



U.S. Department of Energy Categorical Exclusion Determination Form

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Proposed Action Title: Hoover-Mead #1 and #5 230-kV and Mead-Marketplace 500-kV Transmission Lines Facilities Ratings Project

Program or Field Office: Western Area Power Administration, Desert Southwest Region

Location(s) (City/County/State): Boulder City, Clark County, Nevada

Proposed Action Description:

Western proposes to correct design discrepancies associated with the existing Hoover-Mead #1 and #5 230-kV and Mead-Marketplace 500-kV transmission lines located within approximately 5 miles of the Mead Substation, Clark County, Nevada. The project is located on Bureau of Land Management (BLM)-issued rights-of-way and BLM withdrawn lands under Western's administrative control and jurisdiction in Township 23 South, Range 64 East, Sections 2, 11, 14, 15, 22, 27, 29 (Mount Diablo Baseline and Meridian). A discrepancy exists when field conditions of the transmission line span are not compliant with design criteria. For the proposed facilities ratings project, Western will correct the conductor height in areas where sagging has occurred, resulting in ground clearance issues. Identified problem spans will be corrected by installing floating dead ends on existing structures, replacing existing structures, or reconductoring segments of the transmission lines. Project activities are anticipated to start no sooner than September 1, 2013, and be completed no later than December 31, 2013.

SEE CONTINUATION SHEETS (4 PAGES)

Categorical Exclusion(s) Applied:

B4.6 - Additions and modifications to transmission facilities

For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Subpart D of [10 CFR Part 1021](#).

Regulatory Requirements in 10 CFR 1021.410(b): (See full text in regulation)

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: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) 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; (3) 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; (4) 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; (5) 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.

There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal.

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.

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that 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.

NEPA Compliance Officer:

Linda Marcant

Date Determined:

3-20-13

Western Area Power Administration, Desert Southwest Region
Facilities Ratings Project
Hoover-Mead #1 and #5 230-kV and Mead-Marketplace 500-kV
Transmission Lines Continuation Sheet

Project Description (Continued)

Hoover-Mead # 1 230-kV Transmission Line

Along the Hoover-Mead #1 230-kV transmission line, the existing line will be reconducted between structures 0/4 and 4/2, about 3.5 linear miles. Structure 0/4 is located northeast of Mead Substation; structure 4/2 is located southeast of Boulder City Tap. The scope of work for the reconducting includes the following:

- At tangent structures (where there is no change in the angle of the transmission line), pulleys or travelers will be installed where the existing conductor attaches to the insulator. The old conductor will be pulled out through the travelers and new wire will be pulled in. A bucket truck will be used to allow crews to access the insulator points to attach and remove the travelers.
- A pulling truck (short bobtail truck) will be setup at one dead end location oriented on the opposite side of the structure from the segment where the conductor will be pulled. This location will be either at structure 0/4 or 4/2 on the Hoover-Mead No. 1 transmission line.
- A wire boat (18-wheeled trailer) and tensioner (bobtail truck) will be setup at the opposite dead end of the reconducted segment, also oriented on the opposite side from the conductors being pulled (either structure 0/4 or 4/2).
- At angle structures and dead ends, equipment and crews will use a maximum 300-foot-radius half-circle as a pulling area. Equipment used on site may include pickup trucks, bucket trucks, and line trucks, bobtail trucks, and wire boats. No blading will occur in these locations.
- At tangent structures along the length of a line, equipment and crews may use a maximum 150-foot radius around existing structures in order to access the insulator assemblies. No blading will occur in these locations.

