PROJECT INFORMATION

Project Title:	Tumbleweed Transmission Facilities Project
Project Type:	ENERGY DEVELOPMENT, SOLAR
Latitude/Longitude (DMS):	33.368639 / -104.295732
County(s):	CHAVES
Project Description:	DESRI Renewables, LLC (Applicant) is proposing to site a new generation-tie transmission line and substation for the Tumbleweed Transmission Facilities Project (Project) to connect a new solar generating facility to the new Bitter Lake Substation owned by Xcel Energy. The proposed Project will be located on 124 acres of privately owned property within unincorporated Chaves County, to the east of Roswell, New Mexico. In support of the Applicant's Location Control Permit application to the New Mexico Public Regulatory Commission pursuant to New Mexico Statutes Annotated 1978, Section 62-9-3, Tetra Tech (Consultant) is reviewing a refined project area for potential biological impacts. The purpose of the Project is to provide an interconnection between the new Tumbleweed Solar generation facility and the Xcel Energy transmission system. The interconnection will provide renewably generated energy to consumers in New Mexico, in support of the New Mexico Energy Transition Act (NMSA § 62-18-1 through 23).

REQUESTOR INFORMATION

Project Organization:	
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Phone:	(303) 222-5479

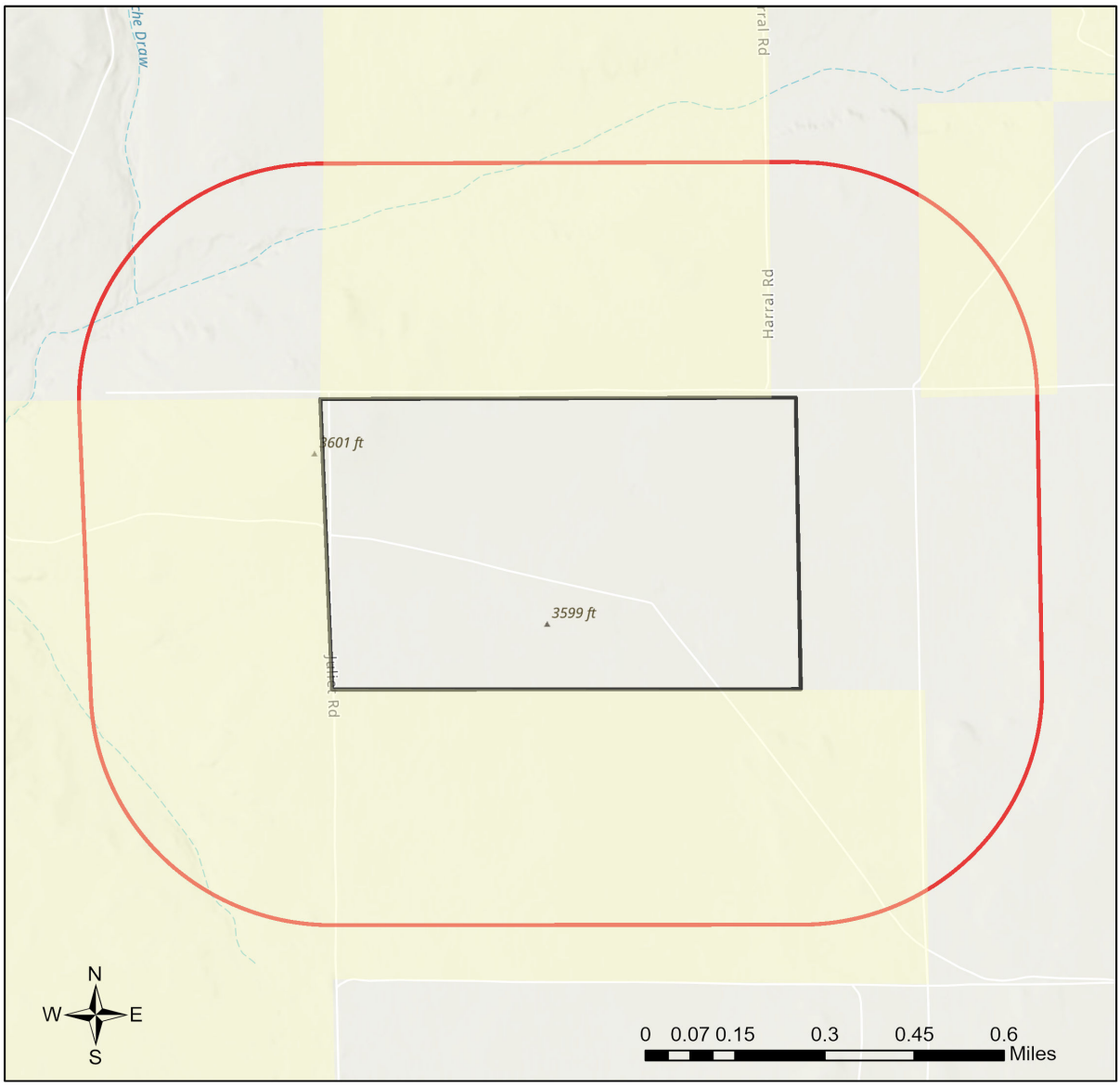
OVERALL STATUS

This report contains an initial list of recommendations regarding potential impacts to wildlife or wildlife habitats from the proposed project; see the Project Recommendations section below for further details. Your project proposal is being forwarded to a New Mexico Department of Wildlife (Department) biologist for review to determine whether there are any additional recommendations regarding the proposed actions. A Department biologist will be in touch within 30 days if there are further recommendations regarding this project proposal.

About this report:

- This environmental review is based on the project description and location that was entered. The report must be updated if the project type, area, or operational components are modified.
- This is a preliminary environmental screening assessment and report. It is not a substitute for the potential wildlife knowledge gained by having a biologist conduct a field survey of the project area. Federal status and plant data are provided as a courtesy to users. The review is also not intended to replace consultation required under the federal Endangered Species Act (ESA), including impact analyses for federal resources from the U.S. Fish and Wildlife Service (USFWS) using their Information for Planning and Consultation tool.
