonprofit organizations and the public who share a vision of a healthy river system contributing to people's livelihoods and a functioning, hydrologically healthy riparian corridor that supports a diverse and rich nature flora and fauna." The BLM preferred alternative (subroute 4C2c) would bisect the lower San Pedro River Valley and would negatively impact the lands and habitat values in this proposed new wildlife refuge.

1. Issues Related to the Need for the SunZia Project

When new transmission lines are proposed such as the SunZia Project, they must serve a true need and be appropriately located to prevent unnecessary and undue degradation to lands and to avoid or minimize harm to wildlife, wildlife habitat, wilderness values, and other important natural and cultural resources. The proposed SunZia Transmission Line is neither justified by demonstrated need nor located so as to sufficiently avoid or minimize negative impacts to sensitive wildlife habitats and resources. The numerous negative environmental impacts of the SunZia Project to areas of high conservation value outweigh the need and the purported benefits of the project. We therefore request that the Arizona Corporation Commission deny approval of a Certificate of Environmental Compatibility for the SunZia Transmission Line.

The purpose of the SunZia Project has been repeatedly framed by the Applicant as meeting a need for increased capacity for the transmission of electricity generated from "renewable energy sources." When the Southwestern Power Group (SWPG), the principal investor in the SunZia Project, originally proposed the project, they made clear that the purpose of the SWPG proposal was to provide needed transmission capacity for its own proposed 1,000 megawatt (MW) natural gas-fired power plant located in Bowie, Arizona. Although the original SWPG proposal mentioned providing transmission capacity for renewable energy, SWPG's personal reason for proposing the SunZia project was to permit transmission of power generated at the Bowie power plant westward to Phoenix and California. SunZia's Willow Substation, described throughout the planning process and included as an integral part of the proposed action, would be sited with the already-permitted Willow switchyard for the Bowie power plant, allowing nearly direct power exchanges between the power plant and SunZia.

In addition, the proposed route connects with existing substations in southwestern New Mexico and the SunZia Project, potentially supplying transmission capacity for several natural gas plants near these substations, thus enabling their future expansion. The preferred alternative route does not go through the Afton generation site and substation which is in the same location as BLM's Afton Solar Energy Zone, despite the fact that the proposed SunZia Transmission Project is in relatively close proximity (20-30 miles) to this area where future large-scale solar energy plants will be incentivized on BLM lands. This supports the view that the SunZia Project intends, as a major component of its design, to provide new transmission capacity for natural gas development, rather than focusing on renewable energy.

2. Issues Related to Environmental Impacts

a. Issues Related to Air Quality

We are concerned that there would be adverse air quality impacts associated with an increase in fossil fuel-generated electricity associated with the SunZia Project. The SunZia Project could encourage development of natural gas-fired power plants like the Bowie Generating Station, and the likely result will be increased nitrogen oxide emissions, toxic air emissions, and other pollutants. This would make it more difficult for Arizona to meet

its obligations relative to the new ozone standard and could also affect Arizona's Clean Power Plan State Implementation Plan.

b. Water Resources

The San Pedro River is one of only two major rivers that flow north out of Mexico into the United States, and it is one of the last generally undammed rivers in the entire Southwest. The San Pedro River Valley is a globally Important Bird Area. The riparian forest and adjacent Sacaton grasslands provide critical stopover habitat for millions of migrating birds each year. The San Pedro River Valley contains one of the planet's most significant Fremont cottonwood/willow gallery forests. Because of the hemispheric significance and importance of these riparian areas, the upper San Pedro River watershed was designated as the first Riparian National Conservation Area in the United States in 1988.

The San Pedro River basin is home to more than 80 species of mammals, including jaguar, black bear, coatimundi, bats, and beaver. Fourteen species of fish, including imperiled native species such as Gila chub, longfin dace, desert sucker, roundtail chub, Sonora sucker, and speckled dace, may be found here. The diverse habitats are also home to 41 species of reptiles and amphibians, including the Sonoran tiger salamander and lowland leopard frog. There are more than 100 species of breeding birds, including the imperiled and federally listed yellow-billed cuckoo, and, seasonally, more than 250 species of migratory birds moving through the San Pedro River Valley.

Impacts to surface water resources, including the San Pedro River and its tributaries, could result from the placement of structures and the construction of access roads and temporary work areas. Direct impacts to the San Pedro River and its tributaries include sedimentation from project-related disturbances, fugitive dust deposition, temporary and permanent fill associated with the construction of roads and access routes, removal of riparian vegetation, bank alteration, accidental contamination associated with spills of environmentally harmful material, damage to wetlands, and introduction of non-native species of plants and animals.

