Project title:	**Cottonwood-Roseville Optical Groundwire Project**				
Requested By:	Joe Oloriz	Mail Code :	N5706	Phone:	916-353-4773
Date Submitted:	7-3-13		Date Required:	7-8-13	

Description of the Project:

Purpose and Need

The 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, switchyards, and facilities throughout California. Western must comply with the National Electric Safety Code, Western States Coordinating Council (WECC), and internal directives for protecting human safety, the physical environment, and maintaining the reliable operation of the transmission system.

The process of marketing and delivering electric power through transmission facilities requires a great deal of real time information transfer between many geographically diverse locations. The requirement for additional real time data is increasing as a result of both changing regulation and customer demand for system security and reliability. Not only must Western respond to the increasing needs for communications capability, but Western must also compensate for the previous reduction in our communications capability that resulted from the Spectrum Relocation law. Under that law, the Federal Communications Commission auctioned off the rights to radio frequencies in the 2-gigahertz spectrum to the private sector. Implementation of this proposed optical ground wire (OPGW) installation will improve the communications system reliability, provide increased security to facilities, and augment Western's ability to fulfill customer needs and comply with applicable regulations.

The replacement fiber activities are substantially consistent with Western's transmission line operation and maintenance activities and qualify for a Categorical Exclusion in accordance with National Environmental Policy Act (NEPA) Section 102(2), Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 CFR parts 1500-15085) and Department of Energy (DOE) Part 1021 – NEPA Implementing Procedures: Categorical Exclusions B4.6, B4.7, B4.11, and B4.13 which allows for , but not exclusive to, adding/modifying electrical facilities, adding/burying fiber optic cable, construction or modification of electrical power substations, and upgrading and rebuilding existing powerlines.

Project Description

The proposed project will consist of stringing OPGW on Western's existing Cottonwood to Roseville line. This project also includes removal of approximately 43 single steel poles in the northern eight miles, replacement of these poles with 29 new, double-circuit, 230-kV transmission line steel poles, reconductoring the northern eight miles of the project area, and construction of an in-line amplifier (ILA) structure under existing lattice tower number 86-1. The new structures will be placed within the existing transmission line Right-of-Way (ROW), in line with the towers to be removed.

Support work for this project may include surveying the ROW, vegetation management within the ROW, and tower maintenance and modification. Access to, and along the transmission line during project activities would be by existing roads or ROW, which may require some improvements to support vehicles and equipment. Any work to access roads would be limited to the current prism of the road.

Construction of the proposed fiber-optic ground wire would include structure assembly and erection, structure removal, reconductoring of northern eight miles, construction of an ILA structure, stringing of OPGW wire, and site clean up and restoration. Specifics of each of these activities are as follows:

Structure Assembly and Erection
The single pole structures (monopoles) would be assembled in a staging area and delivered to the location in one or more pieces for erection. A 84-90-inch diameter, approximately 20-22 foot deep, hole would be augured for the footing. The soil from the holes would be stockpiled nearby and not within sensitive habitats. A reinforcing-bar (re-bar) cage would be placed in the hole, concrete would be poured into the hole and bolts would be added. The base of the structure would be bolted to the top of the concrete footing. The stockpiled soil would be placed back in the hole and compacted. Excess dirt would be spread around the base of the structure if appropriate or hauled to an approved site if there are sensitive habitats in the immediate vicinity. In addition, an ILA structure will be constructed within the existing footprint of lattice tower 86-1. This structure will be housed within a concrete building, set between the tower legs.

Structure Removal
The steel poles may be removed in sections. The embedded portions of the poles may be completely removed or cut-off two feet below grade. Soil may be removed up to a 5-foot radius around each embedded pole using a backhoe. Concrete footings may be broken up using a backhoe-mounted jackhammer and manual removal of re-bar caging (if present) will be done using a hand-held blowtorch. Additional activities will include cutting the pole two feet below grade, removal and proper disposal of all debris, backfilling of the holes using lean concrete and/or borrow material, and restoration of the site.

Stringing of OPGW Fiber and Re-conductoring
The OPGW will be installed from the Roseville substation to the Cottowood substation. Except for in the northern eight miles, OPGW will be installed on existing towers. Portions of the installation will be replacing existing overhead ground wire, while other portions will consist of the installation of new ground wire. Helicopters will be used to deliver personnel and equipment to the towers. Use of helicopters will allow for ground disturbance to be limited to the pulling and tensioning areas, landing zones, staging areas, and access roads.

