

Project title:	Sierra Nevada Region Streaming HD Video, Orthophotography, Still Photography, and LiDAR Project		
Requested By:	Tish Saare	Mail Code :	N0217 Phone: 916-353-4526
Date Submitted:	3-7-2019	Date Required:	3-8-2019

Description of the Project:

The Western Area Power Administration (WAPA) markets and delivers reliable, cost-based hydroelectric power and related services within a 15-state region of the central and western United States. Within its Sierra Nevada Region (SNR), WAPA owns, operates, and maintains 115-kilovolt (kV), 230-kV, and 500-kV transmission lines in Alameda, Butte, Colusa, Contra Costa, Fresno, Glenn, Lassen, Merced, Modoc, Sacramento, San Joaquin, Shasta, Siskiyou, Solano, Sutter, Tehama, Trinity, Yolo, and Yuba Counties, California, and Klamath County, Oregon. To comply with the National Electric Safety Code, Western States Coordinating Council and WAPA directives for protecting human safety and maintaining the reliable operation of the transmission system, the Western Area Power Administration (WAPA) is proposing to perform aerial Light Detection and Ranging (LiDAR) surveys to obtain accurate and complete horizontal and vertical controls to provide digital topographical/feature mapping and aerial imagery of the SNR system.

The project will consist of aerial LiDAR surveys, collection of orthophotographic plan images, collection of digital video and still photography of the transmission and distribution lines, substations, microwave, power plant facilities, and rights-of-way, and placement of control markers throughout the SNR system. Overflights are expected to be conducted with a Bell 206 helicopter at an elevation of 800' above ground level (AGL) and with a Cessna 206 airplane at an elevation of 7000' AGL.

Location of the Project:

Entire SNR transmission line system, which extends from the Malin and Captain Jack substations in Klamath County, Oregon to the Gates substation in Fresno County, California.

Work Order Number: 100153025

Action taken	
Note: All Documentation is Attached	
☒ Categorical Exclusion (CX)	☒ Minimization
☒ Integral Elements	☐ Other
☒ NEPA Attachment Sheet	
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 Environment Supervisor	Date ☒ Approved

CC: Requestor:	File Code:	Assigned to:	Project #: 100153025	Environmental Specialist: Tish Saare Date: 3-6-2019
Western Area Power Administration Sierra Nevada Region	CATEGORICAL EXCLUSION (CX) DETERMINATION			Project Number: 100153025

Integral Elements

Project Title: Sierra Nevada Region Streaming HD Video, Orthophotography, Still Photography, and LiDAR Project

Category of Action:

B3.2: Aviation activities: Aviation activities for survey, monitoring, or security purposes that comply with Federal Aviation Administration regulations.

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 unpermitted 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 (WAPA) has reviewed the proposed action in terms of the level of NEPA

review needed. Based on this review, WAPA 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 significant adverse environmental effects associated with this action.



**Western Area Power Administration,
SIERRA NEVADA REGION
NEPA Attachment Sheet**

**Project
Number:
100153025**

PROJECT TITLE:

Sierra Nevada Region Streaming HD Video, Orthophotography, Still
Photography, and LiDAR Project

REVIEW ACTION AND RESULTS

The Western Area Power Administration (WAPA) is proposing to perform aerial Light Detection and Ranging (LiDAR) surveys to obtain accurate and complete horizontal and vertical controls to provide digital topographical/feature mapping and aerial imagery of the Sierra Nevada Region (SNR) system. The project will consist of aerial LiDAR surveys, collection of orthophotographic plan images, collection of digital video and still photography of the transmission and distribution lines, substations, microwave, power plant facilities, and rights-of-way, and placement of control markers throughout the SNR system.

Control marker locations will be reviewed by the Environment Department prior to work via desktop or field review. Those markers proposed for biologically or culturally sensitive locations will be removed from the work plan or relocated. Flights are conducted with small aircraft at a sufficient altitude such that disturbance or “take” of sensitive species will not occur. Conservation measures are prescribed for biological and cultural features below.

AFFECTED ENVIRONMENT

SNR has transmission facilities in Alameda, Butte, Colusa, Contra Costa, Fresno, Glenn, Lassen, Merced, Modoc, Sacramento, San Joaquin, Shasta, Siskiyou, Solano, Sutter, Tehama, Trinity, Yolo, and Yuba Counties, California, and Klamath County, Oregon. Habitat varies widely throughout the region.

BIOLOGICAL RESOURCES

The affected environment may contain habitat for various sensitive species. However, the areas chosen for ground control target placement are in developed areas or existing road prisms to the extent possible.

Avoidance Measures:

Although ground control target sites are expected to be in developed areas or road prisms to the extent possible, all sites as well as their access routes will be reviewed by a WAPA biologist. If the biologist determines that proposed target sites or access routes have potential to conflict with sensitive resources, the biologist will have the discretion to a) mark and/or buffer resources for avoidance, b) monitor project activities on-site, and/or c) reject proposed target sites.

CULTURAL AND HISTORIC RESULTS

CULTURAL INFORMATION: WAPA will be employing LiDAR as well as other remote-sensing tools to assess ROW conditions. LiDAR uses light and radar to create a 3D model of ground conditions. This data is used to classify vegetation types, encroachments onto the line, potential fall-in hazards, and other information to help WAPA prioritize maintenance operations. Target points placed on the ground have very minimal to no impact. Although all of SNR t-lines have been previously surveyed for cultural resources, a cultural review will be required prior to each LiDAR implementation per t-line to ensure all cultural resource sites are being avoided by planned target locations.

- 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," revised 3/1/2010.
- Include in Western's annual report
- Minimization Measures Required: **Cultural sites shall be avoided.**

AIR QUALITY

The Project extends from Klamath County Oregon to Fresno County, California. Emissions would be dispersed across twenty counties and would not greatly impact any one county or air district. Aerial emissions would be consistent with the aerial inspections evaluated in the Environmental Assessments prepared for each ROW maintenance region.

Support trucks used to place targets for LiDAR aircraft would contribute minimal emissions to any one air district. Light or medium duty vehicles would be used to support aircraft and place/retrieve targets. Support trucks would travel an estimated 51,600 miles total over 45 workdays. Support trucks would adhere to speed restrictions (15 mph) when on unpaved access roads to minimize fugitive dust per Standard Operating Procedures. Total emissions associated with support trucks are expected to be less than those annual on-road emissions calculated for the San Joaquin Valley Maintenance ROW EA SA (SJV SA), which considered 282,000 miles annually; however, average daily mileage would be about 1,147 miles per day, exceeding the estimated 812 miles per day examined in the SJV SA. The SJV SA estimated daily emissions of criteria pollutants, which considered heavy duty and diesel vehicles in addition to light and medium duty vehicles. These estimated SJV SA emissions are well below half of the strictest air district daily thresholds for the Project (25 lb/day Butte County Air Pollution Control District). Based on this previous modeling and the fact that the Project's daily mileage would only increase by about 40% while not using heavy duty or diesel vehicles, the Project emissions from support vehicles are not expected to exceed applicable thresholds

of significance. Therefore, it is not anticipated that this project would significantly impact air quality.

The following SNR Standard Operating Procedure is applicable to this project:

- On-site vehicle speed shall be limited to 15 miles per hour on unpaved surfaces.