Project title: 2014 Access Road Erosion Repair Along the Path 15 500 kV T-Line

Requested By: Tish Saare

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Date Submitted: 7-11-14

Date Required: 7-14-14

Description of the Project:

Site reconnaissance for the Path 15 Erosion Project was conducted (re-visited) during the spring and summer of 2010. Twelve sites were identified as "High Priority", meaning that erosion damage is currently impairing or preventing access along the roads, making travel hazardous, and/or threatening the integrity of transmission line structures. Several additional sites were identified as "Moderate Priority" as defined by the likelihood that development of erosion features, if left unchecked, would most likely impair or prevent access along the roads or threaten the integrity of transmission line structures in the near future. A number of other erosion features were categorized as "Low Priority" based on a potential that further development of these features could eventually impair access or threaten structures.

After consultation with the USFWS, the "High Priority" sites were repaired in 2012. Western plans to address the "Medium Priority" sites during the summer of 2014. Many of these "Medium Priority" sites have degraded further and require repair in order to maintain access road or tower integrity.

Western proposes to repair erosion problems at the "Medium Priority" sites during the summer and fall of 2014. Construction is scheduled to begin in August 2014. These sites are located along the Path 15 transmission line and access roads between tower 41-4 (36°34'10.544"N, long: 120°35'51.477"W) and tower 51-4 (36°28'9.981"N, 120°35'51.477"W) within the 'Monocline Ridge, Levis, and Lillis Ranch, California' 7.5 minute USGS topographic quadrangles.

Erosion repair work will be conducted at ten sites and two staging areas will be used. Total non-native grassland/sage brush habitat disturbance is summarized in the table below for each site and the attached Path 15 Erosion Repair Figures show the location of habitat disturbance.

Erosion Repair Areas Outside Tower Pads and Road Prisms (in acres)

Site Number	Temporary Impacts	Permanent Impacts	
Site Mulliber	remporary impacts	ППрасс	
41A	0.03	0.	01
43A	0.21	0.	04
43C	0.03	0.	00
46A	0.14	0.0	00
47A	0.31	0.0	05
47D	0.13	0.0	00

Site Number	Temporary Impacts	Permanent Impacts
47E	0.24	0.03
47G	0.24	0.01
50A	0.05	0.01
51A	0.21	0.03
Staging Area M43	0.48	0.00
Staging Area Kamm Road	0.49	0.00
Total	2.56	0.18

Methods of Repair

A range of methods to repair existing damage and to control further erosion were developed, based on site conditions and experiences with erosion repair approaches utilized during previous repair efforts. The following paragraphs discuss methods of repairing and mitigating erosion damage in the roadway, in transmission line structure pads, and adjacent to the roadways where applicable:

Full Depth Road Repair and Aggregate Surfacing

This method of repairing erosion damage within the roadway consists of over-excavating washed-out areas and backfilling with compacted earth. Crushed aggregate surfacing would then be placed and compacted in order to prevent water from saturating the subgrade and beginning the process of collapse and erosion.

Riprap

Riprap, consisting of large, durable rock (typically 4 to 8 inches in diameter), would be placed where needed to dissipate the velocity of runoff and prevent erosion. The riprap would be installed over a gravel blanket and a separation geotextile in order to prevent runoff from contacting the native soil at velocities that would induce erosion.

Road Prism Construction

Past road maintenance activities have consisted of blading the traveled way to smooth rough areas. However, this practice has created many areas in which the road surface is now depressed below the adjacent ground surface and functions as a water channel during storm events. These conditions concentrate runoff and contribute to erosion. Installing ditches and building up the road prism to establish positive drainage patters improves road performance and durability. The addition of crushed aggregate surfacing further improves stability.

Road Grading

Shallow erosion features in the roadway may be reworked using a motor grader. Care must be taken to establish proper drainage.

Ditch Construction/Channelization

Ditches or channels may be used to direct runoff away from sensitive area. These channels may be lined with riprap to reduce the erosive effects of storm water.