The construction of access roads would likely require crossing many intermittent and ephemeral stream channels in the lower San Pedro River Valley. These crossings could require the placement of temporary or permanent fill into stream channels, as well as structures that support the crossing and protect water resources (e.g., bridge pilings, culverts, wing walls, etc.). Temporary impacts would result from temporary crossings or fill used to cross intermittent or ephemeral tributaries with little to no stream flow or on temporary access roads.

Ephemeral and intermittent waters can be just as important as perennial waters and were not given proper consideration by the BLM or the applicant. These waters are often more important in the Southwest because of the relative absence of perennial waters. Eighty-one percent of streams in the arid and semi-arid Southwest are ephemeral and intermittent streams. They provide important functions and values:

"These streams provide landscape hydrologic connections; stream energy dissipation during high-water flows to reduce erosion and improve water quality; surface and subsurface water storage and exchange; ground-water recharge and discharge; sediment transport, storage, and deposition to aid in floodplain maintenance and development;

nutrient storage and cycling; wildlife habitat and migration corridors; support for vegetation communities to help stabilize stream banks and provide wildlife services; and water supply and water-quality filtering." Because of their significance, it is recommended that these streams not be looked at individually, but that "[c]onsideration of the cumulative impacts from anthropogenic uses on these streams is critical in watershed-based assessments and land management decisions to maintain overall watershed health and water quality."

Modification of stream banks could result in the removal of vegetation that could take many years to recover. Sedimentation potential would increase, depending upon the extent of disturbance and the amount of re-contouring needed. Permanent impacts would result from stream channel crossings, into which structures would be placed in the streambed, potentially causing an irreversible loss of riparian vegetation on either side of the crossing. The removal of unique riparian habitat, increased sedimentation, and reduced water quality are among the primary adverse environmental effects on surface water resources associated with the Sunzia Project.

Direct impacts to intermittent surface water features are similar to those for perennial waters, although intermittent streams typically have less associated riparian vegetation and, subsequently, are more prone to erosion. Indirect impacts include increased soil erosion due to removal of vegetation. The construction of access roads would likely require stream channel crossings. These crossings could require the placement of temporary or permanent fill into stream channels, as well as structures that support the crossing and protect water resources (e.g., bridge pilings, culverts, wing walls, etc.).

Temporary impacts would result from the construction of temporary crossings or the placement of fill used to cross intermittent or ephemeral tributaries with little to no stream flow or the construction of temporary access roads. These crossings would have the potential to impact stream morphology and ecological function. The modification of stream banks could result in removal of vegetation that could take many years to recover. Sedimentation potential would increase, depending upon the extent of disturbance and the amount of contouring needed. Storm water discharge and quantity of sedimentation to the San Pedro River and its tributaries are correlated to project-related disturbances. Permanent impacts would result from permanent stream channel crossings, into which structures are placed in the streambed, potentially causing an irreversible loss of riparian vegetation on either side of the crossing.

Transmission line access roads typically cross, or are close to, perennial and intermittent streams. It has been well-documented that construction of new access roads increases erosion and sedimentation of water resources. All construction activities within the lower San Pedro River watershed could result in increased sedimentation to the San Pedro River or its tributaries. Periodic vegetation removal or repair to access roads could have indirect effects because of soil erosion, further increasing sedimentation.

3. Issues Related to Biological Resources

The proposed route for SunZia includes unacceptable impacts to sensitive wildlife habitats and wild lands. We have consistently maintained that proposed transmission lines through the Lower San Pedro River Valley were unacceptable due to high levels of ecological sensitivity of these areas. The San Pedro River Valley is a globally significant area that is a

well-documented migratory corridor for birds and other wildlife, and it contains designated critical habitat for several endangered species.

Substantial public and private conservation investments have been made in the Lower San Pedro River Valley. It is an area so special and ecologically valuable that it has recently been proposed by the U.S. Fish and Wildlife Service for the establishment of a new National Wildlife Refuge and Collaborative Conservation Initiative, an effort "involving interested landowners, land managing agencies, local communities, nonprofit organizations, businesses and the public who share a vision of a healthy river system contributing to people's livelihoods and a functioning, hydrologically healthy riparian corridor that supports a diverse and rich nature flora and fauna" The route would run astride this new wildlife refuge. This is not an appropriate area through which to route a major new energy corridor.

Construction of a large transmission line involves developing temporary construction roads as well as a permanent road under the line. This causes significant habitat fragmentation and invites off-road vehicles. Roads and motorized uses can have serious detrimental effects on habitats and wildlife. , , These effects include direct, indirect, and cumulative impacts, ranging from mortality from collisions with vehicles, modification of animal behaviors, altered use of habitats, facilitation of the spread of exotic, invasive, and parasitic species, adverse genetic effects, and fragmentation of connected habitats.

Further road-building, construction, and improved off-road vehicle access in this area will also contribute to erosion and sedimentation that could travel downstream through tributaries and impact threatened native fish populations and other species. For a complete list of affected species, please see our comments to the Line Siting Committee and the BLM.