In order to string the OPGW, Western has identified splice points along the line that meet design criteria and avoid environmentally sensitive areas. Project splice points will be at towers 18-8, 20-2, 24-1, 28-1, 32-1, 35-3, 38-6, 41-1, 46-2, 50-1, 52-5, 56-3, 58-4, 61-2, 64-1, 67-3, 70-3, 74-6, 76-1, 77-5, 81-3, 85-6, 86-1, 89-2, 92-4, 94-1, 97-2, 100-2, 103-4, 107-1, 109-3, 112-2, 114-1, 118-1, 122-2, 125-2, 128-2, 132-2, 136-4, 139-1, 143-2, 146-1, 150-6, 154-1, 158-1 and within the Cottonwood and Roseville substations. Project activities will be conducted at each pulling and tensioning site for a duration of one to two consecutive days. Helicopter landing zones will occur every 3 to 5 miles along the line. These landing zones will be surveyed for sensitive resources and approved by Western's Natural Resources point of contact (POC) prior to use of the selected areas and will comply with avoidance and

minimization measures described in this document. The following description includes information regarding typical methods and equipment normally used for this type of work.

The OPGW is strung in segments of several miles at a time on the tops of existing transmission line structures. Splice points are located at the first and last towers in each segment. On the sending end, there would be a truck to hold the OPGW and a separate machine called a tensioner. On the receiving end there would be a truck containing a machine called a puller. Travelers (a pulley-like device) would be attached to towers by helicopter as needed. A heavy rope called a p-line is then pulled by helicopter through the travelers on the tops of the towers. One end of the p-line would be attached through a connecting device to the reel of OPGW to be installed. The other end of the p-line would be attached to a puller (a winch device). The puller would be operated to pull the p-line, followed by the OPGW, through the travelers at the tops of the structures. The OPGW is pulled from the reel at the start of the segment toward the winch at the end of the segment. Once the fiber has been pulled, contractor personnel would complete the installation of that segment at each tower. Finally, the ends of two adjacent segments must be spliced. This is accomplished through the use of a special vehicle that is placed at the base of the tower where the splice is to be made. Conductor in the northern eight miles will be strung in the same way.

Pulling and tensioning sites are required every 2 ½ to 3 miles as well as at most structures having a turn angle of 30 degrees or greater. All pulling and tensioning sites would be aligned with the transmission line in both directions where possible so that the pulling would not be at an angle to the transmission line. There will be approximately 44 pulling and tensioning sites for this project. The attached map shows these sites.

☒ **Map(s)**
See attached Maps

☐ **Figures(s)**
See attached Figures

☒ **Work Order Number** - 100100719

To be completed by Natural Resources Only

Action taken
Note: All Documentation is Attached

☒ Categorical Exclusion (CX)	☒ Integral Elements
☐ Environmental Assessment (EA)	☒ NEPA Attachment Sheet
☐ Environmental Impact Statement (EIS)	☐ Environmental Requirements/Mitigation
☐ Other Determinations:	☒ Maps/Figures

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, Natural Resource Manager

July 3, 2013
☒ Date Approved

bcc:	File Code:	Assigned to:	Project #:	Environmental Specialist– Date:
		LaTisha Saare	100100719	LaTisha Saare – 5-28-13

Western Area Power Administration Sierra Nevada Region	CATEGORICAL EXCLUSION (CX) DETERMINATION	Project Number 100100719

Integral Elements

Project Title: Cottonwood-Roseville Optical Groundwire Project

Category of Action:

- **B4.6** - Additions/modifications to electric power transmission facilities;
- **B4.7** – Adding/burying fiber optic cable;
- **B4.11** – Construction or modification of electric power substations;
- **B4.13** – Upgrading and rebuilding existing powerlines.

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 must not:

   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
100100719

PROJECT TITLE: Cottonwood-Roseville Optical Groundwire Project

EFFECTED ENVIRONMENT

	The Cottonwood-Roseville transmission line traverses through a variety of environmental settings including agricultural, non-native grasslands, native habitats, orchards, and urban and developed areas.