Water Bars

Water bars are dips placed in the road to intercept runoff and direct it off of the roadway. Water bars are placed at intervals designed to prevent runoff from gaining enough velocity to cause erosion.

Low Water Crossings

Low water crossings, armored with riprap, may be used in lieu of culverts in order to provide an open channel cross section for varying storm water flows while maintaining a drivable surface during low or nonexistent flows.

Berms

Berms may be used to intercept and direct runoff to ditches or other drainage features in order to prevent flowing over areas sensitive to erosion and saturation of the roadway.

Gabions

These rock-filled wire basket structures are used for slope stabilization, retaining structures, and stream bank stabilization. Their massive, permeable shapes can provide catchment for debris, dissipation of water velocity, and mass where needed for stability. Gabions are relatively easy to fabricate and install and their materials are readily available. Installed gabions have a degree of flexibility that allows them to tolerate some settlement.

The following measures have been considered for erosion repair at transmission line structures:

Retaining Structures

Earth retaining structures have been considered as a way to provide protection against the encroachment of erosion and slope failure at the high priority structure sites. Crib walls, sheet piling, and gabion structures have been the main types of earth retention structures considered. These types of retaining structures would be used to limit the extent of erosion to an acceptable distance away from the transmission line structures.

Crib walls consist of interlocking members that form a 'log cabin' type of wall anchored into the adjacent embankment. The interlocking members are typically steel or timber, and the wall is backfilled with select material and compacted. Sheet piling refers to steel panels driven into the ground to form a linear earth-retaining structure. Gabions, described in the roadway repair alternatives, could be used in this application to limit the deposition of sliding and unraveling material from cut slopes onto the tower structures; the mass of the gabion structures would prevent movement due to the buildup of material.

Cavity Repair

Another measure to mitigate the erosion damage at the transmission line structure pads is to over-excavate erosion cavities and backfill with compacted select material.

Slope Stabilization and Re-Vegetation

Various areas disturbed during original construction of the transmission line, or disturbed in subsequent activities, have not been able to re-vegetate and as a result have experienced accelerated erosion. A more rigorous approach to re-vegetation could be used at these areas, which would include re-working the top layer of soil, spreading topsoil, and applying a stabilizing emulsion with an approved native seed mix chosen for the area's soil and climatic conditions. Watering would need to be applied to foster early growth.

\boxtimes	Map(s) See attached Maps
	Figures(s) See attached Figures
\boxtimes	Work Order Number - 100250561

To be completed by Natural Resources Only	
	ion taken pumentation is Attached
Environmental Assessment (EA) Environmental Impact Statement (EIS) Other Determinations: Determination: Based on my review of information prov. Compliance Officer, I have determined that the proposed	

bcc:	File Code:	Assigned to: Tish Saare	Project #: 100250561	Environmental Specialist – Date: LaTisha Saare – 7-3-14	
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CATEGORICAL EXCLUSION (CX) DETERMINATION

Project Number 100250561

Integral Elements

Project Title: 2014 Access Road Erosion Repair Along the Path 500 kV T-Line

Category of Action:

- B1.3 Routine Maintenance
- B1.13 Pathways, short access roads, and rail lines

Regulatory Requirements for a Categorical Exclusion Determination: The Department of Energy (DOE), National Environmental Policy Act (NEPA) Implementing Procedures, 10 CFR 1021.410(b) require the following determinations be made in order for a proposed action to be categorically excluded (see full text in regulation).

- 1. The proposed action fits within a class of action listed in Appendices A and B to Subpart D. For classes of actions listed in Appendix B, the following conditions are integral elements; i.e., to fit within a class, the proposal <u>must not</u>:
 - a. Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including requirements of DOE and/or Executive Orders;
 - b. Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities, but may include categorically excluded facilities;
 - c. Disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or un-permitted releases; or
 - d. Have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B;
 - e. Involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.
- 2. There are no extraordinary circumstances related to the proposal which may affect the significance of the environmental effects of the proposal;
- 3. The proposal has not been segmented to meet the definition of a categorical exclusion. The proposal is not connected to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions requiring preparation of an environmental impact statement.