Biological Resource Conservation Areas

The proposed project would have impacts to wildlands, wildlife, and conservation areas in both Arizona and New Mexico. This project would affect several conservation areas that are managed for biological resources, as well as several Important Bird Areas. These lands support a wide variety of plant and animal species, including numerous special status species. Many of them are relatively undeveloped and provide increasingly important refuges for the species they support.

The proposed SunZia project and related energy development projects will harm these conservation plans and areas and compromise the integrity of the following areas and the surrounding landscapes, as well as others:

Pima County's Sonoran Desert Conservation Plan Conservation Lands System (Pima County)

San Pedro River Valley and migration corridor (Globally Significant Important Bird Area, USFWS proposed National Wildlife Refuge and numerous private land conservation easements)

Pima County preserves (Pima County, State of Arizona)

AZGFD-identified wildlife linkages (Arizona)

Willcox Playa

The above list is not exhaustive, but merely highlights some of the areas most affected by the proposed project.

l) Wildlife linkages and habitat fragmentation

"Habitat fragmentation and loss are currently recognized as the principal threats to biodiversity" (FEIS, pg. 4-96). We are concerned about the effects of the linear fragmentation (from the transmission line and associated roads and other features), the potential effects that may radiate outward (e.g., increased recreation, illegal spur roads, etc.), and the edge effects associated with these. Natural, undeveloped areas are critically important to a variety of species that will be affected by this project; natural, undeveloped corridors between these areas are just as important. Any source of fragmentation in these areas – whether new development or additive to other development – should be avoided.

4. Issues Related to Cultural Resources and Tribal Concerns

There are numerous cultural resources located along or in close proximity to the route. Direct impacts to these resources come primarily from ground disturbance. Indirect impacts include erosion and increased sedimentation from construction related activities. Another concern relates to the fact that the transmission line corridor will open up miles of previously unfragmented landscape with the likely result of increased vandalism and illegal artifact collecting due to increased public access.

According to the Center for Desert Archaeology and the National Trust for Historic Preservation, the route will have enormous negative impacts on the significant cultural resources in the Lower San Pedro River Valley. CDA and the National Trust indicated that the route that traverses the lower San Pedro Valley was of particular concern.

CDA and the National Trust identified over 500 archeological sites in the lower San Pedro River Valley with approximately one third of them containing architecture and probable human remains. Given this uncertainty and the high value of these resources, CDA and National Trust stated that these important cultural resources were further reason for BLM to select a No Action Alternative and to instead evaluate the use of existing transmission and transportation corridors with less harmful effect. The Line Siting Committee received a comment letter from the Tohono O'Odham Nation outlining significant concerns about cultural and natural resources.

5. Issues Related to Visual Resources

In Arizona, the utility corridor would have high to moderate-high impacts to views observed by hikers using the Arizona National Scenic Trail and the Buehman Canyon Trail. Again, the reason given for the high to moderate-high impacts on visual resources is because the SunZia Project would be viewed in the lower San Pedro River Valley, described as a "landscape with few modifications." [FEIS, p. 202].

The SunZia Project would have high to moderate-high impacts on visual resources to travelers on other scenic roads and byways that don't have official scenic byway designations but which traverse relatively unmodified landscapes like the Cascabel Road and Redington Road in the lower San Pedro River Valley [See FEIS, p. 202].

It is difficult to visualize the impact of the construction of 135 foot transmission line towers and access roads cutting a 1,000 foot-wide swath through unmodified landscapes. There is a huge difference between scenery destruction as described by the dry bureaucratic language of the SunZia Project FEIS and in the materials provided by the applicant and the real world impacts seen by residents and visitors to the desert. For example, Mr. Peter Edgell wrote, "On a Sunday morning in 1974 my wife and I were awakened by the sound of a helicopter across the San Pedro River from us. We walked outside and saw to our horror this helicopter was raising a behemoth electrical tower and more were lying in wait to be raised. We had bought our ten acres because of the beautiful views of hills and mountains on all sides of us. Now, almost 40 years later those towers are still upsetting. Several years ago I found a photo taken in 1973 of those hills. They had been so beautiful before the towers were there." Mr. Edgell and his wife will be treated to more towers should the Commission grant the CEC for SunZia.

6. Issues Related to Social and Economic Concerns

The economic analysis related to this proposed transmission line does not consider the impacts on the significant investments in areas that would be affected by the proposed project. Most of the economic benefits would be short-term and associated with construction of the transmission lines, while the negative economic impacts would be long-term, irreversible, and unmitigable.

a. Ecotourism

Many of the areas that would be most significantly affected by this proposed project – the San Pedro River and its tributaries, and the Willcox Playa – are well-known ecotourism attractions. Birders, hikers, and wildlife watchers come from all over the United States and the world to enjoy this region. Birders are particularly drawn to these areas due to the amazing diversity of birds that inhabit and migrate through these ecologically significant lands. Willcox hosts an annual "Wings Over Willcox" event that focuses on the birding in the area. In 2015, it celebrated the 20th anniversary of this event, an important component of the local economy.

