

**APPENDIX A**  
**STANDARD CONSTRUCTION AND OPERATING**  
**PROCEDURES AND MITIGATION MEASURES**

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1.	All construction vehicle movement outside of the right-of-way will be restricted to predesignated access, contractor acquired access, or public roads.
2.	The limits of construction activities will typically be predetermined, with activity restricted to and confined within those limits. No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate survey or construction activity limits. The right-of-way boundary will be flagged in environmentally sensitive areas described in the specific plan of development to alert construction personnel that those areas should be avoided.
3.	In construction areas where recontouring is not required, vegetation will be left in place wherever possible to avoid excessive root damage and allow for resprouting.
4.	In construction areas (e.g., marshalling yards, structure sites, spur roads from existing access roads) where ground disturbance is significant or where recontouring is required, surface restoration will occur as required by the landowner or land-management agency. The method of restoration will typically consist of returning disturbed areas to their natural contour (to the extent practical), reseeding or revegetating with native plants (if required), installing cross drains for erosion control, placing water bars in the road, and filling ditches. Seed must be tested and certified to contain no noxious weeds in the mix by the State of Arizona Agricultural Department. Seed viability must also be tested at a certified laboratory approved by the authorized officer.
5.	Watering facilities (e.g., tanks, developed springs, water lines, wells, etc.) will be repaired or replaced to their predisturbed conditions as required by the landowner or land-management agency if they are damaged or destroyed by construction activities.
6.	Prior to construction, all construction personnel will be instructed on the protection of cultural, paleontological, and ecological resources. To assist in this effort, the construction contract will address (a) federal and state laws regarding antiquities, fossils, and plants and wildlife, including collection and removal; and (b) the importance of these resources and the purpose and necessity of protecting them.
7.	Impact avoidance and mitigation measures for cultural resources developed in consultation with the SHPO, BLM, BOR, YPG, ASLD, and the tribes will be implemented.
8.	The project sponsors will respond to complaints of line-generated radio or television interference by investigating the complaints and implementing appropriate mitigation measures. The transmission line will be patrolled on a regular basis so that damaged insulators or other line materials that could cause interference are repaired or replaced.
9.	The project sponsors will apply necessary mitigation to minimize problems of induced currents and voltages onto conductive objects sharing a right-of-way, to the mutual satisfaction of the parties involved.
10.	All construction and maintenance activities shall be conducted in a manner that will minimize disturbance to vegetation, drainage channels, and intermittent and perennial streambanks. In addition, all existing roads will be left in a condition equal to or better than their condition prior to the construction of the transmission line.
11.	All requirements of those entities having jurisdiction over air quality matters will be adhered to and any necessary permits for construction activities will be obtained. Open burning of construction debris (cleared trees, etc.) will not be allowed on BLM administered lands.