Hoover-Mead # 5 230-kV Transmission Line

Along the Hoover-Mead #5 230-kV transmission line, work will occur over about 2.1 linear miles as follows:

- Four structures (5W/1 to 5W/4) will be replaced in-kind with steel monopoles. Structures will be replaced within 50 feet of their current locations. A 10-wheel bobtail auger truck will drill 6-foot-wide by 23-foot-deep holes for the new structure location. Concrete will be poured into the hole to provide footings for the new poles.
- Old structures will be cut off 3 feet below the ground surface and backfilled with dirt augered from the new pole locations. Excess soil will be spread evenly at the structure locations to match existing contours. Equipment and crews may use a maximum 300-foot radius at pole replacement locations for overland travel and set-up; no blading will occur in these locations.
- Seven structures (5W/5 to 6W/6) will have floating dead ends installed. At these locations, bucket trucks will be used to access and replace the insulator arrangements on the existing structures. Equipment and crews may use a maximum 150-foot radius around the existing structures to access the insulator assemblies. No blading will occur in these locations.

Mead-Marketplace 500-kV Transmission Line

The Mead-Marketplace 500-kV transmission line clearance issue occurs between structures 12/2 and 12/3. In order to resolve this discrepancy, insulator discs will be added to the existing insulator arrays on the Hoover-Mead #6 230-kV transmission line at structure 10/1 (on the east conductor insulator assembly). At this location, bucket trucks will be used to access and replace the insulator arrangements on the existing structures. Equipment and crews may use a maximum 150-foot radius around the existing structure to access the insulator assembly. No blading will occur in these locations.

Conservation Measures

1. Western will ensure that an authorized desert tortoise biologist is onsite during project activities. All potential tortoise biologists will complete the Authorized Desert Tortoise Qualifications Form provided by the U.S. Fish and Wildlife Service (Service) and submit it to the Service for review and final approval as appropriate. Allow 30 days for Service review and response.
2. Prior to initiation of construction, the authorized biologist will present a desert tortoise awareness program to all personnel who will be onsite, including but not limited to contractors, contractors' employees, supervisors, inspectors, and subcontractors. This program will contain information concerning the biology and distribution of the desert tortoise and other sensitive species, their legal status and occurrence in the project area; the definition of "take" and associated penalties; the terms and conditions of this Biological Opinion; the means by which employees can help facilitate this process; and reporting procedures to be implemented in case of desert tortoise encounters or non-compliance with this Biological Opinion. The name of every individual trained will be recorded on a sign-in sheet. Each trained individual will be given evidence indicating they have received this training and will keep that evidence with them at all times they are in the project area.
3. An authorized biologist will clear all work areas of tortoises including paths of travel for all vehicles and equipment, ahead of work activity. An authorized biologist will survey for desert tortoises and their burrows using techniques providing 100-percent coverage of all work areas and areas affected by project activity and an additional area approximately 90 feet beyond these areas.
4. All potential desert tortoise burrows located within the project area will be excavated by hand by an authorized desert tortoise biologist, tortoises removed, and collapsed or blocked to prevent occupation by desert tortoises. All desert tortoise handling and removal, and burrow excavations, including nests, will be conducted by an authorized desert tortoise biologist in accordance with the Desert Tortoise Field Manual (Service 2009).
5. All desert tortoises observed within the project area or on access roads will be reported immediately to the authorized biologist. The biologists will halt activities as necessary to avoid harm to a desert tortoise. Project activities that may endanger a desert tortoise will cease until the desert tortoise moves out of harm's way or is moved out of harm's way by an authorized desert tortoise biologist.
6. Desert tortoises will be moved solely for the purpose of moving them out of harm's way. Desert tortoises will be relocated 1,500 feet into adjacent undisturbed habitat on protected public land in accordance with Service-approved handling protocol (Service 2009). The disposition of all tortoises handled will be documented.

