DOE-ID NEPA CX DETERMINATION
Idaho National Laboratory

CX Posting No.: DOE-ID-INL-17-032

SECTION A. Project Title: Idaho National Laboratory (INL) Power Management Maintenance Activities (Overarching)

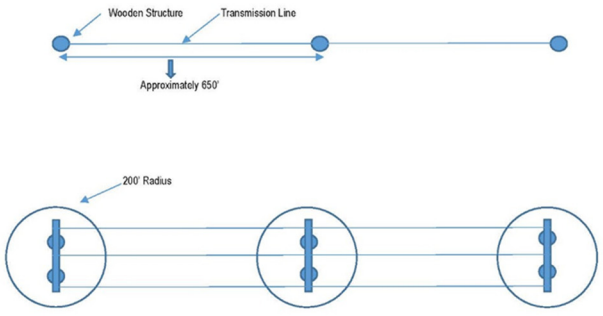
SECTION B. Project Description and Purpose:

The purpose of this Environmental Checklist (EC) is to address activities that would meet the intent of Categorical Exclusion (CX) B1.3, and those applicable to Electrical Power and Transmission (B4.6), described in 10 Code of Federal Regulation (CFR) 1021, Appendix B to Subpart D through CY 2017. These activities would consist of typical types of actions, such as routine maintenance on electrical power systems (e.g., power lines, transformers, poles) required to support safe and efficient operations. Activities would occur at Idaho National Laboratory (INL) Site locations. These activities would be performed by INL Facility and Site Services personnel. None of these activities would be performed as part of or in support of a larger project requiring an environmental assessment or environmental impact statement. Activities not covered by this EC include, but may not be limited to, the following:

a) Actions that change the scope or mission of a facility
b) Actions, changes, additions or alterations to an area, facility, structure, system, or component that alters the appearance, environmental impact, design basis, or expected equipment life (for example building color, drainage, habitat preservation, flow rates, seismic strengths, delta pressures, control parameters, program sequence, load carrying capacity, response time, fire suppression/detection capabilities, shielding, criticality spacing, corrosion resistance) unless specified in the CXs referenced in this EC
c) Actions that cause a substantial increase in environmental impacts
d) Actions for which a separate CX is specified in 10 CFR 1021, Appendix B to Subpart D
e) Actions that would require a permit or permit modification
f) Actions that remove or disturb sagebrush outside of the 200' radius area of impact around poles and structures (see Figure 1) anywhere on the INL Site
g) Actions that disturb any type of vegetation within the Sage Grouse Conservation Area outside of the 200' radius area of impact around poles and structures.

This EC authorizes routine maintenance on powerlines, additions or modifications to electric power transmission facilities within a previously disturbed or developed facility area, and removal or replacement of powerlines and power poles within facility area boundaries. Other activities associated with power management, including removal or replacement of powerlines and power poles outside of fenced facility boundaries, require project specific environmental checklists. Figure 1 shows a representative section of a powerline and the area of impact (200' radius around poles/support structures, not including the transmission line) anticipated for routine maintenance activities for Power Management. Vegetation disturbance from vehicle traffic is expected in these area, and in limited circumstances where direct-line travel from a road to a power pole or structure is required in order to complete routine maintenance activities.

Figure 1. Powerline maintenance area of impacts (not to scale)



Activities requiring use of gravel/borrow sources must review EC INL-14-045, "Idaho National Laboratory Gravel/Borrow Pits (Overarching)." Before removing or planning to remove material from any on-Site borrow source, complete form 450.AP01. Expansion of gravel pit boundaries inside approved footprints requires completion of cultural and biological surveys.

Activities with the potential to disturb sagebrush outside of the 200' impact area around poles and structures are not authorized by this EC.

This EC does not include maintenance of unpaved roads at the INL Site. Maintenance of unpaved roads is covered in EC Idaho National Engineering Laboratory (INEL)-02-024, "Maintaining Unpaved Roads on the INEEL," or its revisions or replacements.

Cultural resource reviews have not been conducted on numerous power line corridors. Off-road vehicle travel along powerline corridors must be reviewed by the Cultural Resource Management Office (CRMO) and must be approved in writing prior to beginning activities authorized in this EC. In addition, all off-road travel must receive written clearance from the CRMO.

Activities that would disturb vegetation or nesting birds from April 1 to September 1 must have nesting bird survey(s) and written approval to proceed.

Time-of-day restrictions (6:00 PM to 9:00 AM between March 15 and May 15) are in effect within 1 km (0.6 mi) of a sage-grouse lek.

Those conducting maintenance activities would use the instructions from Laboratory-wide Procedure (LWP)-6200 "Maintenance Integrated Work Control Process" and all applicable instructions in LWP-8000, "Environmental Instructions for Facilities, Processes, Materials and Equipment."

Certain activities conducted under this EC may require preparation of project specific ECs, including, but not limited to, activities involving soil disturbance (e.g. digging, blading, excavating, tilling, placing fill material, etc.), sagebrush disturbance outside of the 200' radius area of impact around poles and structures, any vegetation outside of the 200' radius area of impact around poles and structures in the Sage Grouse Conservation Area, and cultural or historic resources, etc.

All activities (including those within the 200' radius area of impact around poles and structures) which involve soil disturbance (e.g. excavation, blading, digging, tilling, placing fill material, etc.) require, at a minimum, preparation of second tier ECs.

