Project title:	Maxwell - O'Banion OPGW				
Requested By:	David Young	Mail Code :	N1410	Phone:	916-353-4542
Date Submitted:	9/11/2011		Date Required:	9/20/2011	

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 and Reclamation 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. Western is proposing to put Optical Ground Wire (OPGW) on its existing Maxwell O'Banion (MAX-OBN) transmission line. The need for OPGW installation is due to the fact that the process of marketing and delivering power through transmission facilities requires a great deal of real time information transfer between many geographically diverse locations. The need for real time data is rapidly increasing as a result of changing regulation and customer demand for overall system security and reliability.

The placement of OPGW on the existing MAX OBN transmission line and associated activities with this project are required and substantially consistent with Western's transmission line operation and maintenance activities and; thus, qualifies 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 exclusions B 1.7, B4.6, B 4.7 and B4.11 which allows for , but not exclusive to, installation of communication systems, adding/modifying electrical facilities within a previously developed area, adding new fiber optic cable, and modification of electric power substations.

Project Overview

The proposed MAX OBN OPGW project includes the installation of fiber optic cable at the tops of the towers of this existing transmission line which is approximately 38 miles long and generally traverses in a west-east direction beginning approximately 5-miles west of Interstate 5 at the existing Maxwell substation and terminating at the existing OBanion Substation off of OBanion Road, approximately 2 miles west of Highway 99, in Sutter Co. See attached figures for project location and vicinity.

Two different components comprise the proposed work. The two components may be executed separately or together, depending on construction contractor approach and determination of efficiency. The two components are as follows: The first component is to install/retrofit a new bracket to each existing tower for the attachment of the new OPGW. These brackets weigh approximately 500 pounds each and are manufactured off-site, transported to the site, and staged in areas determined by the construction contractor and Western's COR/Biologist. In staging area selection, the construction contractor is restricted and must comply with the stipulations and requirements set forth in the Letter of Concurrence (LOC). Additionally, any staging, laydown, or landing zones must be approved prior to use by the COR/Biologist. Helicopters will be used to deliver personnel to the towers for bracket and OPGW installation. Use of helicopters will minimize ground disturbance to staging areas and access during all phases of project.

The second component is the actual running, stringing, tensioning and securing of the OPGW starting at Maxwell Substation and terminating, as indicated, at the OBanion Substation. Only one new tower will be erected/constructed. It will be constructed immediately adjacent to the OBanion Substation to the northwest approximately 200 feet outside the perimeter fenced area of the substation, in previously disturbed areas and in the existing Right of Way (ROW) between the Substation and OBanion Road.

There will be a minimum of 10 pulling and tensioning sites at the following tower locations (see attached Figures for tower numbers and locations: 96/4, 98/4B, 102/3, 106/3, 111/4, 116/3, 120/5, 126/2, 130/2, and 134/5. There may be additional or alternative locations depending on sensitive resource identification, weather and access but mitigation and minimization measures will be implemented throughout the project and strictly enforced by on-site, qualified biological and resource monitors.

Western's Natural Resources Department, including the environmental project manager, in-house biologist, representatives from the Lands Department and a member of the maintenance line crew conducted various site visits to select and verify splice points along the line that meet design criteria, consider the contractor's capabilities, and most importantly avoided the environmental and resource sensitive areas to assure no adverse affect on any listed federal or state species or sensitive habitat. 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. Additionally, Western entered into informal Endangered Species Act (ESA) with the States Fish and Wildlife Service (USFWS) and received a Letter of Concurrence (LOC) determining that the project would NOT likely affect vernal pool crustaceans, Elderberry shrub, red-legged frog, valley elderberry longhorn beetle, giant garter snake, or the palmate-bracted bird's beak.

There are four (4) culturally sensitive locations within the project area that have been identified and recorded. These areas will be flagged for avoidance and carefully protected by on-site environmental monitors to assure no disturbance.

The following description includes information regarding typical methods and equipment used for this type of work. Splice points are located at the first and last towers in each stringing segment. On the sending end, there would be a truck to hold the OPGW and a separate machine called a tensioner to feed and run the fiber through the new brackets. On the receiving end there would be 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 would 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.

