

DOE-ID-NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: Power Line Configuration 2013-1

SECTION B. Project Description:

This project will install temporary distribution-level power lines between Materials and Fuels Complex (MFC) and Critical Infrastructure Test Range Complex (CITRC) to support research and development and testing using electric power infrastructure.

Two circuits of three-phase distribution lines will be installed from Power Burst Facility (PBF)-613 to the MFC test pad. Standard new crossarms and insulators will be installed on the existing 138kV H structures (underbuild) to support standard aluminum conductors steel reinforced (ACSR) conductors for the majority of the configuration change (approximately from Pole 40E to Pole 127E – an approximate distance of 10.5 miles). At three corner locations of the existing transmission line (at poles 124, 109 and 73) the corner poles will be bypassed by installing new poles. These new poles will be placed to reduce structural load on the existing corner poles. New poles at the corners will be located 100-300 ft from the existing corner poles and will require multiple guy-lines for stabilization. New poles will also be installed at other locations where the distance between existing H structures will not provide sufficient line clearance; these poles will be located under the existing power lines. An additional 4-5 new poles will be placed near the IML; these poles will be located approximately 90 ft from the existing power lines. In total, approximately 20 new poles will be installed. In addition to the overhead power lines, two circuits of insulated copper conductor will also be installed on the ground from approximately Pole 40E along the 138kV transmission right of way and along the paved access road to PBF-613, an approximate distance of 1.5 miles. Ground rods will be emplaced, as necessary to meet project needs.

Installation of the circuits will require vehicle traffic from the CITRC area, along the T-25 road to MFC Test Pad and along the PBF-613 access road, and use of bucket trucks and augers for digging holes for new power poles and line trucks for installing conductors. Guy-line installation may require drilling into rock and pouring concrete to anchor the guy line. Conductors will be terminated at CITRC PBF-613 and the MFC Test Pad. Vehicles with cable reels will be used to lay out conductors on the ground immediately adjacent to the roads to PBF-613. Vehicle travel off of T-25 to install new poles and guy-wires will take the shortest route possible between T-25 and the work site and then return directly to T-25. It is understood that vehicle travel under the existing power and between the new poles will be required to install and remove the new conductors.

This construction work will support a future test. The details of the test are not yet available. As soon as details are available, the work will be addressed in a separate Environmental Checklist (EC).

Reconfiguration and removal of test circuits will be required at the end of the test. Conductors will be removed during Calendar Year (CY)2013. New poles and crossarms may be left in place in anticipation of potential future test needs or removed. New crossarms and insulators on existing poles may be left in place or removed. If left in place at the end of testing, crossarms must be fitted with anti-perch devices when the conductors are removed. Upon removal/retrieval, conductors will be returned to the customer, kept for possible future use by INL, or recycled.

See the diagram, Figure 1, for the route from the PBF 613 to approximately pole #40E on the 138kV transmission line.

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Figure 1



SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions - Some air pollutant emissions are expected from operation of mobile non-road engines (small electrical generators), but are exempt from permitting per State of Idaho Air Regulations (IDAPA 58.01.01.222). These engines will remain on site no longer than one year and do not require preparation of an Air Permitting Applicability Determination (APAD).

Project activities may also generate fugitive dust. If generation of fugitive dust is expected from project operations, reasonable precautions will be taken to prevent the particulate from becoming airborne (IDAPA 58.01.01.650-651). All dust suppression activities will be documented in accordance with requirements in the Idaho National Laboratory (INL) Title V air permit. The date, location, time, and the type and amount of dust suppressant used will be documented in project files.

Disturbing Cultural or Biological Resources – A cultural resource review of all proposed project areas will be necessary and some micro-siting of specific project components may be necessary to avoid known cultural finds. All ground disturbances in and near CITRC must be monitored by an INL archaeologist with the authority to redirect work in the event of a discovery of sensitive items. Project personnel will work with the Cultural Resource Management (CRM) Office to avoid impacts to known resources and complete the requisite surveys and monitoring. The CRM Office will also be contacted immediately and work will temporarily halt if any evidence of cultural/historical artifacts or sensitive items is discovered during project implementation in any location. The power line right-of-way, the locations for new poles, and power line routes inside the PBF area must be surveyed by personnel from the CRM office prior to beginning work. Project personnel must follow recommendations made by CRM personnel to avoid disturbance of cultural resources.