- This report contains information on wildlife species protected under the ESA and the Wildlife Conservation Act (WCA), Species of Greatest Conservation Need (SGCN) (page 18, table 5), and Species of Economic and Recreational Importance (SERI). Species listed under the ESA are protected from take at the federal level and under the WCA are protected from take at the state level. SGCN are identified in the State Wildlife Action Plan (SWAP) for New Mexico; all of these species are considered to be of conservation concern but not all of them are protected from take at the state or federal level. The harvest of all SERI is regulated at the state level. The Department has no authority to designate critical habitat for species listed under the WCA; only the USFWS can designate critical habitat for species listed under the ESA.
- The New Mexico Environmental Review Tool (ERT) utilizes species observation locations and species habitat suitability models, both of which are subject to ongoing change and refinement. Inclusion or omission of a species within a report cannot guarantee species presence or absence within your project area. To determine occurrence of any species listed in this report, or other wildlife that may be present within your project area, onsite surveys conducted by a qualified biologist during appropriate, species-specific survey timelines may be necessary. Any surveys including handling or capturing wildlife may require a scientific collection permit; contact the Department's Wildlife Permits Manager at dgf.permits@dgf.nm.gov for more information.
- The Department encourages use of the ERT to modify proposed projects for avoidance, minimization, or mitigation of wildlife impacts. However, the ERT is not intended to be used in a repeatedly iterative fashion to adjust project attributes until a previously determined recommendation is generated. The ERT serves to assess impacts once project details are developed. The New Mexico Crucial Habitat Assessment Tool, the data layers from which are included in the ERT, is the appropriate system for advising early-stage project planning and design to avoid areas of anticipated wildlife concerns and associated regulatory requirements.

Tumbleweed Transmission Facilities Project



- Buffered Project Boundary
- Project_Boundary
- Bureau of Land Management
- City Land
- County Land
- Department of Defense
- Department of Energy
- National Park Service
- NM Department of Game & Fish
- NM State Forestry Division
- NM State Parks
- Other Federal Agency
- Other Federal Agency
- State Land Office
- State of New Mexico
- Tribal Land
- U.S. Army Corps of Engineers
- U.S. Bureau of Reclamation
- U.S. Department of Agriculture
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- U.S. Natural Resources Conservation Service

NHNM, USGS, USFS, US Census Bureau, NMDGF
Esri, NASA, NGA, USGS, FEMA
Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