Typical Equipment	*Explanation of Equipment's Purpose*
Truck/	Required to transport new OPGW reels and to hold one of them during installation.
2 ½ Ton Truck	Used to move a Wire Puller or a Wire Tensioner into position.
Wire Puller	Used at receiving end of the OPGW segment being installed to pull the fiber.
Wire Tensioner	Used at the sending end of the OPGW segment being installed to provide proper tension during installation.
Splicing Vehicle	The Splicing Vehicle provides a clean environment and the specialized equipment needed to splice Glass Fibers. This work is done at the base of the tower at the splice point location.
Aerial Devices (Bucket Trucks)	The use of bucket trucks is expected to be largely avoided in favor of helicopters. Nevertheless, they are listed in the event they are needed.
Utility Trucks	As needed
Helicopter	Used to deliver personnel, tools and equipment and to minimize or complete avoidance to sensitive environmental resources.

The project has a short duration of approximately 3 weeks of construction time, with construction activities tentatively scheduled to begin the first week of October 2011. Due to the work scope, project schedule, and time of year, the impacts, if any, to sensitive species and habitats would be temporary and non-permanent and would not result in adverse affects. To assure no affects to any sensitive species, associated habitats or other sensitive resources to the greatest amount feasible, Western will implement additional mitigation, discussed and included below, to assure no adverse affects on

.

Location of the Project:

The proposed OPGW project is on Western's existing MAX OBN transmission line, which is approximately 38 miles long and traverses through Colusa and Sutter counties in a west-east direction beginning at the Maxwell substation outside the town of Maxwell in Colusa County and terminating at the O'Banion substation off of O'Banion Road in Sutter County. See Figures for project location and entire project site and ROW.

☐ **Map(s)**
See attached Maps

☒ **Figures(s)**
Maxwell to O'Banion KE-OBN & ODA-OBN 230 kV Maps which include, but are not limited to, the project area and entire ROW with habitat points, cultural resource locations, access roads, and facilities.

☒ **Work Order Number 100123732**

To be completed by Natural Resources Only

Action taken
Note: All Documentation is Attached

☒ Categorical Exclusion (CX) ☒ Integral Elements

☐ Environmental Assessment (EA)
☐ Environmental Impact Statement (EIS)
☒ Other Determinations: (ESA Letter of Concurrence)

☒ NEPA Attachment Sheet
☒ Environmental Requirements/attached
☒ 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
NEPA Compliance Officer

Date 9/15/2011
☒ Approved

bcc:	File Code:	Assigned to: David Young	Project #: CX 110901	Environmental Specialist– Date: 9/15/2011

Western Area Power Administration Sierra Nevada Region	**CATEGORICAL EXCLUSION (CX) DETERMINATION**	Project Number CX 110901

Integral Elements

Project Title: MAX OBN OPGW

Category of Action:

- **B 1.7 – Installation of communication systems**
- **B 4.6 – Additions and or modifications to electric power transmission facilities within previously developed area(s);**
- **B 4.7 - Adding/burying fiber optic cable;**
- **B 4.11 – Construction or modification of electric power substations**

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 Appendixes 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 preexisting in the environment such that there would be uncontrolled or un-permitted releases; or

d. Adversely affect environmentally sensitive resources (including but not limited to those listed in paragraph B (4)).

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 is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(I)), is not related to other actions with cumulatively significant impacts (40 CFR 1508.25(a)(2)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211.

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
CX 110901

PROJECT TITLE:

	Maxwell to O'Banion (MAX OBN) OPGW

EFFECTED ENVIRONMENT

	The MAX OBN OPGW project includes the installation of brackets and fiber optic cable at the tops of the towers of this existing transmission line which is approximately 38 miles long. The existing MAX OBN transmission line runs, generally, in a west-east direction beginning approximately 5-miles west of Interstate 5 at the existing Maxwell substation and terminating at the existing OBanion Substation off of OBanion Road, approximately 2 miles west of Highway 99, in Sutter Co. See attached figures for project location and vicinity and project ROW. The MAX OBN project will be constructed on existing towers, except for one new tower to enter into the O'Banion substation, and entirely within the existing transmission line Right of Way and; thus, completely within previously disturbed areas. Vehicle access, staging area and helicopter landing zones will be limited to established and previously disturbed areas. Helicopter(s) will be used to minimize or completely avoid ground disturbance and environmental monitors will be on-site and closely observing all project activities to assure less than adverse impacts to any sensitive species or resource.