Project activities involving placement of new power lines, new power poles, placement of power lines on the ground, and temporary equipment may disturb wildlife or wildlife habitat. A review of areas impacted by the project will be requested of Gonzales-Stoller Surveillance (GSS) personnel. Any areas where soil/vegetation is disturbed or destroyed will be subject to weed control and/or revegetation requirements. Contact Steve Winn for inclusion of the areas in Plan (PLN)-611. PLN-611 addresses control only of noxious weeds. Project personnel remain responsible for on-going control of invasive weeds, such as cheat-grass. Contact Jackie Hafla, of GSS, at 227-9031 for revegetation requirements. Project personnel have overall responsibility for weed control and/or revegetation (if needed); revegetation and weed control may require several years of effort.

The proposed work is not within 1 km of any known sage grouse lek, so no travel work restrictions, with regards to sage grouse, apply UNLESS a new lek is discovered by GSS personnel. Nesting bird season begins on 1 May. Beginning on 1 May, field work must be preceded by a nesting bird survey conducted by GSS personnel. The survey must be completed no more than 2 weeks before the work begins and preferably the week prior to the commencement of soil/vegetation disturbing activities. Recommendations from GSS personnel regarding breeding birds must be followed.

Anti-perch devices shall be placed on the empty cross arms and tops of the new poles as the conductors are being removed. If the cross arms are removed, anti-perch devices shall be placed on the top of the new poles.

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Generating and Managing Waste - Generation of hazardous waste is not anticipated, but is possible. Waste Generator Services (WGS) would characterize and manage all hazardous waste. Industrial waste, in the form of trash, scrap metal from construction, solder, wipes, rags, failed parts, will be characterized by the generator and managed for disposal by WGS. All scrap material will be recycled or excessed to the extent practicable. Portable toilets will be used by field personnel; the units will be serviced by an Idaho Falls contractor.

Releasing Contaminants - Small amounts of air emissions will be generated by the mobile non-road engines.

Using, Reusing, and Conserving Natural Resources - All applicable waste will be diverted from disposal in the landfill when possible. Project personnel will use every opportunity to recycle, reuse, and recover materials and divert waste from the landfill when possible. The project will practice sustainable acquisition, as appropriate and practicable, by procuring construction materials that are energy efficient, water efficient, are bio-based in content, environmentally preferable, non-ozone depleting, have recycled content, and are non-toxic or less-toxic alternatives. New equipment will meet either the Energy Star or SNAP requirements as appropriate (see <http://www.sftool.gov/GreenProcurement/ProductCategory/14>).

SECTION D. Determine the Recommended Level of Environmental Review (or Documentation) and Reference(s): Identify the applicable categorical exclusion from 10 CFR 1021, Appendix B, give the appropriate justification, and the approval date.

For Categorical Exclusions (CXs) the proposed action must not: 1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, 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 or facilities; 3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; 4) have the potential to cause significant impacts on environmentally sensitive resources (see 10 CFR 1021). In addition, no extraordinary circumstances related to the proposal exist which would affect the significance of the action, and the action is not "connected" nor "related" (40 CFR 1508.25(a)(1) and (2), respectively) to other actions with potentially or cumulatively significant impacts.

References: National Environmental Policy Act (NEPA) Implementing Procedures, Final Rule, 10 CFR 1021 Appendix B to Subpart D, Categorical Exclusion B4.13, "Upgrading and rebuilding existing powerlines" effective November 14, 2011.

Justification: Project activities are consistent with 10 CFR 1021 Appendix B to Subpart D, Categorical Exclusion B4.13. "Upgrading or rebuilding approximately 20 miles in length or less of existing electric powerlines, which may involve minor relocations of small segments of the powerlines."

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act) Yes No

Approved by Jack Depperschmidt, DOE-ID NEPA Compliance Officer on: 4/15/2012.