REVIEW ACTION

	SNR Regional Preservation Official has reviewed the proposed project description for this undertaking. A complete cultural resource survey for the CW-RSC transmission line was undertaken in 2003 and 2010. All known cultural resources sites are recorded and documented on Western's GIS mapping system. The CW-RSC OPGW undertaking was planned to avoid cultural resource sites, including those project activities associated with pulling and tensioning of OPGW cable and lay down/staging areas. One known prehistoric site could not be avoided and will be impacted by new tower placement. An archeological monitor will be onsite for activities in close proximity to cultural resources sites and for new tower construction. SNRs Biologist has reviewed the proposed project and has proposed avoidance, minimization, and mitigation measures in order to minimize potential project affects to biological resources. Specific measures are outlined below.

CULTURAL AND HISTORIC RESULTS

	Effects Determination- Pursuant to Section 106 of NHPA, Western has determined that no historic properties will be affected by the CW-RSC OPGW undertaking. One cultural resource site will be impacted by proposed removal of poles currently located within the site and the addition of two new poles in the site. The site, CA-Teh-1000 is a prehistoric site that was first recorded in 1980. Western revisited this site in 2012 and conducted a full resurvey and National Register eligibility evaluation of the site. Ca-Teh-1000 is recommended as <u>not eligible</u> for the National Register due to lack of integrity, surface scarcity (no depth to site), and no diagnostic or temporal artifacts that could provide additional data to the site. The final report is on file at SNR. By letter of January 9, 2013 Western consulted with the California State Historic Preservation Official (SHPO) regarding Western's effects determination and eligibility recommendation to site Ca-Teh-1000. SHPO was provided with all documentation. In addition, Western consulted with the Native American Heritage Commission (NAHC) regarding the CW-RSC undertaking. NAHC provided a current list of tribes who may have an interest in this undertaking. By letter of December 17, 2012 Western consulted 24 tribes. The tribes were also provided a copy of the survey and evaluation report for CA-Teh-1000. As of this date, only the United Auburn Indian Community of the Auburn Rancheria has contacted Western. Their primary concern is to ensure both Western and the tribe share the same accurate cultural data.
☒	Consultation on this project was completed on: 4/10/13

☐	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.
☒	Mitigation required (see below) Cultural resource sites near construction activities shall be flagged prior to initiation of project to ensure avoidance. Archaeological and tribal monitors will be on site during tower construction activities.
☒	Include in Western's annual report

BIOLOGICAL RESULTS

☒	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. Consultation with the United States Fish and Wildlife Service (USFWS) on the CW-RSC OPGW project was initiated with USFWS. The USFWS issued a Biological Opinion for the proposed project on 6/6/13. Avoidance, minimization, and mitigation measures detailed in the Biological Opinion are incorporated in this CX in addition to the measures listed below.
☐	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)

COMPLIANCE RESULTS

☒	The proposed project will replace the existing fiber optics with new fiber optic cable and replace steel poles with steel poles; thus, will not use or require the disposal of wood poles or associated hardware.
☐	**Wood Pole Disposal:** All wood poles and crossarms shall be removed from the right-of-way. Wood Poles will be disposed of in accordance to the attached wood pole disposal guidance provided by SNR. Treated wood poles and members removed during the project shall be recycled or transferred to the public for accepted uses as indicated in the attached guidance. Treated wood poles and members transferred to a landfill or the public shall be accompanied by a written consumer information sheet on treated wood (attached). Obtain a receipt form, part of the consumer information sheet, from the recipient indicating that they have received, read, and understand the consumer information sheet. Treated wood products transferred to right-of-way landowners shall be moved off the right-of-way. Treated wood product scrap or poles and members that cannot be donated or reused shall be properly disposed in a landfill that accepts treated wood and has signed Western's consumer information sheet receipt. Submit treated wood pole consumer receipt forms to the Natural Resources Department after completion of work.

☒	**Hardware Disposal:** All associated hardware that is recyclable shall be sent for recycling. The Elverta Maintenance Facility accumulates hardware for recycling. All other material shall be disposed of in accordance to federal, State, and local regulations.
☒	**Waste Material Quantity Report:** Submit quantities of total project waste material disposal as listed below to the Natural Resources Department after completion of work. (1) Sanitary Wastes: Volume in cubic yards or weight in pounds. (2) Hazardous or Universal Wastes: Weight in pounds. (3) PCB Wastes (If applicable): Weight in pounds. (4) Other regulated wastes (e.g., lead-based paint or asbestos): Weight in pounds (specify type of waste in report).

