

**U.S. Department of Energy
Naval Reactors Laboratory Field Office**

Knolls Laboratory

National Environmental Policy Act (NEPA) Categorical Exclusion (CX)
Determination Summary Form

CENTRAL COMPUTER FACILITY UPGRADE PROJECT

REFERENCES

36 CFR Part 800, Protection of Historic Properties

10 CFR Part 1021, Department of Energy National Environmental Policy Act
Implementing Procedures, Subpart D, Typical Classes of Actions

PROJECT SCOPE DISCUSSION

The scope of the Knolls Laboratory Central Computing Facility (CCF) Upgrade, E10-105 Project supports the computing needs of the Naval Reactors Program. This project will improve the facility's flexibility/scalability to support a wide range of computing systems, prepare the CCF to support increased density of computational power in computer racks, improve energy efficiency and allow for the transition of computing systems to a more efficient computing space. The project scope includes:

- 1) Installing new cooling and electrical power infrastructure to support future computing systems, which can be expanded without significant modifications.
- 2) Enable increased density of computational power in the computer racks which allows for additional computers in each rack and frees up computing center space for future applications.
- 3) Increase the efficiency of cooling for the computer systems to reduce cost and meet federal standards.
- 4) Isolate computing equipment from support systems to reduce security vulnerabilities and foot traffic within the computing spaces.

The CCF will increase cooling efficiency using high-efficiency equipment and methods including; energy efficient computer room air conditioners, transformers, humidification, LED lighting, installation of a hot air return plenum, and removal of underfloor airflow obstructions. Old and abandoned equipment in E10-105 and the E9 Equipment Room including the under floor halon fire suppression system will be removed. Building

materials and equipment containing asbestos and/or coated with paints formulated with polychlorinated biphenyls and other environmental contaminants associated with older building materials will be remediated and properly disposed as part of the renovation. The project does not violate applicable regulatory requirements, require construction or major expansion of waste handling facilities, result in unpermitted releases of hazardous substances, or adversely affect environmentally sensitive resources, including wetlands. The project does not involve genetically engineered organisms or species. There are no extraordinary circumstances related to the proposed action. The project has not been segmented to meet the definition of a categorical exclusion and is not connected to other actions with potentially significant and/or cumulative impacts.

CONCLUSION

In accordance with 36 CFR 800, Protection of Historic Properties, NRLFO as the Agency Preservation Official has determined this action is not the type of activity that has the potential to cause an adverse effect on a historic property and does not require a Section 106 review by the State Historic Preservation Office.

The activity as described may proceed without further Cultural Resources-Historic Preservation review. The utilization of CX(s) for NEPA compliance is appropriate.

The Central Computer Facility Upgrade Project is categorically excluded from additional NEPA documentation under 10 CFR 1021 Subpart D, Appendix B, CX B1.4, B1.5, B1.7, B1.15, B1.16 and B1.17. Specifically, the categorical exclusions that apply are as follows:

B1.4 Air conditioning systems for existing equipment

Installation or modification of air conditioning systems required for temperature control for operation of existing equipment.

B1.5 Existing steam plants and cooling water systems

Minor improvements to existing steam plants and cooling water systems (including, but not limited to, modifications of existing cooling towers and ponds), provided that the improvements would not: (1) Create new sources of water or involve new receiving waters; (2) have the potential to significantly alter water withdrawal rates; (3) exceed the permitted temperature of discharged water; or (4) increase introductions of, or involve new introductions of, hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products.

B1.7 Electronic equipment

Acquisition, installation, operation, modification, and removal of electricity transmission control and monitoring devices for grid demand and response, communication systems, data processing equipment, and similar electronic equipment.

B1.15 Support buildings

Siting, construction or modification, and operation of support buildings and support structures (including, but not limited to, trailers and prefabricated and modular buildings) within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible). Covered support buildings and structures include, but are not limited to, those for office purposes; parking; cafeteria services; education and training; visitor reception; computer and data processing services; health services or recreation activities; routine maintenance activities; storage of supplies and equipment for administrative services and routine maintenance activities; security (such as security posts); fire protection; small-scale fabrication (such as machine shop activities), assembly, and testing of non-nuclear equipment or components; and similar support purposes, but exclude facilities for nuclear weapons activities and waste storage activities, such as activities covered in B1.10, B1.29, B1.35, B2.6, B6.2, B6.4, B6.5, B6.6, and B6.10 of this appendix.

B1.16 Asbestos removal

Removal of asbestos-containing materials from buildings in accordance with applicable requirements (such as 40 CFR part 61, "National Emission Standards for Hazardous Air Pollutants"; 40 CFR part 763, "Asbestos"; 29 CFR part 1910, subpart I, "Personal Protective Equipment"; and 29 CFR part 1926, "Safety and Health Regulations for Construction"; and appropriate state and local requirements, including certification of removal contractors and technicians).

B1.17 Polychlorinated biphenyl removal

Removal of polychlorinated biphenyl (PCB)-containing items (including, but not limited to, transformers and capacitors), PCB-containing oils flushed from transformers, PCB-flushing solutions, and PCB-containing spill materials from buildings or other aboveground locations in accordance with applicable requirements (such as 40 CFR part 761).

NRLFO Approval:



D. A. Delwiche

Date: 10-19-2016

CX Determination Date