12.	Fences and gates, if damaged or destroyed by construction activities, will be repaired or replaced to their original predisturbed condition as required by the landowner or the land-management agency. Temporary gates will be installed only with the permission of the landowner or the land-management agency, and will be restored to their original predisturbed condition following construction.
13.	The proposed hardware and conductor will limit the audible noise, radio interference (RI), and television interference (TVI) due to corona. Tension will be maintained on all insulator assemblies to assure positive contact between insulators, thereby avoiding sparking. Caution will be exercised during construction to avoid scratching or nicking the conductor surface, which may provide points for corona to occur.
14.	During operation of the transmission line, the right-of-way will be maintained free of construction related non-biodegradable debris.
15.	Totally enclosed containment will be provided for all debris. All construction waste including debris, litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials will be removed to a disposal facility authorized to accept such materials. A Spill Contingency Plan and Spill Prevention Control and Countermeasure (SPCC) Plan will be prepared. The SPCC Plan will address prevention and remediation of oil, hydraulic fluid, and petroleum fuel spills including spills that could enter navigable waters of the United States. Oils or chemicals will be hauled to an approved site for disposal. If a spill occurs on BLM land the respective BLM field office will be notified, and a copy of the manifest for disposal of the affected materials will be provided to the BLM.
16.	Structures will be constructed to conform to “Suggested Practices for Avian Protection on Power Lines” (Avian Power Line Interaction Committee 2006).
17.	Species protected by the Arizona Native Plant Law will be made available for salvage. A salvage plan approved by the BLM will be included in the specific plan of development.
18.	The alignment of any new access roads or overland routes will follow the designated area’s landform contours where possible, providing that such alignment does not additionally impact resource values. This would minimize ground disturbance and reduce scarring.
19.	All new access roads not required for maintenance will be permanently closed using the most effective and least environmentally damaging methods appropriate to that area with concurrence of the landowner or land manager (e.g., stock piling and replacing topsoil, or rock replacement). This would limit access into the area. Fencing, signing, and other closure methods will be determined by the BLM and paid for by the contractor or APS.
20.	In designated areas, structures will be placed or rerouted so as to avoid sensitive features such as, but not limited to, riparian areas, watercourses, and cultural sites, or to allow conductors to clearly span the features, within limits of standard tower design.
21.	Transmission line structures will comply with Federal Aviation Administration Guidelines to minimize aircraft hazards (Federal Aviation 77).
22.	Special status species or other species of particular concern will continue to be considered during the construction phase of the Project, in accordance with management policies set forth by the BLM and other appropriate land management agencies. This will entail monitoring for plant and wildlife species of concern along the proposed transmission line and associated facilities (i.e., access roads and staging areas). In cases where such species are identified, appropriate action will be taken to avoid adverse impacts on the species and its habitat.
23.	The contractor or APS will submit to BLM a proposed road development plan for inclusion in the POD for the area in and around the Muggins Mountains. The goal of the plan is to limit new road construction to a minimum, restrict unauthorized use of maintenance roads, and discourage a travel route in the Muggins Mountains.

24.	As-built drawings, including locations of access roads, will be provided to the BLM as required by the right-of-way grant. The drawings will be provided in a format specified by the BLM.
25.	Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or federal land shall be immediately reported to the BLM authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values.

## **APPENDIX B**

### **VISUAL RESOURCES**

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## **APPENDIX B VISUAL RESOURCES**

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### **VISUAL RESOURCE MANAGEMENT OBJECTIVES**

BLM VRM classes are assigned to specific landscapes by the BLM that direct acceptable levels of visual intrusions within each class. VRM class guidelines are as follows:

- **Class I Objective.** The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.
- **Class II Objective.** The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.
- **Class III Objective.** The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.
- **Class IV Objectives.** The objective of this class is to provide for management activities, which require major modifications of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

**APPENDIX C**  
**BIOLOGICAL RESOURCES**

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## APPENDIX C BIOLOGICAL RESOURCES

Special status species that are known to be present, or that have reasonable potential to be present within the study area based on known distribution or habitat requirements, are noted in Table C-1. Potential impacts to these species have been described in Section 3.5.2 of this EA.

TABLE C-1 SPECIAL STATUS SPECIES				
Common Name	Scientific Name	Habitat	Federal Status	State of Arizona
<b>MAMMALS</b>				
California leaf-nosed bat	<i>Macrotus californicus</i>	Sonoran desertscrub with caves or mines for roosts	SC	WC
Cave myotis	<i>Myotis velifer</i>	Roosts primarily in mines or caves in xeric habitats such as creosote bush or palo verde mixed scrub plant associations. Requires a permanent water source within a few miles of roost	SC	
Pocketed Free-tailed Bat	<i>Nyctinomops femorosaccus</i>	Sonoran desertscrub with cliffs for roosts	SC	
Spotted bat	<i>Euderma maculatum</i>	Dry desert environments, and from below sea level up to conifer habitat		WC
Desert Bighorn Sheep	<i>Ovis canadensis</i>	Precipitous, desert mountain ranges	SC	
Sonoran Desert Pronghorn	<i>Antilocapra americana sonoriensis</i>	Open cover grassland, or grassland with low shrubs and rolling hills	E	WC
<b>BIRDS</b>				
Great Egret	<i>Ardea alba</i>	Aquatic habitat generalists		WC
Western burrowing owl	<i>Athene cunicularia hypugia</i>	Open country, agricultural areas, urban habitats at golf courses, and airports	SC	
Western Yellow-billed Cuckoo	<i>Coccyzus americanus occidentalis</i>	Dense, wooded riparian zones and damp thickets with high humidity	C	WC
Southwestern Willow Flycatcher	<i>Empidonax traillii eximius</i>	Lowland riparian woodlands and thickets	E	WC
American Peregrine Falcon	<i>Falco peregrinus anatum</i>	Open areas with perches providing good visibility. Found in almost any habitat	SC	WC