If proposed activities do not fall under this overarching EC, prepare a 1st tier EC for Department of Energy (DOE) approval. Project personnel should note approval of 1st tier ECs can take three weeks or longer, and should prepare accordingly.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Project activities have the potential to contribute to air emissions through the following:

- Generating air pollutants, including but not limited to chemical and combustion emissions.
- Generating hazardous emissions, such as by operation of fuel burning equipment, decontamination work, use of maintenance products that contain hazardous constituents, and disturbance of contaminated soils.
- Acquiring and dispositioning chemicals.
- Disturbing asbestos.
- Generating fugitive dust or other fugitive emissions.
- Purchasing, relocating, operating, modifying or maintaining portable air emission sources, including non-road internal combustion engines.

Discharging to Surface-, Storm-, or Ground Water

Activities addressed by this EC have the potential to impact waters of the United States (U.S.) or groundwater through conduct of the following:

- Discharging Wastewaters.

Disturbing Cultural or Biological Resources

Activities included in this EC have the potential to disturb cultural or biological resources as follows:

- Maintaining or repairing facilities, structures, equipment or processes
- Management of migratory birds and bird nests on the INL and at in-town facilities
- Disturbing vegetation and soil
- Modifying buildings or structures constructed on the INL before 1970, including Experimental Breeder Reactor-I (EBR-I).

Generating and Managing Waste

Routine maintenance activities have the potential to generate waste from conducting the following activities:

- Decontaminating equipment containing or contaminated with polychlorinated biphenyls (PCBs) (From equipment manufactured before 1982)

- Maintaining equipment containing or contaminated with PCBs (From equipment manufactured before 1982)
- Disposing asbestos-containing material
- Disturbing asbestos or removing asbestos-containing material
- Other activities that generate waste.

Releasing Contaminants

Activities addressed by this EC have the potential to release contaminants through the following:

- Acquiring, using, storing and dispositioning chemicals
- Managing and dispositioning excess property and materials
- Reporting and cleaning up spills and releases
- Managing elemental lead
- Removing lead from service or from a structure.

Using, Reusing, and Conserving Natural Resources

Activities addressed by this EC have the potential for use, reuse and conservation of natural resources related to the following:

- Generating greenhouse gasses
- Building energy use
- Generating landfill waste or construction and demolition wastes
- Generating recyclable materials
- Engaging in sustainable acquisition practices.

SECTION D. Determine Recommended Level of Environmental Review, Identify Reference(s), and State Justification: Identify the applicable categorical exclusion from 10 Code of Federal Regulation (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 Department of Energy (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 Comprehensive Environmental Response, Compensation, and Liability Act (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 that would affect the significance of the action. In addition, the action is not "connected" to other action actions (40 CFR 1508.25(a)(1) and is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1608.27(b)(7)).

References: 10 CFR 1021, Appendix B, B1.3 "Routine maintenance," B4.6 "Additions and modifications to transmission facilities," and B4.10 "Removal of electric transmission facilities."

Justification: Activities are consistent with 10 CFR 1021, Appendix B1.3 "Routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructures (including, but not limited to, pathways, roads, and railroads), vehicles and equipment, and localized vegetation … control, during which operations may be suspended and resumed, provided that the activities would be conducted in a manner in accordance with applicable requirements. … activities to preserve facility appearance, working conditions … (such as … painting …) … . Routine maintenance activities, corrective (that is, repair), preventive, and predictive, are required to maintain and preserve buildings, structures, infrastructures, and equipment in a condition suitable for a facility to be used for its designated purpose. Such maintenance may occur as a result of severe weather (such as hurricanes, floods, and tornados), wildfires, and other such events. Routine maintenance may result in replacement to the extent that replacement is in-kind and is not a substantial upgrade or improvement. In-kind replacement includes installation of new components to replace outmoded components, provided that the replacement does not result in a significant change in the expected useful life, design capacity, or function of the facility. Routine maintenance does not include replacement of a major component that significantly extends the originally intended useful life of a facility (for example, it does not include the replacement of a reactor vessel near the end of its useful life). Routine maintenance activities include, but are not limited to:

a) Repair or replacement (like for like) of facility equipment …; …
b) Plumbing, electrical utility, lighting, and telephone service repair or replacement; …
c) Repair and maintenance of transmission facilities, such as replacement of conductors of the same nominal voltage, poles, circuit breakers, transformers, capacitors, crossarms, insulators, and downed powerlines, in accordance, where appropriate, with 40 CFR part 761 (Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions) or its successor;
d) Routine testing and calibration of facility components, subsystems, or portable equipment (such as … transformers, capacitors …);
e) Routine decontamination of the surfaces of equipment … (by such activities as wiping with rags …), and removal of contaminated intact equipment and other material … ."

B4.6 "Additions or modifications to electric power transmission facilities within a previously disturbed or developed facility area. Covered activities include, but are not limited to, switchyard rock grounding upgrades, secondary containment projects, paving projects, seismic upgrading, tower modifications, load shaping projects (such as the installation and use of flywheels and battery arrays), changing insulators, and replacement of poles, circuit breakers, conductors, transformers, and crossarms."

B4.10 "Deactivation, dismantling, and removal of electric transmission facilities (including, but not limited to, electric powerlines, substations, and switching stations) and abandonment and restoration of rights-of-way (including, but not limited to, associated access roads)."

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

Approved by Jason Sturm, DOE-ID NEPA Compliance Officer on: 6/15/2017