MITIGATION

☒	Other Mitigation: Required Western anticipates that the USFWS will issue a Biological Opinion 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 Cottonwood-Roseville OPGW Project	Project Number 100100719

ITEMS CHECKED ARE APPLICABLE TO THIS PROJECT.

General

☐	All routine maintenance activities will be performed during the non-nesting period between August 15 and March 1. 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.
☐	Vegetative management plans will be followed as appropriate.
☒	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.
☐	Dispose of all cleared vegetation in an appropriate manner.
☒	The biologist will determine whether a sensitive habitat is present at the maintenance site. If special status species are identified in the area, maintenance will receive approval from Natural Resources prior to initiating any maintenance.
☒	Natural Resources will be contacted immediately: 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.
☒	No paint or permanent discoloring agents will be applied to rocks or vegetation.
☒	If used, survey stakes will be removed as a part of the final clean up.
☒	All work on access and maintenance roads must stay within the existing prism of the roads.

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.

Vernal Pools and Seasonal Wetlands

☒	The following measures will be implemented to minimize disturbance to vernal pool/seasonal wetland habitat: • 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 within one work day of starting on site. • Prior to project activities, a qualified biologist will identify and mark a 50-foot area around vernal pools, swales, wetlands, and other suitable vernal pool crustacean habitat within 250 feet of pulling and tensioning sites, landing zones, staging areas, and off road access areas. New tower locations will be placed a minimum of 100 feet from suitable fairy shrimp and tadpole shrimp habitat. • At tower removal locations YL 25-3, YL 25-5, YL 25-6, YL 25-7, and YL 25-8, suitable fairy shrimp and tadpole shrimp habitat will be avoided by a minimum of 20 feet, with the exception of travel on existing roads. Silt fencing will be installed between tower removal locations and these wetland features. A biological monitor will remain on site for any work done at these locations to ensure that these features are not encroached upon and that project activities will not affect these features. • If activities are conducted during the wet season, then vernal pool crustacean habitat within existing roads will be avoided to the extent feasible. Features will be flagged and vehicles will detour around these flagged features if possible. For linear features (swales), features or complexes that are too large to avoid, and for features within topography that prevents avoidance, the vehicle speed limit will be 10 mph through features on the existing access roads.
☒	The following compensatory mitigation measures will be implemented to offset permanent and indirect impacts to vernal pool/seasonal wetland habitat: • Permanent impacts to 0.065 acres to vernal pool fairy shrimp/vernal pool tadpole shrimp habitat will be mitigated for at a 3:1 ratio through purchase of 0.195 acres of credit at an approved mitigation bank. • Indirect impacts to 0.406 acres to vernal pool fairy shrimp/vernal pool tadpole shrimp habitat will be mitigated for at a 2:1 ratio through purchase of 0.812 acres of preservation credit at an approved mitigation bank.

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.

Valley Elderberry Longhorn Beetle

☒	The following measures will be implemented to avoid potential impacts to valley elderberry longhorn beetle (VELB): • Prior to project activities, a qualified biologist will flag a 100-foot buffer from the drip-line of any elderberry shrub in the vicinity of tower installation and removal sites, pulling and tensioning sites, landing zones, staging areas, and off-road access areas. Project activities within this buffer will be avoided to the extent possible. If project activities must occur within 100 feet of an elderberry shrub, then a biological monitor will remain on-site during all activities within 100 feet of an elderberry shrub. With the exception of vehicle travel along previously established roads, project activities will not be permitted within 20 feet of an elderberry shrub. • Installation of OPGW and reconductoring will be performed by pulling the line from tower to tower without touching the vegetation in areas where elderberry shrubs are present.

