

**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 LONG TERM UPGRADE PROJECT**

**REFERENCE**

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

**PROJECT SCOPE DISCUSSION**

The Knolls Laboratory Central Computing Facility Long Term Upgrade (CCF LTU) Project will support the future computing needs of the Naval Reactors Program by improving the facility's flexibility/scalability to allow a wide range of computing systems, preparing the CCF to support increased density of computational power in computer racks, improving energy efficiency, and allowing transition of computing systems to a more efficient computing space. The project scope includes:

1. Installation of three high-efficiency, variable speed Computer Room Air Conditioning (CRAC) units that will be located outside of the computing space;
2. Installation of transformers and electrical panels located outside of the computing space to eliminate these heat loads from the computing space;
3. Installation of new, dedicated chillers allowing CCF personnel to regulate cooling temperatures;
4. Removal of drop ceilings to allow hot exhaust air from servers to rise to the high ceiling in the area where the CRAC unit air intake ducts will be located and increase the efficiency of removing the hot air from the room; and
5. Isolation of classified from unclassified computing equipment to reduce security vulnerabilities and foot traffic within the classified computing spaces.

The CCF LTU 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 the facility including the under floor halon fire suppression system will be removed. The building structure and equipment containing asbestos and/or coated with paints formulated with polychlorinated biphenyls and other environmental contaminants 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 historical properties, or other 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**

The Central Computer Facility Upgrade Project meets the requirements to be categorically excluded from additional NEPA documentation under 10 CFR 1021 Subpart D, Appendix B, 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.

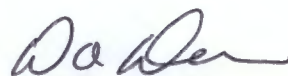
*B1.16 Asbestos removal*

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:

3 APRIL 2019

CX Determination Date