TABLE C-1 SPECIAL STATUS SPECIES				
Common Name	Scientific Name	Habitat	Federal Status	State of Arizona
Cactus Ferruginous Pygmy-Owl	<i>Glaucidium brasilianum cactorum</i>	Sonoran desertscrub with braided wash systems and mesquite, paloverde, saguaro, ironwood, and other shrubs and cacti	SC	WC
Yuma Clapper Rail	<i>Rallus longirostris yumanensis</i>	Freshwater marshes	E	WC
REPTILES				
Desert Rosy Boa	<i>Charina trivirgata gracia</i>	Rocky areas with basalt and granite soils in desert ranges, especially in canyons with permanent or intermittent streams	SC	
Desert tortoise (Sonoran population)	<i>Gopherus agassizii</i>	Completely terrestrial desert species requiring firm, but not hard, ground for construction of burrows, frequents desert oases, riverbanks, washes, and rocky slopes	SC	WC
Common chuckwalla	<i>Sauromalus ater</i>	Rock-dwelling, herbivorous lizard, widely distributed in the desert	SC	
Cowl's Fringe-Toed Lizard	<i>Uma notata rufopunctata</i>	Sparsely vegetated fine windblown sand dunes, flats, riverbanks, and washes of arid desert	SC	WC
PLANTS				
Kearney sumac	<i>Rhus kearneyi</i>	Found on north-facing dry cliffs in desert scrub at elevations from 1,000 to 1,500 feet	SS	
Schott Wire Lettuce	<i>Stephanomeria schottii</i>	semi-stabilized sand dunes with creosote bush, white bursage, big galleta grass, and many species of wildflowers at 400 to 800 feet	SS	
Arizona Rosewood	<i>Vauquelinia californica</i> spp. <i>sonorensis</i>	Woodland or forest at the base of cliffs, along canyon bottoms, and on moderate to steep slopes	SS	
Key: Federal Status: SC = Species of concern , E = Endangered, C = Candidate for listing as Endangered, SS = Sensitive species State Status: WC = Wildlife of special concern in Arizona. HS = Highly Safeguarded (Native Plant Law) Sources: AZGFD 2004a, 2004b; AOU 1998; Burt and Grossenheider 1980; Degenhardt et al. 1996; Ehrlich et al. 1988; Glinski 1998; Harvey et al.; 1999; Hoffmeister 1986; ITIS 2005; NGS 2002; Stebbins 2003; Wheeler 2003				

