

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: Safety and Tritium Applied Research (STAR) Standby Power Upgrade

SECTION B. Project Description:

The Safety and Tritium Applied Research (STAR) facility, located in building Test Reactor Area (TRA)-666 at Idaho National Laboratory's (INL's) Advanced Test Reactor (ATR) Complex, conducts tritium research via confinement systems that rely on once-through building and experiment ventilation which is exhausted to a stack. The building does not have standby power and cannot run the tritium air monitoring system during power outages. The proposed action would provide standby power for the air monitoring system during outages.

The proposed action would consist of the following:

1. Tap into ATR Complex Standby Power in TRA-605 and deliver 480 V commercial/backup diesel power to the STAR facility using existing conduits inside of TRA-605 and underground between TRA-605 and TRA-666A.
2. Place a 480 V commercial/standby power panel on the south exterior wall of TRA-666A to accept standby power.
3. Install an Uninterruptible Power Supply (UPS) capable of powering the tritium monitoring equipment, and logging computer, for 1.5 hours.

In addition, the blower control system would be capable of auto-restarting at the last set blower speed settings prior to a power loss.

Approximate Cost: \$250,000

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions - There is a potential to disturb asbestos containing caulk when running conduit along the walls of the building. Workers will be required to have the appropriate training and use adequate control methods when disturbing the asbestos-containing material (ACM) caulk. Quantities of asbestos that are to be disturbed would be communicated to the Construction Environmental Support and Services (ES&S) representative in order to file the Asbestos Removal Notification Form (450.04). Asbestos work would not take place until the project has received approval from the Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAPs) Technical Point of Contact (TPOC).

Disturbing Cultural or Biological Resources - TRA-666 is eligible for listing on the National Register of Historic Places. The project, as described, is exempt from cultural resource review (Idaho National Laboratory [INL] Cultural Resources Management Plan, Table 2, exemption 6 [Department of Energy Idaho Operations Office (DOE/ID)-10997 rev. 5]). Therefore, the project may proceed as planned.

Generating and Managing Waste - Typical construction non-hazardous industrial waste such as scrap conduit, wire, wood, rags, cardboard, etc., would be generated during the project. Polychlorinated biphenyl (PCB) bulk product waste may be generated from suspect PCB paint that is on the existing facility components. Pollution prevention/waste minimization would be implemented where economically practicable to reduce the volume and/or toxicity of waste generated. All waste generated would be transferred to Waste Generator Services (WGS) for appropriate disposition.

Releasing Contaminants - Typical construction chemicals such as lubricants, fuels, caulks, etc., would be used by the subcontractor. A chemical inventory list with associated Safety Data Sheets (SDS's) will be submitted in the vendor data system by the subcontractor. All chemicals would be entered into the INL Comply Plus Chemical Management System by the Construction Chemical Coordinator.

Batteries would be installed as part of the new UPS system. Precautions would be taken during installation to prevent acid spills from these batteries. Spill control equipment would be onsite and the Spill Notification Team contacted in the event of a spill.

Paints older than 1980 are suspect for containing PCB's. The subcontractor would use appropriate control methods if disturbing these painted surfaces, including no hot work (welding, torch cutting, etc.) on any painted surfaces suspected to contain PCBs.

Using, Reusing, and Conserving Natural Resources - All material would be reused and/or recycled where economically practicable. All applicable waste would be diverted from disposal in the landfill when possible. Project personnel would use every opportunity to recycle, reuse, and recover materials and divert waste from the landfill when possible. The project would 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, or are non-toxic or less-toxic alternatives (see <http://www.sftool.gov/GreenProcurement>).

SECTION D. Determine the Recommended Level of Environmental Review (or Documentation) and Reference(s): 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 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,

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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, B2.5 "Facility safety and environmental improvements"

Justification: Project activities are consistent with 10 CFR 1021, Appendix B, B2.5 "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 and 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 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 Jack Depperschmidt, DOE-ID NEPA Compliance Officer on: 7/17/2015