7. Desert tortoises will be kept shaded at all times until it is safe to release them. No desert tortoise will be captured, moved, transported, released, or purposefully caused to leave its burrow for whatever reason when the ambient air temperature is above 95°F (35°C). Ambient air temperature will be measured in the shade, protected from wind, at a height of 2 inches (5 centimeters) above the ground surface. No desert tortoise will be captured if the ambient air temperature is anticipated to exceed 95°F (35°C) before handling and relocation can be completed. If the ambient air temperature exceeds 95°F (35°C) during handling or processing, desert tortoises will be kept shaded in an environment that does not exceed 95°F (35°C), and the animals will not be released until ambient air temperature declines to below 95°F (35°C).
8. All fuel, transmission or brake fluid leaks, or other hazardous waste leaks, spills or releases will be reported immediately to Western. Western or the project proponent will be responsible for spill material removal and disposal to an approved off-site landfill. Servicing of construction equipment will take place only at a designated area. All fuel or hazardous waste leaks, spills, or releases will be stopped or repaired immediately and cleaned up at the time of occurrence. Service/maintenance vehicles will carry a bucket and pads to absorb leaks or spills.
9. Vehicles will not exceed 15 MPH on access roads. Authorized desert tortoise biologists will monitor speed limit compliance during construction.
10. Project personnel will exercise caution when commuting to the project area and obey speed limits to minimize any chance for the inadvertent injury or mortality of species encountered on roads leading to and from the project site.
11. Any time a vehicle is parked, whether the engine is engaged or not, the ground around and underneath the vehicle will be inspected for desert tortoises prior to moving the vehicle. If a desert tortoise is observed, an authorized biologist will be contacted.
12. The biologist will ensure that no habitat is disturbed beyond designated work areas as a result of the project, including ensuring that all vehicles and equipment remain in designated areas or areas devoid of native vegetation. All cross-country travel and travel outside designated areas will be prohibited.
13. Trash and food items will be promptly disposed in predator-proof containers with re-sealing lids. Trash containers will be emptied daily, and waste will be removed from the project areas and disposed in an approved off-site landfill. Construction waste also will be removed from the site each day and properly disposed.
14. The boundaries of all areas to be disturbed will be flagged before beginning any activities, and all disturbances will be confined to the flagged areas. All project vehicles and equipment will be confined to the flagged areas. Disturbance beyond the construction zone is prohibited. Authorized desert tortoise biologists will ensure that project vehicles and equipment occur only in designated areas. Workers will avoid shrubs to the greatest extent practicable.
15. Western will monitor the material site for weeds and take appropriate control measures to ensure that weeds do not establish at the site.
16. Western will designate a field contact representative. The field representative will be responsible for overseeing compliance with protective stipulations for the desert tortoise and coordinating **directly** with Western and the Service. The field contact representative will have the authority to halt activities or construction equipment that may be in violation of the stipulations. Western will

provide a copy of the terms and conditions of this Biological Opinion to the Field Contact Representative and biologists for the project.

17. The on-site biologist will record each observation of desert tortoise handled. Information will include the following: Location, date and time of observation; whether tortoise was handled, general health and whether it voided its bladder; location tortoise was moved from and location moved to; and unique physical characteristics of each tortoise. A final report will be submitted to the Service's Nevada Fish and Wildlife Office in Las Vegas within 90 days of completion of the project.
18. Prior to surface-disturbing activities associated with the proposed project, Western will pay remuneration fees at the rate of \$810 per acre of disturbance. These fees will be indexed for inflation based on the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U). Information on the CPI-U can be found on the internet at: <http://stats.bls.gov/news.release/cpi.nr0.htm>. The next adjustment will occur on March 1, 2013.

The payments will be submitted to the San Diego Zoo to be applied towards costs associated with operation of the Desert Tortoise Conservation Center. The DOE or project proponent will contact the San Diego Zoo's Institute for Conservation Research for specific instruction on submitting payment.

Associate Director, Conservation Field Programs
San Diego Zoo's Institute for Conservation Research
15600 San Pasqual Valley Road
Escondido, California 92027-7000
(760) 796-5602

The receipt of payment of the remuneration fees will be sent to the Desert Tortoise Recovery Office in Reno and the Nevada Fish and Wildlife Service Office in Las Vegas.