**TABLE C-2**  
**MIGRATORY BIRD SPECIES THAT MAY OCCUR IN THE VICINITY OF THE**  
**PROPOSED PROJECT**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Habitat</b>
Pied-billed grebe	<i>Podilymbus podiceps</i>	Lakes, ponds, streams, and canals
Great blue heron	<i>Ardea herodias</i>	Lakes, ponds, streams, canals, and marshes
Snowy egret	<i>Egretta thula</i>	Ponds, streams, and marshes
White-faced ibis	<i>Plegadis chihi</i>	Lakes, ponds, streams, marshes, and fields
Mallard	<i>Anas platyrhynchos</i>	Lakes, ponds, streams, and canals
Cinnamon teal	<i>Anas cyanoptera</i>	Ponds, streams, and canals
Turkey vulture	<i>Cathartes aura</i>	Open country, woodlands, farms
Northern harrier	<i>Circus cyaneus</i>	Wetlands, open fields
Sharp-shinned hawk	<i>Accipiter striatus</i>	Generally distributed
Cooper's hawk	<i>Accipiter cooperii</i>	Broken woodlands or streamside groves
Harris's hawk	<i>Parabuteo unicinctus</i>	Semiarid woodland, brushland
Swainson's hawk	<i>Buteo swainsoni</i>	Fields and desert
Red-tailed hawk	<i>Buteo jamaicensis</i>	Plains, prairie groves, desert
Ferruginous hawk	<i>Buteo regalis</i>	Dry, open country
American kestrel	<i>Falco sparverius</i>	Open country, cities
Prairie falcon	<i>Falco mexicanus</i>	Dry, open country, prairies
Peregrine falcon	<i>Falco peregrinus</i>	Cliffs, generally distributed, tops of tall urban buildings
Gambel's quail	<i>Callipepla gambelii</i>	Desert scrublands and thickets
Killdeer	<i>Charadrius vociferus</i>	Ponds, streams, and fields
White-winged dove	<i>Zenaida asiatica</i>	Dense mesquite, mature citrus groves, riparian woodlands, saguaro-paloverde deserts
Mourning dove	<i>Zenaida macroura</i>	Wide variety of habitats
Common ground dove	<i>Columbina passerina</i>	Fields and hedgerows
Greater roadrunner	<i>Geococcyx californianus</i>	Scrub desert and mesquite groves, less common in chaparral and oak woodland
Barn owl	<i>Tyto alba</i>	Dark cavities in city and farm buildings, cliffs, trees
Western screech owl	<i>Otus kennicottii</i>	Open woodlands, streamside groves, deserts, suburban areas
Great horned owl	<i>Bubo virginianus</i>	Common in wide variety of habitats
Elf owl	<i>Micrathene whitneyi</i>	Desert lowlands, canyons, foothills
Burrowing owl	<i>Athene cunicularia</i>	Open country, golf courses, airports
Lesser nighthawk	<i>Chordeiles acutipennis</i>	Dry, open country, scrubland, desert
Common poorwill	<i>Phalaenoptilus nuttallii</i>	Sagebrush and chaparral slopes
White-throated swift	<i>Aeronautes saxatalis</i>	Mountains, canyons, and cliffs
Black-chinned hummingbird	<i>Archilochus alexandri</i>	Lowlands and low mountains
Anna's hummingbird	<i>Calypte anna</i>	Coastal lowlands, mountains, deserts
Costa's hummingbird	<i>Calypte costae</i>	Desert washes, dry chaparral
Rufous hummingbird	<i>Selasphorus rufus</i>	Suburban and riparian areas
Gila woodpecker	<i>Melanerpes uropygialis</i>	Towns, scrub desert, cactus country, streamside woods
Ladder-backed woodpecker	<i>Picoides scalaris</i>	Dry brushlands, mesquite and cactus country, towns and rural areas
Northern flicker	<i>Colaptes auratus</i>	Open woodlands, suburban areas
Gilded flicker	<i>Colaptes chrysoides</i>	Low desert woodlands, favors saguaro
Pacific-slope flycatcher	<i>Empidonax difficilis</i>	Migrant through lowlands
Say's phoebe	<i>Sayornis saya</i>	Dry, open areas, canyons, cliffs
Ash-throated flycatcher	<i>Myiarchus cinerascens</i>	Wide variety of habitats