Special Status Animal Species Potentially within 650 Meters of Project Area

Common Name	Scientific Name	USFWS (ESA)	NMDOW (WCA)	NMDOW SGCN/SERI	USFS	USFS SCC	BLM
Barking Frog	Craugastor augusti			SGCN			
Plains Leopard Frog	Lithobates blairi			SGCN			BLM WATCH
American Bittern	Botaurus lentiginosus			SGCN			BLM WATCH
Aplomado Falcon	Falco femoralis		E	SGCN			
Peregrine Falcon	Falco peregrinus		T	SGCN			BLM WATCH
Yellow-Billed Cuckoo	Coccyzus americanus	LT		SGCN			
Elf Owl	Micrathene whitneyi			SGCN			BLM WATCH
Western Burrowing Owl	Athene cunicularia hypugaea			SGCN	Sensitive Species	USFS R3 SCC	BLM SENSITIVE
Common Nighthawk	Chordeiles minor			SGCN			
Lewis's Woodpecker	Melanerpes lewis			SGCN		USFS R3 SCC	BLM WATCH
Red-Headed Woodpecker	Melanerpes erythrocephalus			SGCN			
Bank Swallow	Riparia riparia			SGCN			
Pygmy Nuthatch	Sitta pygmaea			SGCN			
Mountain Bluebird	Sialia currucoides			SGCN			
Sprague's Pipit	Anthus spragueii			SGCN			BLM SENSITIVE
Loggerhead Shrike	Lanius ludovicianus			SGCN		USFS R3 SCC	BLM WATCH
Bell's Vireo	Vireo bellii		T	SGCN			BLM SENSITIVE
Vesper Sparrow	Pooecetes gramineus			SGCN			
Chestnut-Collared Longspur	Calcarius ornatus			SGCN			BLM SENSITIVE
Spotted Bat	Euderma maculatum		T	SGCN	Sensitive Species	USFS R3 SCC	BLM SENSITIVE
Black-Tailed Prairie Dog	Cynomys ludovicianus			SGCN	Sensitive Species		BLM SENSITIVE
Mule Deer	Odocoileus hemionus			SERI			
Pronghorn	Antilocapra americana			SERI			

Special Status Animal Species Potentially within 650 Meters of Project Area

Common Name	Scientific Name	USFWS (ESA)	NMDOW (WCA)	NMDOW SGCN/SERI	USFS	USFS SCC	BLM
Western River Cooter	Pseudemys gorzugi		T	SGCN			BLM SENSITIVE
Western Ribbon Snake	Thamnophis proximus		T	SGCN	Sensitive Species		
Desert Massasauga	Sistrurus catenatus edwardsii			SGCN			

Common Name hyperlink takes you to species account in bison-m.org; Scientific Name hyperlink takes you to information in NatureServe Explorer; ESA = Endangered Species Act, C = Candidate, LE = Listed Endangered, LT = Listed Threatened, XN = Non-essential Experimental Population, for other ESA codes see this website; WCA = Wildlife Conservation Act, E = Endangered, T = Threatened; SERI = Species of Economic and Recreational Importance; SGCN = Species of Greatest Conservation Need; USFS = U.S. Forest Service, Sensitive Species = A species likely to occur on USFS lands that is of concern for a potential reduction in population viability; SCC = Species of Conservation Concern; BLM = Bureau of Land Management, BLM SENSITIVE = A species that occurs on BLM lands and whose viability is at risk, BLM WATCH = Species that may be added to the sensitive species list in future pending new information regarding species status.

Project Recommendations

Your proposed project activities may require a custom review for assessment of potential effects to wildlife. See the "OVERALL STATUS" section above to determine the likelihood that your project will be reviewed further based on its location. A Department biologist will confirm whether any additional conservation measures are needed. You should expect to receive any additional project recommendations within 30 days of your project submission. If the "OVERALL STATUS" section indicates that no further consultation with the Department is required based on its location, then you will only receive additional project feedback from the Department if a biologist deems it necessary.

Grading or blading within the proposed solar project area should be minimized to the greatest extent possible. Minimize soil compaction by ensuring that heavy equipment has rubber tires and tracks and avoid the use of “drive and crush”, “disc and roll”, and other similar techniques. Whenever feasible, retain 60-70% native vegetation within the project area. This will help retain wildlife habitat features within the site and preserve existing vegetation and soil structure. Keeping the existing soil and root structures intact also helps to maximize water infiltration, minimize erosional run-off, and reduce biodiversity loss within the site.

