Project title:	**2012 Access Road Maintenance Along the Path 500 kV T-Line**				
Requested By:	**Ricardo Velarde**	Mail Code :	**N1411**	Phone:	**X4565**
Date Submitted:			Date Required:		

☒ **Description of the Project:**

Western Area Power Administration (Western), Sierra Nevada Region (SNR), is responsible for the operation and maintenance (O&M) of federally owned and operated transmission lines throughout California. Western must comply with the National Electric Safety Code, Western States Coordinating Council and Western directives for protecting human safety and maintaining the reliable operation of the transmission system. In order to accomplish this, Western proposes to rehabilitate and/or maintain its existing maintenance roads for the Los Banos – Gates #3 (Path 15) Transmission Line.

The purpose of the Path 15 Erosion project is to address erosion problems along the access roads and near structures along the Los Banos – Gates 500-kV transmission line. These problems were first identified and cataloged in March 2009. Subsequent surveys were conducted during the spring and summer of 2010. Sixteen sites were identified as a high priority for maintenance. These high priority sites are currently impairing safe and/or effective access along the designated maintenance roads/ or pose an imminent risk of this condition; or are an erosion feature that has developed, or has a high probability of developing, to the extent that it poses a risk to the integrity of a transmission line structure within the structure's design life. Construction is scheduled to begin in late September 2012.

Methods of Repair

A range of methods to repair existing damage and to control further erosion was considered, based on site conditions and experiences with previous erosion repair efforts. The following describe typical methods of repairing and mitigating erosion damage in the roadway, in transmission line structure pads, and adjacent to the roadways that will be used in this project. The Design Drawings enclosure describes methods to be used at each site.

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.

☒ **Location of the Project:**

The Path 15 T-Line is located in the western portion of the San Joaquin Valley. Los Banos Substation, the northern terminus, is approximately 10 miles west of the city of Los Banos, near San Luis Reservoir in western Merced County. Gates Substation, the southern terminus in southern Fresno County, is approximately 13 miles east of Coalinga. Path 15 extends generally south-southeast between the two substations in the eastern foothills of the Coast Range, skirting the intensively developed agricultural areas of the San Joaquin Valley. The entire length of the line runs for 84 miles and has 149 miles of associated legal access roads. This translates to 1,020 acres of ROW for the line and 540 acres of ROW associated with the roads. The 16 repair sites are identified in the Area Map enclosure.

☒ **Attachments:**

Area Maps (12)
Design Drawings (16)
USFWS Informal Consultation Letter (2)

To be completed by Natural Resources Only

Action taken

Note: All Documentation is Attached

☒ Categorical Exclusion (CX)
☒ Integral Elements
☒ NEPA Attachment Sheet
☒ Mitigation/Best Management Practices
☒ Environmental Requirements
☒ Attachments

Determination: Based on my review of information provided to me concerning the proposed action as NEPA Compliance Officer, I have determined that the proposed action meets the requirements for the categorical exclusion listed above. Therefore, I have determined that the proposed action may be categorically excluded from further NEPA review and documentation.

Gerald Robbins
NEPA Compliance Officer

August 24, 2012
Date
☒ Approved

File Code:	Assigned to:	Project #:	Environmental Specialist– Date:
	Ricardo Velarde	120801	8/24/12

Western Area Power Administration Sierra Nevada Region	CATEGORICAL EXCLUSION (CX) DETERMINATION	Project Number 120801

Integral Elements

Project Title: 2012 Access Road Maintenance along the Path 500 kV T-Line

Category of Action:

B1.3 – Routine Maintenance

B1.13 – Pathways, short access roads, and rail lines
Construction, acquisition, and relocation, consistent with applicable right-of-way conditions and approved land use or transportation improvement plans, of pedestrian walkways and trails, bicycle paths, small outdoor fitness areas, and short access roads and rail lines (such as branch and spur 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 proposal fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not:

    a. threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders;

    b. require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or 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 unpermitted releases;

    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 that 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. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related 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 during 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 meets the above regulatory criteria and there are no adverse environmental effects associated with this action.

Western Area Power Administration,
SIERRA NEVADA REGION
NEPA Attachment Sheet

Project Number
120801

PROJECT TITLE:

2012 Access Road Maintenance along the Path 500 kV T-Line

EFFECTED ENVIRONMENT

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 ACTION

Sensitive resource surveys were conducted by ICF International and Pacific Legacy in 2011. Western reviewed the data which captured habitat, biological, paleontological and cultural information within Western's T-line ROWs and access roads and developed the conservation measures below.