Results of Review: In accordance with DOE environmental regulations (10 CFR 1021), The Western Area Power Administration (Western) has reviewed the proposed action in terms of the level of NEPA review needed. Based on this review, Western has determined the proposal is encompassed within a class of action listed in Appendix B to Subpart D (10 CFR 1021.410) which do not require preparation of either an environmental impact statement (EIS) or an environmental assessment (EA).

The proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.



Western Area Power Administration, SIERRA NEVADA REGION NEPA Attachment Sheet

Project Number 100250561

PROJECT	TITLE:
	2014 Access Road Erosion Repair Along the Path 500 kV T-Line
EFFECTE	DENVIRONMENT
	The project area is within Fresno County. This area has a Mediterranean climate, which is characterized by hot, dry summers and cool, moist winters with annual precipitation ranging between approximately 13 and 22 inches per year. The project area is composed of rolling and steep hills and is dominated by non-native annual/natural grassland and areas of sagebrush and bitterbrush habitat. The project area is interspersed with ephemeral and intermittent drainages. Barren areas within the project areas are comprised of gravel and dirt roads, tower pads, and staging areas for cattle and ranching operations. The primary land uses in the project area consist of cattle grazing/ranching and transmission line location.
REVIEW A	CTION
	Sensitive resource surveys were conducted by Aspen Environmental in May – July 2014. Western reviewed the data, which detailed habitat and species specific survey information within Western's ROW and an appropriate radius around each erosion repair site and staging area. Conservation measures are detailed below.
	L AND HISTORIC RESULTS
	Archaeological and paleontological surveys were conducted prior to the construction of Path 15 for the entire ROW. Significant pre-historic, historic, and paleontological sites have been recorded along access roads and at certain tower locations. Kamm staging location was surveyed last year and no cultural sites were located. All tower/erosion control work areas as described in this CX have been reviewed for the presence of cultural or paleontological resources. No resources of this type were recorded during the preconstruction surveys. No sensitive cultural or paleontological resources will be affected by the erosion control activities. Although it is unlikely that any cultural or paleontological resources will be uncovered during the erosion control activities, an archaeological monitor will periodically inspect
	erosion control activities during the project. In the event of any unanticipated discoveries, all work shall cease in the area until the significance of the find can be determined.
	Contractor and erosion control crew will be required to attend a cultural and paleontological awareness training conducted by Western prior to mobilization.
	Consultation on this project was completed on:
	This action is covered by Western's Programmatic Agreement, "Programmatic Agreement Among the Western Area Power Administration, the Advisory Council on Historic Preservation, and the California State Historic Preservation Officer Concerning Emergency and Routine Maintenance Activities and Other Routine Activities at Western Facilities in California,"

revised March, 2010.