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<b>Common Name</b>	<b>Scientific Name</b>	<b>Habitat</b>
Brown-crested flycatcher	<i>Myiarchus tyrannulus</i>	Saguaro desert, river groves, lower mountain woodlands
Western kingbird	<i>Tyrannus verticalis</i>	Dry, open country
Common raven	<i>Corvus corax</i>	Mountains, deserts, coastal areas
Horned lark	<i>Eremophila alpestris</i>	Dirt fields, gravel ridges, shores
Tree swallow	<i>Tachycineta bicolor</i>	Streams, ponds, and lakes
Violet-green swallow	<i>Tachycineata thalassina</i>	Riparian areas, streams, ponds, and lakes
Northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>	Banks of streams and canals, streams, ponds, and lakes
Cliff swallow	<i>Petrochelidon pyrrhonota</i>	Lakeside, cliffs, and canals; nesting under nearby bridges, buildings, and other overhangs; streams and ponds
Verdin	<i>Auriparus flaviceps</i>	Southwestern desert
Cactus wren	<i>Campylorhynchus brunneicapillus</i>	Cholla cactus habitat
Rock wren	<i>Salpinctes obsoletus</i>	Arid and semiarid habitats
Canyon wren	<i>Catherpes mexicanus</i>	Canyons and cliffs, often near water
Bewick's wren	<i>Thryomanes bewickii</i>	Wooded riparian areas
Ruby-crowned kinglet	<i>Regulus calendula</i>	Woodlands, thickets
Black-tailed gnatcatcher	<i>Poliophtila melanura</i>	Desert, especially washes
Northern mockingbird	<i>Mimus polyglottos</i>	Variety of habitats
Bendire's thrasher	<i>Toxostoma bendirei</i>	Open farmlands, grasslands, brushy desert
Curve-billed thrasher	<i>Toxostoma curvirostre</i>	Cholla deserts and suburban areas
Phainopepla	<i>Phainopepla nitens</i>	Riparian areas, especially in trees with mistletoe
Loggerhead shrike	<i>Lanius ludovicianus</i>	Generally distributed
European starling	<i>Sturnus vulgaris</i>	Generally distributed
Orange-crowned warbler	<i>Vermivora celata</i>	Riparian and suburban areas in lowlands
Lucy's warbler	<i>Vermivora luciae</i>	Mesquites and cottonwoods along watercourses
Yellow-rumped warbler	<i>Dendroica coronata</i>	Riparian and suburban areas
Wilson's warbler	<i>Wilsonia pusilla</i>	Dense, moist woodlands, bogs, streamside tangles
Western tanager	<i>Piranga ludoviciana</i>	Transient in lowlands
Green-tailed towhee	<i>Pipilo chlorurus</i>	Brushy areas, riparian, and suburban areas
Canyon towhee	<i>Pipilo fuscus</i>	Sonoran desertscrub
Abert's towhee	<i>Pipilo aberti</i>	Riparian areas, suburban areas
Chipping sparrow	<i>Spizella pallida</i>	Brushy edges and riparian areas
Brewer's sparrow	<i>Spizella breweri</i>	Deserts, field edges, and suburban areas
Vesper sparrow	<i>Pooecetes gramineus</i>	Open weedy fields, roadsides, and grassy areas
Lark sparrow	<i>Chondestes grammacus</i>	Brushy, weedy areas, riparian areas, and field edges
Black-throated sparrow	<i>Amphispiza bilineata</i>	Desertscrub
Lark bunting	<i>Calamospiza melanocorys</i>	Brushy desert and field edges
Savannah sparrow	<i>Passerculus sandwichensis</i>	Open fields, roadsides, and grassy areas
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	Suburban, riparian, and other brushy areas
Black-headed grosbeak	<i>Pheucticus melanocephalus</i>	Transient in lowlands
Northern cardinal	<i>Cardinalis cardinalis</i>	Woodland edges, swamps, streamside thickets, suburban gardens

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<b>Common Name</b>	<b>Scientific Name</b>	<b>Habitat</b>
Pyrrhuloxia	<i>Cardinalis sinuatus</i>	Thorny brush, mesquite thickets, desert, woodland edges, ranchlands
Lazuli bunting	<i>Passerina amoena</i>	Weedy and shrubby areas along irrigation ditches and other bodies of water and suburban areas
Western meadowlark	<i>Sturnella neglecta</i>	Fields and other open areas, deserts
Brown-headed cowbird	<i>Molothrus ater</i>	Suburbs and agricultural areas
Hooded oriole	<i>Icterus cucullatus</i>	Riparian and suburban areas
House finch	<i>Carpodacus mexicanus</i>	Riparian and suburban areas, farmland, desert
Lesser goldfinch	<i>Carduelis psaltria</i>	Riparian areas, brushy desert scrub
Sources: National Geographic Society 2002; Witzeman et al. 1997		

### **Additional Sonoran Desert Tortoise Mitigation**

A desert tortoise protection education program shall be presented to all employees, inspectors, supervisors, contractors, and subcontractors who carry out proposed activities at the project site. The education program shall include discussions of the following:

- The legal and sensitive status of the tortoise
- A brief discussion of tortoise life, history, and ecology
- Mitigation measures designed to reduce adverse effects to tortoises
- Protocols to follow if a tortoise is encountered, including appropriate contact points

The project proponent shall designate a field contact representative (FCR) who shall be responsible for overseeing compliance with these mitigation measures and for coordination on compliance with the BLM. The FCR and authorized/qualified biologist(s) shall have the authority and the responsibility to halt all project activities that are in violation of these mitigation measures. The FCR shall be responsible for oversight of compliance with these mitigation measures, coordination with permitting agencies, land managers, and State Game and Fish Departments; and shall serve as a contact point for personnel that encounter desert tortoises. The FCR shall be on site during project activities and shall be familiar with and have a copy of these mitigation measures.

Prior to any surface-disturbing activities, work sites shall be surveyed for desert tortoises by a qualified biologist approved by the BLM. Surveys shall be in accordance with U.S. Fish and Wildlife Service protocol (Service 1992). For surface-disturbing activities occurring during the desert tortoise season (March 1 through November 1), surveys shall be conducted within 24 hours of initiation of surface-disturbing activities. The 100-percent surveys of new areas of disturbance shall be conducted a maximum of three times, or two consecutive times if no desert tortoises are found. During surveys, occupied desert tortoise burrows in or within 40 feet of areas to be disturbed shall be excavated using hand tools by an authorized biologist. Burrows discovered in areas to be disturbed by project activities shall be collapsed or blocked to prevent entry by tortoises (any tortoises in those burrows shall be relocated first). Desert tortoises and

any desert tortoise eggs found in areas to be disturbed shall be relocated and handled in accordance with the following measure.

If a tortoise is found in a project area, activities shall be modified to avoid injuring or harming it. If activities cannot be modified, tortoises shall be moved from harm's way. Upon discovery of a desert tortoise in harm's way, the authorized biologist shall translocate the animal the minimum distance possible (but not more than 2 miles) within appropriate habitat to ensure its safety from death, injury, or collection associated with the project or other activities. The authorized biologist shall be allowed some discretion to ensure that survival of each relocated desert tortoise is likely. Desert tortoises shall not be translocated to lands outside the administration of the Federal government without the written permission of the landowner.

Handling procedures for desert tortoises shall adhere to protocols outlined in the *Management Plan for the Sonoran Desert Population of the Desert Tortoise in Arizona* (December 1996) (document attached).

Only biologists authorized by the BLM and the appropriate State Fish and Game Department shall handle desert tortoises. The holder shall submit the name(s) of the proposed authorized biologist(s) to the BLM for review and approval at least 45 days prior to the onset of activities that could result in a take.

The authorized biologist shall maintain a record of all desert tortoises encountered during project activities. This information shall include for each desert tortoise:

- The locations and dates of observation;
- General condition and health, including injuries and state of healing and whether animals voided their bladders;
- Location moved from and location moved to; and
- Diagnostic markings; i.e., identification numbers of marked lateral scutes.

No notching of scutes or replacement of fluids with a syringe is authorized.

Vehicle use shall be limited to existing or designated routes.

Areas of new construction or disturbance shall be flagged or marked on the ground prior to construction. All construction workers shall strictly limit their activities and vehicles to areas that have been marked. Construction personnel shall be trained to recognize markers and understand the equipment movement restrictions involved.

Blading of new access or work areas shall be minimized. Disturbance to shrubs shall be avoided. If shrubs cannot be avoided during equipment operation or vehicle use, they shall be crushed rather than excavated or bladed and removed.

Project features that might trap or entangle desert tortoises such as open trenches, pits, open pipes, etc., shall be covered or modified to prevent entrapment. (This may only be necessary

during the tortoise active season and may be unnecessary if an on-site biologist is monitoring activities - see Suggested Mitigation Measures for Projects Conducted During the Tortoise Activity Period below.)

Construction sites shall be maintained in a sanitary condition at all times. The project proponent shall be responsible for controlling and limiting litter, trash, and garbage by immediately placing refuse in predator-proof, sealable receptacles. Trash and debris shall be moved when construction is complete.