CULTURAL, PALEONTOLOGICAL AND HISTORIC RESULTS

Archaeological and paleontological surveys were conducted prior to the construction of Path 15 for the entire ROW. A significant pre-historic archaeological site was recorded along the access road to and below tower 45/1. Use of the access road by the contractor will not disturb or impact the site. As a protective measure, the archaeological site along the access road will be flagged to ensure avoidance. In addition, a paleontological (fossil) site was unearthed during tower construction at Site 45A directly underneath the tower structure and beyond. Some paleontological material was excavated at that time (2003) but a substantial amount of fossil material still remains at this site and is currently buried and not exposed. The major laws protecting paleontological resources on BLM (and other public lands) are the Federal Land Policy and Management Act (1976), the National Environmental Policy Act (1969), and various sections of Part 43 of the Code of Federal Regulations. In addition the Omnibus Public Land Management Act of 2009 provides further protection and restrictions for paleontological resources on BLM land. To ensure the protection of the paleontological resources erosion control activities at Site 45A shall not exceed a depth of 6 inches from the existing surface Western shall provide a paleontological monitor who will be on site during all erosion control activities at tower 45/1. Contractor will be required to coordinate erosion control activities with monitor. Paleontologist shall monitor ground-disturbing activities to detect for inadvertent exposure of paleontological resources (fossils). The paleontological monitor shall be authorized to redirect and/or halt construction activities at the location of a discovery, to review the potential paleontological material, and to protect the resource while it is evaluated. Monitoring

shall continue at the project area until the paleontologist determines that no native sediments are present or that significant paleontological resources are not likely to be discovered.

Contractor and erosion control crew will be required to attend a cultural and paleontological awareness training conducted by Western prior to mobilization.

☒ 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 at Western Facilities in California," dated December 11, 1997.

☒ Include in Western's annual report

☐ Consultation on this project was completed on_____

☐ Mitigation required (see below)

BIOLOGICAL RESULTS

Conservation of Natural Resources – Threatened and Endangered Species

a. GENERAL: 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.

b. 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.

c. 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.

d. GENERAL MITIGATION/AVOIDANCE MEASURES: The Contractor shall follow all conservation measures listed below as applicable to each site, in coordination with Western's Natural Resources Point of Contact (POC) and the COR:

(1) San Joaquin Kit Fox

(a) A Western biologist will conduct surveys within 30 days of the start of ground work in any one area. The contractor shall contact the Western Natural Resources POC a minimum of 30 days prior to the start of ground work and on a regular basis throughout the project in order for the surveys to be scheduled.

(b) Any active natal or pupping dens must be avoided by 1000 feet between December 1 and May 31 and active dens must be avoided by 100 feet between June 1 and November 30. Western's biologist will flag these zones. Activities in these zones shall be restricted to essential vehicle operation on existing roads and foot travel with approval from Westerns Natural Resources POC. All other activities, vehicle operation, material and equipment storage, and other surface-disturbing activities shall be prohibited within the exclusion zones. In the event that work is necessary within the exclusion zones, Western will consult with the USFWS to determine the appropriate measures to minimize the disturbance to dens. Work within the exclusion zones is prohibited unless the Western Natural Resources POC has given the clearance to do so.

(c) A Western biological monitor shall be on site to ensure work activities do not impact the San Joaquin kit fox. The contractor shall contact the Western Natural Resources POC a minimum of 30 days prior to the start of ground work and on a regular basis throughout the project in order for the monitor to be scheduled.

(2) Giant Kangaroo Rat

(a) A Western biologist will conduct surveys within 30 days of the start of ground work in any one area. The contractor shall contact the Western Natural Resources point of contact a minimum of 30 days prior to the start of ground work and on a regular basis throughout the project in order for the surveys to be scheduled.

(b) Any potential dens must be avoided by 30 feet. The Western biologist will flag these zones. Activities in these zones would be restricted to essential vehicle operation on existing roads and foot travel with approval from Westerns Natural Resources POC. All other activities, vehicle operation, material and equipment storage, and other surface-disturbing activities shall be prohibited within the exclusion zones. In the event that work is necessary within the exclusion zones, Western will consult with the USFWS to determine the appropriate measures to

minimize the disturbance to dens. Work within the exclusion zones is prohibited until the Western Natural Resources point of contact has given the clearance to do so.

(c) A Western biological monitor shall be on-site to ensure work activities do not impact the giant kangaroo rat. The contractor shall contact the Western Natural Resources POC a minimum of 30 days prior to the start of ground work and on a regular basis throughout the project in order for the monitor to be scheduled.