The project will affect ecotourism including direct, indirect, and cumulative impacts. The economic role of public lands, river valleys, playas, and natural open space, plus the wildlife these support for the local communities and existing research documenting the economic importance of protected public land resources should be considered. Income from tourism is a sustainable source of income, but requires that the resource is managed and protected. The proposed SunZia transmission line has the potential to forever damage sustainable regional resources for a questionable purpose and need.

b. Watchable wildlife

Watchable Wildlife programs play an increasing role with state wildlife agencies and land managers. As other forms of wildlife recreation continue to decline, watchable wildlife programs are more popular than ever. In Arizona, the Arizona Game and Fish Department is seeking to "Identify, assess, develop and promote watchable wildlife recreational opportunities." In a 2006 study, the Outdoor Industry Foundation reported that all outdoor wildlife-related recreational activities generated \$730 billion annually for the United States economy and, of that, watchable wildlife generated \$43 billion annually. They reported 66

million Americans participated in wildlife viewing, which supported 466,000 jobs. Estimated economic returns included retail sales averaging \$8.8 billion, trip related expenditures of \$8.5 billion, and state and federal tax receipts of \$2.7 billion. There are some aspects of outdoor recreation not captured by these numbers as well, including visitors who come for sight-seeing, family gatherings, and for educational benefits.

A 2011 study by the National Fish and Wildlife Foundation estimated the combined value of outdoor recreation, nature conservation and historic preservation at creating more than 9.4 million jobs, generating \$107 billion in local, state, and federal tax revenues resulting in a minimum total economic impact nationally of \$1.6 trillion. The U.S. Fish and Wildlife Service contributed about \$4.2 billion in economic activity and supported over 32,000 jobs through its management of 553 National Wildlife Refuges and thousands of smaller natural areas throughout the country.

According to a 2004 study of National Wildlife Refuges, there were 36.7 million visitors who generated \$1.64 billion of economic activity in regional economies. About two-thirds of the total expenditures were generated by non-consumptive activities, meaning it was neither fishing (27 percent) nor hunting (5 percent). The authors of this study also conducted willingness-to-pay research to determine the value of these refuges beyond what it actually cost to visit. They found that visitors showed a consumer surplus of more than \$1.3 billion, with \$816 million of this amount attributed to non-consumptive visitation.

7. Issues Related to the Impact of Roads

Roads pose significant threats to the land and resources, including impacts on wildlife through direct and indirect mortality and habitat fragmentation. In addition to creating new roads in already disturbed areas, many of the subroutes would cross currently roadless areas. We are strongly opposed to construction of roads in these areas.

Roads inflict a horrific toll on wildlife, with an estimated one million vertebrates killed daily on America's highways. Roads, paved or primitive, facilitate inadvertent or deliberate disruption of wildlife. According to prominent conservation biologists, habitat fragmentation is the most serious threat to biological diversity and is the primary cause of the present extinction crisis."

Roads fragment habitat by carving otherwise large patches into smaller ones resulting in negative impacts to interior habitat. Roads also directly eliminate wildlife habitat by occupying space within the ecosystem and by altering adjacent habitat. Roadside habitats experience increased temperature extremes and solar input and pollution from exhaust, herbicides, garbage, dust, and noise. These conditions increase habitat disturbance by a minimum of 500-600 meters on either side of a small rural road and a much larger distance for highways.

Wildlife is affected directly and indirectly by roads. Mule deer frequently harassed by all-terrain vehicles (ATVs) may alter their feeding and spatial-use patterns, and produce fewer offspring the following year. Mountain lions avoid improved dirt and hard-surfaced roads and select home range areas with lower densities of these road types.

In the Southwest, roads and associated activities are the primary cause of extensive arroyo cutting during the last century. Severe gully formation negatively affects soils,

vegetation, and archaeological resources. Vehicular traffic directly destroys biological resources by crushing vegetation and microbiotic soil crusts. The resulting soil compaction retards the recovery of vegetation. In addition, off-road vehicle (ORV) use can cause unsustainable erosion rates, exacerbate the spread of non-native invasive plants, cause user conflicts, and damage cultural sites.

Summary

Please carefully consider the negative and significant impacts of this proposed transmission line, the lack of need for the line, especially in light of the Southline project, and the disparate impact of the project on Arizona resources. Please deny approval of the CEC for SunZia.

Thank you for considering our comments.

Sincerely,



Sandy Bahr
Chapter Director
Sierra Club - Grand Canyon (Arizona) Chapter