REVIEW ACTION

	Review for this CX was conducted by Western Environmental Project Manager, biologist, and archeologist as well as staff relevant and applicable federal and state regulatory agencies including the USFWS and SHPO.

CULTURAL AND HISTORIC RESULTS

	Effects Determination The proposed MAX OBN OPGW project is covered under the Revised 2010 Programmatic Agreement (PA) with the California State Historic Preservation Officer (SHPO). No additional SHPO consultation is required.
☐	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 at Western Facilities in California," dated December 11, 1997.
☐	Mitigation required (see below)
☒	Include in Western's annual report

BIOLOGICAL RESULTS

☐	No biological resources will be impacted by this project. The determination for all listed species is "no effect"; therefore, consultation under Section 7 of the Endangered Species Act is not required.
☒	Consultation on this project was completed on February 3, 2011 (LOC from the USFWS attached) and determined that it will NOT likely affect vernal pool crustaceans, Elderberry shrub, valley elderberry longhorn beetle, giant garter snake, or the palmate-bracted bird's beak.
☐	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) for additional avoidance and minimization measures included in the LOC

COMPLIANCE RESULTS

☒	**Material Disposal/Recycle:** All associated materials that are recyclable shall be sent for recycling. All other material shall be disposed of in accordance to federal, State, and local regulations.
☒	**Waste Material Quantity Report and Recycled Material Report:** Submit quantities of total project waste material disposal and recycled project materials as listed below to the Natural Resources Department after completion of work or within Federal and State mandated time-frames (i.e., manifests). (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). (5) Recycled items by item type: Weight in pounds or metric tons.

MITIGATION

☐	Other Mitigation: Not Required
☒	Other Mitigation: Required – the LOC, attached, includes various minimization and mitigation measures to assure less than adverse impacts on any sensitive species

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. If work must be conducted within the nesting period, prior to activities, a qualified biologist will survey the proposed sites to determine whether nesting migratory birds are present. If no nesting migratory birds are present, 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. Refer to the **Review Action** in this report for further information.
☐	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 maintenance foremen 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 the 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.
☒	From May 1 to October 31, vehicle access will be permitted only on well-established roads until the site has been cleared by a qualified biologist. All vehicles will have rubber tires. Off-road travel will be avoided.
☒	Vehicle access will be permitted only on well-established roads while vehicles are traveling from one splice point tower to another. Off-road travel is prohibited except in the immediate area of splice point tower locations and only for the purpose of moving pulling, tensioning, and splice equipment to their proper placement around the splice location tower.
☒	Seed mixtures applied for erosion control and restoration will be certified as free of noxious weed seed, and will be composed of native species or sterile nonnative species.

Elderberry Savanna

☒	Western and contractor personnel will avoid disturbance within 20 feet of the drip line of each elderberry bush.

☒	No insecticides, herbicides, fertilizers, or other chemicals that might harm the beetle or its host plant would be used within 100 feet of an elderberry plant with a stem measuring one-inch or greater in diameter at ground level.
☐	If avoidance of elderberry bushes is not possible, maintenance will notify Natural Resources prior to initiating work, except in "danger" tree conditions. Special mitigation measures for habitat areas containing elderberry bushes require a survey by a qualified biologist and must be handled by Natural Resources.
☒	A 100-foot buffer will be flagged from the drip-line of any elderberry shrub in the vicinity of staging areas, pulling, tensioning, and splicing areas. Refueling, vehicle maintenance, ground disturbance due to helicopter use, equipment storage, and all other staging area activities and pulling, tensioning, and splicing activities will be prohibited within this buffer.
☒	Preconstruction surveys will be conducted no sooner than one month prior to the start of construction.

Perennial Streams and Rivers

☐	No vehicle refueling within 300 feet of a perennial stream or river channel.
☒	All spills of fuel or hydraulic fluid would be immediately cleaned up according to Western's guidelines for hazardous material handling.