Security perimeter fencing around the solar facility should be constructed to allow for some wildlife permeability. Leaving a 6 to 8 inch gap between the ground surface and bottom of the fence will allow smaller terrestrial wildlife species to move freely through the area and make use of any suitable habitat within the solar facility. Retain patches of undisturbed habitat within and adjacent to the project area and connect these patches with a minimum of 300 feet wide, unfenced corridors. For large solar arrays, optimally include a 300 feet wide corridor for every mile of fence and keep corridors as short as possible. Wider corridors or vegetative screening of project fencing may be needed when pronghorn (*Antilocapra americana*) or other big game animals are present in the area. Angle fencing at perimeter and corridor corners to facilitate animal movement around the project area.

To protect important and sensitive wildlife habitats, place solar arrays at least 200 feet from the edges of desert washes and build in previously disturbed or developed areas whenever possible. To minimize potential for fenced areas to drive animals onto roadways, place fenced areas at least 300 feet from roadways that don’t have wildlife-proof fencing. In the event that development must encompass desert washes, ensure that fences do not cross these washes and fragment this sensitive habitat.

All migratory birds are protected against direct take under the federal Migratory Bird Treaty Act (16 U.S.C. Sections 703-712), and hawks, falcons, vultures, owls, songbirds, and other insect-eating birds are protected under New Mexico State Statutes (17-2-13 and 17-2-14 NMSA), unless permitted by the applicable regulatory agency. To minimize the likelihood of adverse impacts to migratory birds, nests, eggs, or nestlings, the Department recommends that ground disturbance and vegetation removal activities be conducted outside of the primary migratory bird breeding season. This season runs from 15 April - 1 September for upland songbirds, willow flycatcher (*Empidonax traillii*), yellow-billed cuckoo (*Coccyzus americanus*), and other riparian songbirds; 1 March - 1 September for most raptors; 1 January - 15 July for golden eagle (*Aquila chysaetos canadensis*) and great horned owl (*Bubo virginianus*); and 1 March - 15 September for low-elevation deserts. If ground-disturbing and clearing activities must be conducted during the breeding season, the area should be surveyed for active nest sites (with birds or eggs present in the nesting territory) and avoid disturbing active nests until young have fledged. For active nests, establish adequate buffer zones to minimize disturbance to nesting birds. Buffer distances should be at least 100 feet from songbird and raven nests; 0.25 miles from most raptor nests; and 0.5 miles for ferruginous hawk (*Buteo regalis*), golden eagle, peregrine falcon (*Falco peregrinus*), and prairie falcon (*Falco mexicanus*) nests. Active nest sites in trees or shrubs that must be removed should be mitigated by qualified, permitted biologists or wildlife rehabilitators. Department biologists are available to consult on nest site mitigation and can facilitate contact with qualified personnel. Removal of active nests of state-protected species may require a scientific collection permit; contact the Department's Wildlife Permits Manager at dgf.permits@dgf.nm.gov for more information.

For post-construction reclamation of the solar project area, the Department recommends that the project proponent use only native plant species and that the reclamation seed mix is designed to enhance local pollinator habitat. The Department also recommends that only certified weed-free seed be used to avoid inadvertently introducing non-native species to the reclamation site. Any alternate plant species, used to substitute for primary plant species that are unavailable at the time of reclamation, should also be native. When possible, the Department recommends using seeds that are sourced from the same region and habitat type as the reclamation site and suggests including seeds from a region that represents potential future climatic conditions at the site.

Burrowing owl (*Athene cunicularia*) may occur within your project area. Burrowing owls are protected from take by the Migratory Bird Treaty Act and under New Mexico state statute. Before any ground disturbing activities occur, the Department recommends that a preliminary burrowing owl survey be conducted by a qualified biologist using the Department's Burrowing Owl Survey Protocol. Surveys including audio calls may require a scientific collection permit; contact the Department's Wildlife Permits Manager at dgf.permits@dgf.nm.gov for more information. Should burrowing owls be documented in the project area, please contact the Department or USFWS for further recommendations and information on any permitting requirements regarding relocation or avoidance of impacts.