$ \boxtimes$	Mitigation required (see below) Archaeological monitor required to periodically check erosion
	control activities to ensure no inadvertent discoveries.
\boxtimes	Include in Western's annual report
BIOLOGIC	CAL RESULTS
\boxtimes	Studies conducted, in order to evaluate potential impacts of the proposed project on special status species
	and/or their habitats, included background research to determine which special-status species and their
	habitats may occur within the project area and a review of habitat types in the project area. Informal
	consultation with the United States Fish and Wildlife Service (USFWS) on the project was initiated with USFWS on 7/7/14. Avoidance, minimization, and mitigation measures detailed in the consultation letter
	are detailed below. Any additional measures required in the Letter of Concurrence anticipated to be
	issued by the USFWS will be incorporated in this CX in addition to the measures listed below.
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	This activity is covered by Western's Biological Opinion, "Formal Programmatic Consultation
	on the Operation and Maintenance Activities of the Western Area Power Administration," dated
	May 27, 1998, U.S. Fish and Wildlife Service File 1.1-97-F-0140.
	Mitigation required (see below)
	NCE RESULTS
\boxtimes	Recycled Materials Quantities: All materials generated from the project that can be recycled,
	shall be recycled. Submit quantities of all recycled material by category to the COR within 30
	days of recycling and prior to submittal of final invoice. Record quantities of material by
	category that is salvaged, recycled, reused, or reprocessed.
\boxtimes	Disposal of Waste Material: Dispose or recycle waste material in accordance with applicable
	Federal, State, and local regulations and ordinances. Coordinate with COR regarding sampling
	and signatures on manifests for wastes materials if required. Submit quantities of total project
	waste material disposal as listed below to the COR prior to submittal of final invoice.
	(1) Umregulated Wester (i.e. treak), Volume in ordinary is a subject to the state of the state o
	(1) Unregulated Wastes (i.e., trash): Volume in cubic yards or weight in pounds.
	(2) Hazardoug or Universal Wester, Weight in nounds
	(2) Hazardous or Universal Wastes: Weight in pounds.
	(3) PCB Wastes (If applicable): Weight in pounds.
	(5) 1 CD wastes (11 applicable). Weight in pounds.
	(4) Other regulated wastes (e.g., lead-based paint or asbestos): Weight in pounds (specify type
	of waste in report).
	of waste in report).
\boxtimes	Pollutant Spill Prevention, Notification, and Cleanup: The Spill Prevention, Notification,
	and Cleanup Plan is expected to be a brief description of the measures taken by the contractor to
	prevent spills, to notify in the event of a spill, to train personnel, and to describe the company's
	commitment of manpower, equipment, and material which would be mobilized in the event of a
	spill. The plan should describe those elements in proportion to the risks posed by the project.
	This not intended to be the Spill Prevention, Control and Countermeasures Plan, as specified in
	40 CFR 112. Those plans are required by law for facilities with ≥1320 gallons of oil storage.
	To CITE 112. Those plans are required by law for facilities with \(\geq 1520\) gallons of oil storage.

	Prevention of Air Pollution: Federal law requires the protection of air quality under the Clean
	Air Act. All activities on this project shall be compliant with Federal, State, and local
1	regulations. In particular, California Air Resources Board regulations apply to diesel equipment
	and trucks as well as fleets of large spark ignition equipment. Also, the project is located within
	the San Joaquin Valley Air Pollution Control District jurisdiction and is subject to the local rules
	from that agency.
$ \boxtimes$	Prevention of Water Pollution: Federal law requires the protection of water quality under the
	Clean Air Act. The project is exempt from the General Permit for Stormwater Discharges
	Associated with Construction and Land Disturbance Activities issued by the California State
	Water Board because it consists of routine maintenance activities in an existing right of way, and
	because the proposed staging areas occurring outside that existing right of way measure
	collectively less than one acre. Construction activities must therefore remain strictly within the
	boundaries specified in the plans in order to qualify for this exemption. Best management
	practices should be used to control runoff from the project areas.
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MITIGATION

Other Mitigation: Required

Western anticipates that the USFWS will issue a Letter of Concurrence that outlines avoidance, minimization, and mitigation measures for federally listed species. Additional avoidance, minimization, and mitigation measures are included below.

Western Area Power Administration Sierra Nevada Region

Environmental Requirements for the 2014 Access Road Erosion Repair Along the Path 500 kV T-Line

Project Number 100250561

ITEMS CHECKED ARE APPLICABLE TO THIS PROJECT.