Giant Garter Snakes

☐	These provisions are applicable in Butte, Colusa, Yuba, Sutter, Yolo, Sacramento, and San Joaquin Counties.
☐	All work will be conducted between May 1 to October 31, during the snake's active period.
☒	Vehicle traffic is restricted to designated access roads and the immediate vicinity of construction or maintenance sites. Vehicle speeds will not exceed 15 miles per hour on unimproved access roads.
☒	If a giant garter snake is observed, all work will stop until it can be determined that the snake will not be harmed.
	A 300-foot buffer will be flagged from the banks of all rice fields, canals, and other giant garter snake aquatic habitats in the vicinity of staging areas. Refueling, vehicle maintenance, ground disturbance due to helicopter use, equipment storage, and all other staging area activities will be prohibited within the buffer. If this is not feasible, contact Natural Resources and a biological monitor will be assigned.
	A 200-foot buffer will be flagged from the banks of all griant garter snake aquatic habitats in the vicinity of pulling, tensioning, and splicing areas, and any areas that off-road travel may be necessary. All pulling, tensioning, and splicing activities and off-road travel will be prohibited within the buffer.

Woodland (MBTA habitat)

☐	If work must commence during the nesting period (February 1 – August 30) in MBTA habitat, a biological survey or a monitor may be employed to determine the absence or presence of nests and/or MBTA birds. Contact Natural Resources.

Grasslands (Kit Fox habitat)

☐	These provisions are applicable in grassland habitats or disturbed habitats within 0.5 miles of grassland habitats located in San Joaquin, Alameda, and Contra Costa Counties.

Vernal Pools

☐	There are some ephemeral wetlands that should not be traversed by anything other than rubber-tired vehicles, especially when water is present.
☒	All vehicles are restricted to existing roads in vernal pool habitat.
☐	Vehicle use of existing roads is restricted to times of the year when soils are dry enough to resist compaction and annual plants have set seed (generally June 1 to September 30). If in question, contact Natural Resources prior to initiating work.

☐	No vehicle traffic is permitted off established roads within 50 feet of individual vernal pools (measured from the upland margin of the pool).
☒	Materials used for maintenance activities will be located outside of vernal pool habitat or on existing roads.
☒	A 300-foot buffer will be flagged around the edge of all vernal pools or vernal pool grassland in the vicinity of staging areas. Refueling, vehicle maintenance, ground disturbance due to helicopter use, equipment storage, and all other staging area activities will be prohibited within the buffer.
☒	A 250-foot buffer will be flagged around the edge of all vernal pools or vernal pool grassland in the vicinity of pulling, tensioning, and splicing areas. All pulling, tensioning, and splicing activities will be prohibited within the buffer. If this is not feasible, contact Natural Resources and a biological monitor will be assigned.
☒	When off-road travel is necessary at splice point tower locations, a 50-foot buffer will be flagged around the edge of all vernal pools or vernal pool grassland. Off-road travel is prohibited within the buffer unless soils are sufficiently dry in order to resist compaction and after annual plants have set seed. If soils are found to be sufficiently dry, a minimum buffer of 25 feet will be flagged and avoided.

California Red-legged Frog

☒	Conduct pre-construction surveys to identify red-legged frog breeding habitat.
☒	A 300-foot buffer will be flagged around any red-legged frog breeding habitat in the vicinity of staging areas. Refueling, vehicle maintenance, ground disturbance due to helicopter use, equipment storage, and all other staging area activities will be prohibited within the buffer.
☒	A 300-foot buffer will be flagged around any red-legged frog breeding habitat in the vicinity of pulling, tensioning, and splicing areas, and any areas that off-road travel may be necessary. All pulling, tensioning, and splicing activities and off-road travel will be prohibited within the buffer. If this is not possible, a preconstruction survey will be conducted no more than 24 hours before work at any one site begins. A qualified biologist will remain on site during all activities to ensure protection of red-legged frogs or an exclusion barrier will be constructed around the work site, following USFWS-approved methods, which will be removed a the end of the work activity.

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
☒	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