19. To the greatest extent possible, all disturbances shall be located on previously-disturbed areas. If previously-disturbed areas are not available, these activities will be restricted to designated areas and will be cleared of tortoises by the onsite biologist prior to use.

Checklist for Categorical Exclusion Determination, revised Nov. 2011

Application of Categorical Exclusions (1021.410)	Disagree	Agree	Unknown
(b)(1) The proposal fits within a class of actions that is listed in appendix A or B to subpart D.		X	
(b)(2) There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal, including, but not limited to, scientific controversy about the environmental effects of the proposal; uncertain effects or effects involving unique or unknown risks; and unresolved conflicts concerning alternate uses of available resources		X	
(b)(3) The proposal has not been segmented to meet the definition of a categorical exclusion. Segmentation can occur when a proposal is broken down into small parts in order to avoid the appearance of significance of the total action. The scope of a proposal must include the consideration of connected and cumulative actions, that is, the 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 § 1021.211 of this part concerning limitations on actions during EIS preparation.		X	
B. Conditions that are Integral Elements of the Classes of Actions in Appendix B. :	NO	YES	UNKNOWN
(1) Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety and health, or similar requirements of DOE or Executive Orders.	X		
(2) 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;	X		
(3) 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;	X		
(4) Have the potential to cause significant impacts on environmentally sensitive resources. An environmentally sensitive resource is typically a resource that has been identified as needing protection through Executive Order, statute, or regulation by Federal, state, or local government, or a federally recognized Indian tribe. An action may be categorically excluded if, although sensitive resources are present, the action would not have the potential to cause significant impacts on those resources (such as construction of a building with its foundation well above a sole-source aquifer or upland surface soil removal on a site that has wetlands). Environmentally sensitive resources include, but are not limited to:	X		
(i) Property (such as sites, buildings, structures, and objects) of historic, archaeological, or architectural significance	X		

	designated by a Federal, state, or local government, or property determined to be eligible for listing on the National Register of Historic Places;			
(ii)	Federally-listed threatened or endangered species or their habitat (including critical habitat) or Federally- proposed or candidate species or their habitat (Endangered Species Act); state-listed or state-proposed endangered or threatened species or their habitat; Federally-protected marine mammals and Essential Fish Habitat (Marine Mammal Protection Act; Magnuson-Stevens Fishery Conservation and Management Act); and otherwise Federally-protected species (such as under the Bald and Golden Eagle Protection Act or the Migratory Bird Treaty Act);	X		
(iii)	Floodplains and wetlands (as defined in 10 CFR 1022.4, —Compliance with Floodplain and Wetland Environmental Review Requirements: “Definitions,” or its successor);	X		
(iv)	Areas having a special designation such as Federally- and state-designated wilderness areas, national parks, national monuments, national natural landmarks, wild and scenic rivers, state and Federal wildlife refuges, scenic areas (such as National Scenic and Historic Trails or National Scenic Areas), and marine sanctuaries;	X		
(v)	Prime or unique farmland, or other farmland of statewide or local importance, as defined at 7 CFR 658.2(a), —Farmland Protection Policy Act: Definitions, or its successor;	X		
(vi)	Special sources of water (such as sole-source aquifers, wellhead protection areas, and other water sources that are vital in a region); and	X		
(vii)	Tundra, coral reefs, or rain forests.; or	X		
(5)	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 of the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.	X		

Western Area Power Administration, Desert Southwest Region Hoover-Mead #1 and #5 230-kV and Mead-Marketplace 500-kV Transmission Lines Facilities Ratings Project, Clark County, Nevada



Figure 1. Hoover-Mead #1 and #5 230-kV Transmission Lines Discrepancy Areas



Figure 2. Mead-Marketplace 500-kV Transmission Line Discrepancy Area

**Correction will occur on the Hoover-Mead #6 230-kV transmission line*

