

**DOE-ID NEPA CX DETERMINATION
Idaho National Laboratory**

SECTION A. Project Title: Advanced Test Reactor M6 Diesel Replacement

SECTION B. Project Description and Purpose:

The 674-M-6 quick start emergency diesel generator is over 30 years old and needs to be replaced due to age, wear, and eroding Original Equipment Manufacturing (OEM) support. The engine has more start cycles than are typical for the operating hours and is still required to supply power to critical and safety-related loads following a loss of commercial power. The scope of this effort includes installation of a new generator, the associated support systems required for operation (cooling, lube oil, fuel, starting components and circuitry, electrical switchgear, and control cabinet), all of which are safety-related in Test Reactor Area (TRA) 670 located at the INL.

The new diesel generator systems will be installed on poured concrete foundations. These foundations will involve excavating, grading, grounding, and ductwork connections. Most likely the fuel tanks will be integral to the diesel unit unless the design firm finds it more beneficial to have exterior satellite tanks. If that is the case those tanks will also have concrete foundations. There will be new cabling and potentially new conduits ran from the designated area back to TRA-670.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Project activities have the potential to release ozone depleting substances and greenhouse gases.

Discharging to Surface-, Storm-, or Ground Water

NA

Disturbing Cultural or Biological Resources

Cultural: A preliminary assessment of the scope of work provided for this undertaking determines that the CRMO does not have adequate scope to assess effects to build environment historic properties for this proposed undertaking and complete the Section 106 process at this time. Please refer to HOLD POINTS for more information.

Generating and Managing Waste

All identified waste streams have an existing, mature disposition path. Waste Generator Services (WGS) will manage all waste. Based on volumes anticipated, these potential industrial and recyclable waste streams are expected to have minimal impact in the INL Waste Management Program.

Releasing Contaminants

When chemicals are used during the project there is the potential for spills that could impact the environment (air, water, soil).

Using, Reusing, and Conserving Natural Resources

Project description indicates materials that will need to be purchased or used that require sourcing materials from the environment. Being conscientious about the types of materials used could reduce the impact to our natural resources.

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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:

B2.5 "Facility safety and environmental improvements"

Justification:

B2.5 Facility safety and environmental improvements. Safety and environmental improvements of a facility (including, but not limited to, replacement and upgrade of facility components) that do not result in a significant change in the expected useful life, design capacity, or function of the facility and during which operations may be suspended and then resumed. Improvements include, but are not limited to, replacement/upgrade of control valves, in-core monitoring devices, facility air filtration systems, or substation transformers or capacitors; addition of structural bracing to meet earthquake standards and/or sustain high wind loading; and replacement of aboveground or belowground tanks and related piping, provided that there is no evidence of leakage, based on testing in accordance with applicable requirements (such as 40 CFR part 265, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities" and 40 CFR part 280, "Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks"). These actions do not include rebuilding or modifying substantial portions of a facility (such as replacing a reactor vessel).

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

Approved by Jason L. Anderson, DOE-ID NEPA Compliance Officer on: 9/6/2023