After completion of the project, trenches, pits, and other features in which tortoises could be entrapped or entangled, shall be filled in, covered, or otherwise modified so they are no longer a hazard to desert tortoises.

After project completion, measures shall be taken to facilitate restoration, where practicable. Restoration techniques shall be tailored to the characteristics of the site and the nature of project impacts identified in the mitigation plan as developed by project biologists, Arizona Game and Fish Department, and permitting State and Federal agencies. Techniques may include removal of equipment and debris, recontouring, replacing boulders that were moved during construction, seeding, planting, transplanting of cacti and yuccas, etc. Only native plant species shall be used in restoration.

The project proponent shall submit a monitoring report to the BLM within 60 days of project completion. For long-term or ongoing projects that may result in continuing impacts to tortoises and habitat, annual monitoring reports shall be prepared. Monitoring reports shall briefly document the effectiveness of the desert tortoise mitigation measures, actual acreage of desert tortoise habitat disturbed, the number of desert tortoises excavated from burrows, the number of desert tortoises moved from construction sites, and other applicable information on individual desert tortoise encounters. The report shall make recommendations for modifying or refining the mitigation program to enhance desert tortoise protection and reduce needless hardship on the project proponents.

In accordance with Compensation for the Desert Tortoise (Desert Tortoise Compensation Team 1991), signed by Desert Tortoise Management Oversight Group, authorizing agencies shall require compensation for residual impacts to desert tortoise habitat (see Table 4, page 27 of *Management Plan for the Sonoran Desert Population of the Desert Tortoise in Arizona*).

Oil, fuel, pesticides, and other hazardous material spills shall be cleaned up and properly disposed of as soon as they occur in accordance with applicable State and Federal regulations. All hazardous material spills must be reported promptly to the appropriate surface management agencies and hazardous materials management authorities.

Workers shall check under vehicles for desert tortoises before vehicles are moved. If tortoises are found, they shall be allowed to move out of harm's way on their own or shall be moved by an authorized biologist prior to moving the vehicle.

No unleashed pets (e.g., dogs) shall be allowed on the construction site.

In desert tortoise habitat, project-related vehicles shall not exceed 25 miles per hour on unpaved roads.

Use of roads constructed for specific nonpublic purposes such as access routes to microwave towers shall be gated to limit access.

Temporary access routes created during project construction shall be modified as necessary to prevent further use. Closure of access routes shall be achieved by ripping, barricading, posting the route as closed, and/or seeding and planting with native plants.

***Projects Conducted During Tortoise Activity Period (Typically March 1 to November 1)***

For projects conducted during normal tortoise activity period (typically March 1 to November 1), construction and operation activities shall be monitored by a qualified biologist (approved by the BLM). The biologist shall be present during all activities in which encounters with tortoises may occur. The biologist shall watch for tortoises wandering into construction areas, check under vehicles, check at least three times per day any excavations that might trap tortoises, and conduct other activities necessary to ensure that death and injury of tortoises is minimized.

If any Gila monsters or desert tortoises are observed, their location shall be recorded and the sighting along with any information concerning the sighting shall be reported to the BLM wildlife biologist at the YFO, 2555 E. Gila Ridge Road, Yuma, AZ, 85365, telephone number (520) 317-3200.