General

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	and March 1 as possible. The timing of maintenance activities will be adjusted to avoid sensitive periods
	for special status species and their habitat types. Qualified biologists will monitor or mark sensitive
	habitat so that it can be avoided by maintenance personnel during specific activities in specific habitat
	types. Prior to maintenance activities during the nesting season, a qualified biologist will survey the
	proposed maintenance sites to determine whether nesting raptors or migratory birds are present. If no
	nesting raptors or migratory birds, maintenance activities can proceed. Survey results will be valid only
	for the nesting season in which they were conducted and additional surveys would be needed for each
	additional season that work must be conducted.
	Routine maintenance activities will be avoided from mid-March through mid-June in the vicinity of
	structures.
	Road maintenance operations will be conducted to minimize soil erosion. The United States Forest
	Service's Best Management Practices, Forest Practices, and Forest Practices Rules of the California
	Department of Forestry will be implemented where practical.
	Culverts will be sized to match storms that may occur during the life of the road to minimize the potential
	for access road washouts under high intensity storms.
	Excavated material will not be stock piled or deposited on or near stream banks, lake shorelines, or other
	water course perimeters where they could be washed away by high water or storm run-off or could
	significantly impact the water course.
\boxtimes	In areas where excavation is not required, vegetation will be left in place whenever possible and original
	contours maintained in an undisturbed condition.
	Habitat diversity will be maintained to the greatest extent feasible.
	Brush blades will be used on bulldozers in clearing operations where such use will help preserve the cover
_	crop of grass, low-growing brush, etc.
×	
	status species are identified in the area, maintenance will receive approval from Natural Resources prior
	to initiating any maintenance.
	a. If there is a "take" of a special status species or action affecting their critical habitat, and/or
	b. If archeological, paleontological, or historic evidence is found.
X	
	All work on access and maintenance roads must stay within the existing prism of the roads.

Threatened and Endangered Species

· .	Federal law prohibits the taking of endangered, threatened, proposed or candidate wildlife and plants, and
	destruction or adverse modification of designated Critical Habitat. Federal law also prohibits the taking
	of birds protected by the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act.
	"Take" means to pursue, hunt, shoot, wound, kill, trap, capture or collect a protected animal or any part

	thereof, or attempt to do any of those things. The Contractor must always stay within Western's right-of-
	way and/or easement.
	Known Occurrence of Protected Species or Habitat: Following issuance of the notice to proceed, and prior
	to the start of construction, Western will provide training to all contractor and subcontractor personnel
	involved in the construction activity. Untrained personnel shall not be allowed in the construction area.
	Western will provide two sets of drawings showing known sensitive areas located on or immediately
	adjacent to the transmission line right-of-way and/or facility. These areas shall be considered avoidance
	areas. Prior to any construction activity, the avoidance areas shall be marked on the ground in a manner
	approved by the COR. If access is absolutely necessary, the contractor shall first obtain permission from
	the COR, noting that a Western and/or other government or tribal agency biologist may be required to
	accompany personnel and equipment. Ground markings shall be maintained through the duration of the
	contract. Western will remove the markings during or following final inspection of the project.
	Unknown Occurrence of Protected Species or Habitat: If evidence of a protected species is found in the
	project area, the contractor shall immediately notify the COR and provide the location and nature of the
	findings. The contractor shall stop all activity in the vicinity of the protected species or habitat and not
	proceed until directed to do so by the COR.
	Prior to the start of project activities, all personnel will participate in environmental awareness training
	which will inform them of the sensitive habitats within the project area, the species that have the potential
	to occur in the project area, and the avoidance and minimization measures that are to be adhered to during
	project activities. Any new crew members that start after project activities have started will be given the
	environmental awareness training prior to starting work on site.
\boxtimes	General Mitigation/Avoidance Measures: The Contractor shall follow all species specific conservation
	measures listed below as applicable to each site, in coordination with Western's Natural Resources Point
	of Contact (POC) and the COR.

Perennial Streams and Rivers

- The following activities will be prohibited at all times within 100 feet of a seep, spring, pond, lake, river, stream, or marsh, and their associated habitats:
 - Vehicle access, except on existing access and maintenance roads, unless approved by Natural Resources
 - Dumping, stockpiling, or burying of any material, except as required for specific O&M activities (e.g., rip-rap)
 - Mixing of pesticides, herbicides, or other potentially toxic chemicals
 - Open petroleum products

Equipment will be stored, fueled, and maintained in a vehicle staging area 300 feet or the maximum distance possible from any seep, spring, pond, lake, river, stream, marsh, or their associated habitats. Vehicles will be inspected daily for fluid leaks before leaving the staging area.