Prairie dog colonies may occur within the vicinity of your project area. Both black-tailed prairie dogs (*Cynomys ludovicianus*) and Gunnison's prairie dogs (*Cynomys gunnisoni*) are designated as New Mexico SGCN, and their colonies provide important habitat for other grassland wildlife. Wherever possible, occupied prairie dog colonies should be left undisturbed, and all project activities should be directed off the colony. Any burrows that are located on the project site should be surveyed by a qualified biologist to determine whether burrows are active or inactive and whether burrowing owls may be utilizing the site. Colonies within the range of the black-tailed prairie dog can be surveyed by a qualified biologist diurnally, year-round using binoculars. Colonies within the range of the Gunnison's prairie dog can be surveyed by a qualified biologist diurnally, using binoculars during the warmer months from April through October and by searching for fairly fresh scat and lack of cobwebs or debris at the mouths of burrows during the cold months (November through March). If ground-disturbing activities cannot be relocated off the prairie dog colony, or if project activities involve control of prairie dogs, the Department recommends live-trapping and relocation of prairie dogs. A scientific collection permit may be required; contact the Department's Wildlife Permits Manager at dgf.permits@dgf.nm.gov for more information. The Department can provide recommendations regarding suitability of potential translocation areas and procedures. If a project will only impact 10 or fewer burrows and there is a large, active colony adjacent to the site the continued existence of which will not cause future conflicts, the Department suggests use of reverse dispersal translocation methods as outlined in Creating Prairie Dog Management Plans Part three: Appendices and Attachments (see Attachment 1). Methods include setting up a wire door over active burrows followed by monitoring and closure of the few burrows in the project disturbance area after prairie dog evacuation and barrier installation to prevent recolonization of closed areas. Removal activities should be performed after the spring breeding and birthing seasons and prior to winter hibernation (e.g., mid-June to mid-November). Prairie dogs in southern New Mexico may remain active in the winter, extending the potential removal period beyond mid-November. Removal activities should also begin roughly one month before construction or other disturbance occurs as it can take between one week and one month for the animals to disperse.

Your proposed project occurs within an area where springs or other important natural water features occur. This may result in the presence of a high use area for wildlife relative to the surrounding landscape. To ensure continued function of these important wildlife habitats, your project should consider measures to avoid the following.

- Altering surface or groundwater flow or hydrology,
- Disturbance to soil that modifies geomorphic properties or facilitates invasion of non-native vegetation.
- Affecting local surface or groundwater quality.
- Creating disturbance to wildlife utilizing these water features. Disturbance to wildlife can be reduced through practices including clustering infrastructure and activity wherever possible, avoiding large visual obstructions around water features, and limiting nighttime project operations or activities.

Department biologists are available for site-specific consultation regarding measures to assist with management and conservation of these habitat resources.

Disclaimers regarding recommendations:

- The Department provides technical guidance to support the persistence of all protected species of native fish and wildlife, including game and nongame wildlife species. Species listed within this report include those that have been documented to occur within the project area, and others that may not have been documented but are projected to occur within the project vicinity.
- Recommendations are provided by the Department under the authority of § 17-1-5.1 New Mexico Statutes Annotated 1978, to provide "communication and consultation with federal and other state agencies, local governments and communities, private organizations and affected interests responsible for habitat, wilderness, recreation, water quality and environmental protection to ensure comprehensive conservation services for hunters, anglers and nonconsumptive wildlife users".
- The Department has no authority for management of plants or Important Plant Areas. The New Mexico Endangered Plant Program, under the Energy, Minerals, and Natural Resources Department's Forestry Division, identifies and develops conservation measures necessary to ensure the survival of plant species within New Mexico. Plant status information is provided within this report as a courtesy to users. Recommendations provided within the ERT may not be sufficient to preclude impacts to rare or sensitive plants, unless conservation measures are identified in coordination with the Endangered Plant Program.
- Additional coordination and/or consultation may also be necessary under the federal ESA or National Environmental Policy Act (NEPA). Further site-specific mitigation recommendations may be proposed during ESA consultation and/or NEPA analyses or through coordination with affected federal agencies.
- Unless a project is marked as confidential in the title or description by the project proponent and if a ERT-generated report is the only response that the project proponent receives from the Department, then the report will be made publicly accessible via the Public Comment Letters page on the ERT website.