**APPENDIX E**  
**PUBLIC COMMENT**

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PALO VERDE HUB TO NORTH GILA 500kV TRANSMISSION LINE PROJECT BLM ENVIRONMENTAL ASSESSMENT PUBLIC COMMENT AND RESPONSE SUMMARY TABLE*						
Comment No.	Date	Name	Comment Source	Issue	Comment (summary)	EA Location of Response
1	2/6/2006	Richard Issacson, Retired USAF MSGT	Letter	Project description	Approve of proposed 500kV line as submitted	No comment
2	2/7/2006	Shane, Fred Kawasaki	Phone	Project description	Approve of proposed 500kV line as submitted	No comment
3	2/7/2006	Pierre M. Cantou	Letter	Project description	Concern for Yuma Indian Reservation	Refer to Chapter 1, Section 1.1
4	2/8/2006	Peter Steere, Tohono O'odham	Phone	Project alternatives	Location of route within BLM-designated corridor	Refer to Chapter 1, Section 1.1
				Project description	Relationship to the Welton/Mohawk land transfer	Refer to Chapter 1, Section 1.1
5	2/8/2006	Christopher Coover, Parks and Recreation Dept. of Maricopa County	Email	Land use (recreation)	No adverse impact on the Maricopa Trail	Refer to Chapter 3, Section 3.2.1
6	2/9/2006	Ricky L. Rinehart, Adelphia	Letter	None	Approve of proposed 500kV line as submitted	No comment
7	2/10/2006	Jerry Ramirez, ADOT (Yuma)	Phone	Land use	Project must receive an encroachment permit from ADOT prior to any work in ADOT right-of-way	APS will coordinate with ADOT
8	2/10/2006	Ron Pierce, USMC	Phone	Cumulative impacts	Relationship to proposed WAPA line	Refer to Chapter 4, Section 4.2.1
				Project description	Question destination of energy	Refer to Chapter 1, Section 1.2
				Project need	Question need for both APS and WAPA lines	Refer to Chapter 1, Section 1.2
9	2/14/2006	Andy, Rinker Materials	Phone	Land use (mineral rights)	Concern for state lease land	Refer to Chapter 1, Section 1.1
10	2/14/2006	Gayle Rusing, Greater Yuma Economic Development Corporation	Letter	Project description	Approve of proposed 500kV line as submitted	No comment
11	2/14/2006	Carla Cristelli, Department of Energy, Western Area Power Administration	Letter	Construction	Need detailed right-of-way plans; no excavation within 20 feet of WAPA poles; no appreciable change to topography near WAPA line	Refer to Chapter 2, Section 2.2.1
				Mitigation	Maintain clear zone around WAPA poles for maintenance; prevent soil erosion	Refer to Chapter 2, Section 2.2.1
12	2/17/2006	John Eckhardt, ADOT, Intermodal Transportation Division	Letter	Land use	Project must receive an encroachment permit from ADOT prior to any work in ADOT right-of-way	APS will coordinate with ADOT
13	2/21/2006	Mike Cartsonis, City of Litchfield Park	Letter	None	Project distant from jurisdiction	No comment
14	2/23/2006	Sheree Ann Wetjen	Letter	Project description	Project description is vague	Refer to Chapter 1, Section 1.1
				Land use	Question if public land granted for ROW is lost for future use by public	Refer to Chapter 2, Section 2.2.1
				Document review	Would like to receive a copy of the draft/final EA when available	BLM to determine

PALO VERDE HUB TO NORTH GILA 500kV TRANSMISSION LINE PROJECT BLM ENVIRONMENTAL ASSESSMENT PUBLIC COMMENT AND RESPONSE SUMMARY TABLE*						
Comment No.	Date	Name	Comment Source	Issue	Comment (summary)	EA Location of Response
15	2/27/2006	Frank R. Jozwiak, Morisset, Schlosser, Jozwiak & McGaw Law Offices, on behalf of the Quechan Indian Tribe	Letter	Project description	Location of proposed route	Refer to Chapter 1, Section 1.1
				Earth and water resources	Impacts to allocated Colorado River water	Refer to Chapter 3, Section 3.7
16	3/2/2006	Steven L. Spangle, United States Department of the Interior, USFWS, Arizona Ecological Services Field Office	Letter	Biology	General information on how to obtain lists of threatened, endangered, or sensitive species	Refer to Chapter 3, Section 3.5
17	3/3/2006	Merle Eugene Zunigha, United States Department of the Interior, Bureau of Indian Affairs	Letter	Document review	Would like to receive a copy of the draft/final EA when available	BLM to determine
18	3/15/2006	Gregory T. Glassco, Yavapai-Prescott Indian Tribe	Letter	Project description	Supports Path 49 Conductor Clearance upgrade, unrelated to proposed project	No comment
19	3/15/2006	Laura Verdugo, Southern California Edison Company	Email	Project alternatives	Information on alternatives, interconnection points	Refer to Chapter 1, Section 1.1
*Table reflects comments submitted directly to the BLM in response to informational letters mailed in January 2006						