All spills of fuel or hydraulic fluid would be immediately cleaned up according to Western's guidelines for hazardous material handling.

Migratory Birds and Raptors

Under the Migratory Bird Treaty Act of 1918, migratory bird species and their nests and eggs are protected from injury or death. Impacts to migratory bird nests (including state listed Swainson's hawk, other raptors, and state listed bank swallow) shall be avoided during the nesting season (February 1 to August 31). If project activities occur during the nesting season, Western will survey the project area for migratory bird nests prior to project activities and establish appropriate buffers around any active nests that may potentially be disturbed. If work must be conducted within these buffers, a Western supplied biological monitor will be on site for project activities within the buffers. If the biological monitor

determines that activities are likely to cause nest impacts or nest abandonment, then project activities in the area shall be postponed or adjusted until nestlings have fledged, the nest is no longer active, or the activities are not likely to cause nest impacts or nest abandonment.

Blunt-Nosed Leopard Lizard

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- Construction activities will not take place at any site with active BNLL burrows within the erosion repair site or activity site.
- Construction vehicle speed limit of 15 mph will be enforced during construction on all nonpublic project access roads. All access and construction vehicle parking will be restricted to previously determined areas, existing roads, or tower pads.
- A Service-approved biological monitor will be on-site for any activities within suitable blunt-nosed leopard lizard habitat. Prior to construction activities each day within suitable blunt-nosed leopard lizard habitat, the monitor will conduct a brief ground survey of the site to verify that no blunt-nosed leopard lizards are visible within the site. The monitor will have the authority to stop and/or redirect project activities in coordination with the project manager and Westerns Natural Resources staff to ensure the protection of blunt-nosed leopard lizard. The monitor will complete daily reports/logs summarizing activities and environmental compliance.

Giant Kangaroo Rat

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- Construction activities will not take place at any site with active GKR burrows within the erosion repair site or activity site.
- A biological monitor will be on-site for any activities within suitable giant kangaroo rat habitat. Prior to construction activities each day within suitable giant kangaroo rat habitat, the monitor will conduct a brief ground survey of the site to verify that no giant kangaroo rat are present within the site. The biological monitor will have the authority to stop and/or redirect project activities in coordination with the project manager and Westerns Natural Resources staff to ensure the protection of giant kangaroo rats. The biological monitor will complete daily reports/logs summarizing activities and environmental compliance.
- Construction vehicle speed limit of 15 mph will be enforced during construction on all nonpublic project access roads. All access and construction vehicle parking will be restricted to previously determined areas, existing roads, or tower pads.

San Joaquin Kit Fox

 \boxtimes

- To the extent practical, Western would avoid conducting O&M activities that require ground disturbance or off-road travel from December 1 through May 31, the kit fox breeding/pupping season.
- Prior to O&M activities that involve ground disturbance, off-road travel, or vegetation management in suitable kit fox habitat, a qualified biologist will conduct habitat/den surveys in accordance with the 'Small Projects' recommendations in the 2011 USFWS Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance. Any suitable den (i.e., burrow with an entrance greater than 4 inches in diameter) would be monitored for evidence of kit fox use by placing either a tracking medium or wildlife monitoring cameras at the entrance for at least three consecutive nights or using a video endoscope (fiber-optic scope) to survey suspected dens. Active dens would be marked with a 100-foot buffer and natal or pupping dens (December 1 through May 31) would be marked with a 1,000-foot buffer. Construction activities, with the exception of essential vehicle operation on existing roads and foot travel would be prohibited within this buffer area.