(3) Blunt-Nosed Leopard Lizard

(a) A Western biologist will conduct surveys within 30 days of the start of ground work in any one area. The contractor shall contact the Western Natural Resources POC a minimum of 30 days prior to the start of ground work and on a regular basis throughout the project in order for the surveys to be scheduled.

(b) Any potential dens must be avoided by 30 feet. The Western biologist will flag these zones. Activities in these zones shall be restricted to essential vehicle operation on existing roads and foot travel with approval from Westerns Natural Resources POC. All other activities, vehicle operation, material and equipment storage, and other surface-disturbing activities shall be prohibited within the exclusion zones. In the event that work is necessary within the exclusion zones, Western will consult with the USFWS to determine the appropriate measures to minimize the disturbance to dens. Work within the exclusion zones is prohibited until the Western Natural Resource point of contact has given the clearance to do so.

(c) A Western biological monitor shall be on site to ensure work activities do not impact the blunt-nosed leopard lizard. The contractor shall contact the Western Natural Resources POC a minimum of 30 days prior to the start of ground work and on a regular basis throughout the project in order for the monitor to be scheduled.

(4) Burrowing Owl

(a) A Western biologist will conduct surveys within 30 days of the start of ground work in any one area. The contractor shall contact the Western Natural Resources POC a minimum of 30 days prior to the start of ground work and on a regular basis throughout the project in order for the surveys to be scheduled.

(b) Any potential dens must be avoided by 250 feet during the nesting season (February 1 to August 31) and by 160 feet during the non-nesting season (September 1 to January 31). The Western biologist will flag these zones. Activities in these zones shall be restricted to essential vehicle operation on existing roads and foot travel with the approval from Westerns Natural Resources POC. All other activities, vehicle operation, material and equipment

storage, and other surface-disturbing activities shall be prohibited within the exclusion zones. In the event that work is necessary within the exclusion zones, Western will consult with the USFWS to determine the appropriate measures to minimize the disturbance to dens. Work within the exclusion zones is prohibited until the Western Natural Resource point of contact has given the clearance to do so.

(c) A Western biological monitor shall be on-site to ensure work activities do not impact the burrowing owl. The contractor shall contact the Western Natural Resources POC a minimum of 30 days prior to the start of ground work and on a regular basis throughout the project in order for the monitor to be scheduled.

(5) Plants

(a) A Western biologist will conduct surveys within 30 days of the start of ground work in any one area if the work will be conducted during sensitive plant blooming seasons. The contractor shall contact the Western Natural Resources POC a minimum of 30 days prior to the start of ground work and on a regular basis throughout the project in order for the surveys to be scheduled.

(b) Any sensitive plant populations must be avoided by 50 feet. The Western biologist will flag these zones. Activities in these zones shall be prohibited during the bloom season and without the previous approval from Westerns Natural Resources POC.

(c) A Western biological monitor shall be on-site to ensure work activities do not impact sensitive plant species. The contractor shall contact the Western Natural Resources POC a minimum of 30 days prior to the start of ground work and on a regular basis throughout the project in order for the monitor to be scheduled.

(6) Migratory birds and raptors

(a) 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) will 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 nests that may potentially be disturbed. If work must be conducted within these buffers, a Western 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 will be postponed until nestlings have fledged or the nest is no longer active.

☒ This activity is covered by Western's Letter of Concurrence, "Informal Consultation for the Path 15 Erosion Project in Fresno County," dated June 25, 2012, U.S. Fish and Wildlife Service File 108ESMF00-2012-I-0236 (enclosed)

☒ Include in Western's annual report

☒ Informal consultation on this project was completed on June 25, 2012.

CLEAN WATER ACT PERMITS

Proposed access road work will be completed under the U.S. Army Corps of Engineers' (USACE) Nationwide Permit 12 – Utility Line Activities, for the Section 404 permit. Based on a review of previous waters of the US delineations, USGS Quads, site visits and surveys delineating the ordinary high water mark it was determined that notification to the USACE is not required for any of the sites.

Based on discussions with the Regional Water Quality Control Board neither a Section 401 permit nor a general construction permit will be required since these types of repairs are considered routine maintenance to maintain original line or grade, hydraulic capacity, or original purpose of the facility.

OTHER REGULATORY REQUIREMENTS

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.

Sitting and construction or major expansion of waste storage or disposal facilities required.

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.

In the event of a Hazardous Material/Waste spill environmental services will be contacted, dispatch notified, and the appropriate Federal, State, and local regulating authority notified depending on the type and size of the spill.