



National Nuclear Security Administration Categorical Exclusion Determination Form



NEPA ID#: HEDLP 15-001-001

Proposed Action Title: Innovation to Mercury 138-kV Transmission Line Project - Geotechnical Investigation (NV-2013-007)

Program or Field Office: Nevada Field Office

Location(s) (City/County/State): Nevada National Security Site (NNSS), Nye County NV

Proposed Action Description:

Valley Electric Association (VEA) is proposing the construction, operation, and maintenance of an overhead single-circuit 138-kilovolt (kV) transmission line that would extend between the existing Innovation Substation located on BLM-managed land to the existing Mercury Switching Center, located on National Nuclear Security Administration (NNSA)-managed land in Area 22 of the Nevada National Security Site (NNSS). Prior to construction, a geotechnical investigation is needed to characterize the ground and below-ground construction conditions within the proposed project area. The investigation would consist of a field testing program and a laboratory testing program. VEA is requesting temporary access to lands within Area 22 of the NNSS to perform geotechnical investigation fieldwork at three locations in the project area. A total of three borings would be needed, one at each of the locations indicated in Table 1 below to obtain suitable soil samples for laboratory analysis.

TABLE 1 INNOVATION-MERCURY BORING LOCATIONS ON NNSA LAND

BORING NO.	X EASTING (FT)*	Y NORTHING (FT)*	LATITUDE/ LONGITUDE	LEGAL DESCRIPTION	APPROX. BORING DEPTH (FT)	TEMPORARY DISTURBANCE (AC)
DOE 1	1839976.52	20366545.64	36° 37' 13.896" N 115° 59' 11.829" W	SW ¼ of NW ¼ sec 25 T15S R53E	25	No more than 0.25
DOE 2	1835189.21	20373375.41	36° 38' 21.763" N 116° 0' 9.977" W	NW ¼ of NW ¼ sec 23 T15S R53E	25	No more than 0.25
DOE 3	1834838.85	20376814.84	36° 38' 55.797" N 116° 0' 13.984" W	NW ¼ of SW ¼ sec 14 T15S R53E	50	No more than 0.25

*Coordinate System: State Plane NAD83, Nevada Central 2702

Equipment and Methods

The field-testing program would be performed during daylight hours, with a truck-mounted drill rig or equivalent, under the direction of the Drilling Contractor in the presence of the Geotechnical Engineer. Fieldwork would include penetration testing, split barrel and/or thin-walled tube (Shelby tube) sampling, and rock coring where applicable. Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils would conform to ASTM D 1586 using a two-inch (2") O.D. sampler. Thin-Walled Tube sampling would conform to ASTM D 1587. Rock Coring would conform to ASTM D 2113. The Drilling Contractor may need to perform minor brush clearing in order to gain access to the specified boring locations in Table 1.

Should rock or caliche be encountered during field sampling, the Geotechnical Engineer may require coring to be performed. Continuous cores would be obtained, labeled, and stored in appropriate core boxes. Coring would stop if the caliche or rock layer is deeper than ten (10) feet. Coring would require the use of water to assist the drilling.

All drill pipes, drilling tools, augers, etc. would be free of potentially contaminating materials (i.e., oil, grease, paint). The rig would be free of leaks, which could contaminate the holes or site (i.e., hydraulic fluids, oil, gas, loose paint).

Access

Access to the locations would primarily be from an improved unpaved access road paralleling an existing NV Energy 138 kV transmission line. From that road, vehicles would then drive off the access road cross country over NNSA-managed land to the boring locations, taking care to minimize crushing of vegetation.

Soil Logging

During field testing and sampling the Engineer would maintain a continuous log and visually classify the subsurface soil and or rock. Logs would show borehole and sample diameters, and depths at which drilling or sampling methods or equipment change. Upon completion of each boring to the required depth, the groundwater level would be recorded. Logs would show total depth of penetration, blow counts, groundwater level if

encountered and sampling. The bottom of the hole would be clearly identified on the log with the notation "Bottom of Hole." Logs would show drilling fluids used, drilling equipment make and model, drilling method, date and time drilled, casing, any heaving conditions, loss of circulation, voids, or any other conditions observed during drilling. Any special drilling or sampling problems would be recorded on the logs, including resolutions. Any indications of contamination (i.e., staining, odors) would be noted.

Anticipated Vehicle Trips/Traffic Volume

The close proximity and shallow depth of the borings should facilitate field testing of a maximum of three (3) days depending on subsurface soil conditions. It is anticipated that the existing access road would be used sporadically over the 3-day period by a single drill rig escorted by an environmental monitor. Prior to field activities, there may be a one person "call before you dig" representative that would make one trip with one vehicle to locate any possible underground utilities.

Site Reclamation

The Drilling Contractor would fill each boring hole after performing the required work. Bentonite chips or drill cuttings would be used to fill the holes or as required by the state of Nevada. After being filled, each boring location would be marked. Boring holes would be covered until filled and all permanent surface coverings replaced to original or better condition. At the conclusion of boring activities, the Drilling Contractor would remove all equipment, tools and materials from the project site. The site would be clean and clear of all debris as far as the Drilling Contractor's work is concerned.

Notification and Mobilization

Prior to mobilizing equipment and personnel, the Drilling Contractor would notify Kevin Thornton, the NNSA Project Manager, and the "call before you dig" representative as to when they would be conducting their fieldwork.

Categorical Exclusion(s) Applied:

10CFR1021, B-3.1, Site characterization: geotechnical studies

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 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.

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.

Based on my review of information conveyed to me and in my possession concerning 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 and that other-regulatory requirements set forth above are met. Therefore, the application of a categorical exclusion is appropriate.

NEPA Compliance Officer: Linda Cohn

Date Determined: 12/31/2012