Giant Garter Snake

☒	The following measures will be implemented to avoid and minimize potential impacts to giant garter snake (GGS) only if activities are conducted at the three towers (114-1, 122-2, and 132-2) during the active season for the snake. If activities occur during the inactive season for the snake, then these measures are not necessary as all the work will occur within rice fields which is where GGS are not expected to occur during this time: • No digging or ground disturbing activities are proposed in the portions of the project located in the GGS geographic range. Project disturbance within the GGS range will consist only of surface compaction due to vehicle movement and helicopter landing. Digging and ground disturbance in GGS habitat will be prohibited. • 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 within one work day of starting on site. • All work to be done in rice fields, including pulling and tensioning activities at towers 114/1, 122/2, and 132/2, must be coordinated with the landowners and shall be complete prior to May 1 or the contractor will enter into an agreement with the landowner in which rice planting for the season will occur after activities in the field are complete. Rice fields are not to remain unplanted as a result of the project. • Prior to project activities, a qualified biologist will identify potential GGS upland and aquatic habitat within 200 feet of pulling and tensioning sites, landing zones, staging areas, and access roads. Project activities within 200 feet of GGS aquatic habitat will be avoided to the extent possible. When project activities occur within 200 feet of GGS aquatic habitat, a biological monitor will survey the project site immediately before project activities and remain on-site during all activities within 200 feet of GGS aquatic habitat. If a GGS is observed, activities in the vicinity will be stopped until the snake has moved away from the site and Western will contact the USFWS to report the occurrence. • Levee banks with ground squirrel holes and other upland habitat with suitable burrows for refuge during the GGS dormancy period will be avoided. • Vehicles will remain on agricultural access roads, except for at the pulling and tensioning sites. At

	pulling and tensioning sites within rice fields, vehicles will enter and exit the field using the same path. The entrance and exit path will be determined by the biological monitor and will be the shortest path from an established access road to the pulling and tensioning sites that impacts the least area of potential habitat and is suitable for travel. The number of vehicles entering and exiting the field will be limited to essential vehicles and the footprint of the pulling and tensioning sites will be minimized to the extent feasible. • Preparation of pulling and tensioning sites will not be conducted within rice fields where feasible. If the soil within a rice field is too saturated to drive the necessary vehicles on, then matting will be placed on the entrance/exit paths and pulling and tensioning areas where necessary. Plastic, monofilament, jute, or other matting that may entangle snakes will not be used on site. A biological monitor will survey the area prior to the placement of each mat. Mats will be removed within two weeks after activities are completed in a given area.

Listed Plants

☒	The following measures will be implemented to minimize potential impacts to listed plant species: • During 2013, a qualified biologist will survey appropriate project disturbance areas during appropriate blooming periods to verify absence of listed plant species. Any listed species survey findings will be reported to the USFWS. • From February 1 to October 31, vehicle access will be permitted only on established roads within undisturbed grassland habitat until the site has been surveyed by a qualified biologist. If a listed plant population is detected the population will be avoided. A qualified biologist would flag an appropriate buffer around the population and the biological monitor will be present for any activities within the vicinity of the population to ensure that there is no encroachment into the buffer. • 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 within one work day of starting on site. • Prior to project activities, a qualified biologist will identify and mark a 50-foot buffer around vernal pools, swales, wetlands, and other listed vernal pool branchiopod habitat within 250 feet of pulling and tensioning sites, landing zones, staging areas, and off road access areas. New tower locations will be placed a minimum of 100 feet from suitable listed plant habitat. • At tower removal locations YL 25-3 and YL 25-7, and YL 25-8, suitable slender Orcutt grass habitat will be avoided by a minimum of 20 feet, with the exception of travel on existing roads. Silt fencing will be installed between tower removal locations and wetland features. A biological monitor will remain on site for any work done at these locations to ensure that, with the exception of travel on existing roads, these features are not encroached upon and that project activities will not affect these features.

Swainson's Hawk

☒	If project activities are to occur during the Swainson's hawk nesting season (April – August), then a qualified biologist will survey within 0.25 miles of each impact area. If an active Swainson's hawk nest is detected within 0.25 miles of an impact area, then a biological monitor will monitor hawk activities at that site during any project activities. Activities within 0.25 miles of an active nest site will be limited to one consecutive day of work at a time and minimal vehicles and equipment will be allowed on the site, unless the biological monitor determines that more activity will not disturb the nest.

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, regulatory, or permit requirements for environment, safety, and health, including requirements of DOE and/or Executive Orders will be permitted.
☒	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 (For further guidance, please see Natural Resources).
☒	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.
☐	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