- A biological monitor would be on-site for any activities within suitable SJKF habitat. Prior to construction activities each day within suitable SJKF habitat, the monitor will conduct a brief ground survey of the site to verify that no SJKF are present within the site. The biological monitor will have the authority to stop and/or redirect project activities in coordination with the project manager and Westerns Natural Resources staff to ensure the protection of SJKF. The biological monitor will complete daily reports/logs summarizing activities and environmental compliance.
- A day-time speed limit of 15 miles per hour (mph) will be enforced. Night-time activities will be avoided to the extent possible, but may be required for emergency repair work. If night time work is required, a speed limit of 10 mph will be enforced.
- Any excavated, steep-walled holes or trenches more than 2-feet deep will be covered at the close of each working day by plywood or similar materials or escape ramps will be installed in the hole or trench. Before any hole or trench is filled, it will be inspected for trapped animals.
- All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site overnight will be thoroughly inspected for kit foxes before the pipe is buried, capped, or moved. If a kit fox is discovered inside a pipe, that section of pipe will not be moved until the kit fox has left the pipe.
- All food-related trash items will be disposed of in securely closed containers and removed from the project site. No firearms or pets will be allowed on site.
- Upon completion of a project, all areas subject to temporary ground disturbance, including storage
 and staging areas and temporary roads, will be re-contoured and re-vegetated if necessary to
 promote restoration of the area to pre-project conditions.

San Joaquin Woolly-threads

- From February 1 to May 31, vehicle access will be permitted only on established roads within
 undisturbed grassland habitat until the site has been surveyed by a qualified biologist. All vehicles
 will have rubber tires to minimize soil disturbance. Off road travel will be avoided to the extent
 possible.
 - During the bloom season (February 1 to May 31), a qualified biologist will survey the site prior to project activities within undisturbed grassland habitat. If a listed plant population is detected, then a 50-foot avoidance buffer will be established and a biological monitor will be present for any activities within the vicinity of the population to ensure that the buffer is not encroached on. For activities for which a bloom season survey was not able to be conducted or for activities in which a listed plant species was detected and soil disturbance at the site is required: after the plants have set seed, the top four inches of top soil will be removed from the site and stockpiled nearby. The topsoil will be spread back out over the site upon completion of soil disturbance.
 - If vegetation management activities are proposed in the vicinity of a listed plant population, only manual clearing of vegetation will be allowed within 50-feet of the flagged buffer area. All work will be hauled offsite.
 - Standard erosion and sediment-control measures will be installed for all ground-disturbing activities to prevent impacts to plants.

Burrowing Owl

From February 1 to August 31 operations and maintenance (O&M) activity will be prohibited within 250 feet of burrowing owl nesting dens. From September 1 through January 31, disturbance will be prohibited within 160 feet of burrowing owl dens. To date, no active burrowing owl dens have been detected during surveys within 300 feet of tower removal/replacement sites or pulling and tensioning sites. Landing zones and staging areas will not be permitted within 250 feet of active burrows.

Compliance Regulatory Requirements

No violations of applicable statutory

\bowtie	No violations of applicable statutory, regulatory, or permit requirements for environment, safety, and
	health, including requirements of DOE and/or Executive Orders will be permitted.
\boxtimes	There will be no uncontrolled or un-permitted releases of hazardous substances, pollutants, contaminants,
	or CERCLA-excluded petroleum and natural gas products to avoid Adversely affecting environmentally
	sensitive resources.
\boxtimes	In the event of a Hazardous Material/Waste spill Natural Resources will be contacted, dispatch notified,
	and the appropriate Federal, State, and local regulating authority notified depending on the type and size of
	the spill (For further guidance, please see Natural Resources).
\boxtimes	Hazardous Materials/Waste on-site to consider: Fueling of equipment; In the right of way, place spill drip
	pans (or similar) below fueling areas, spill kit and tools available nearby to stop the flow of fuel spills, and
	employees trained in spill response.
\boxtimes	Hazardous Materials/Waste need to be removed off site for disposal/recycling
	Piping and oil sampling required
	Material Analytical Data: See attached results for reference
	Erosion control measures to be taken to prevent sediment from reaching river
	Soil Sampling