

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

Knolls Laboratory

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

KNOLLS DATA CENTER BACKUP POWER AND CAPACITY UPGRADES 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 Data Center (KDC), formerly called the Central Computer Facility (CCF), provides Information Technology (IT) services for the Naval Reactors Program (Program), which includes business applications, fleet support, and scientific engineering design work. The business applications are operated on a 24/7 basis and support the computing needs of the Program.

In accordance with the Federal Information Technology Acquisition Reform Act, the KDC is considered to be a tiered data center and requires an “adequate amount of uninterruptible power supply.” The KDC currently has a standby backup power system that consists of (2) Uninterruptable Power Supply (UPS) Flywheels that are old and use outdated technology compared to current industry standards. The current system provides continuous backup power and power conditioning for essential Enterprise IT systems. This system utilizes a flywheel system that provides a short-term means of ride through power to IT systems as the emergency diesel powered electrical generator comes up to speed and picks up the electrical loads in the facility. This backup system provides a transfer of power from the single source feed through the single automatic transfer switch.

This project will replace the current UPS flywheel system with a newer, state-of-the-art system. This system will include a connection point that facilitates connection of a UPS system and provides advanced technology, increased capacity, and N+1 redundancy to support future data center growth. This project also will install an additional backup emergency power generator to provide redundancy and cooling equipment with N+1 capacity to support the current and future requirements of KDC. The operation of an emergency power generating stationary internal combustion engine (emergency power generator) as defined under 6 NYCRR Part 200.1(cq) is considered an Exempt Activity under New York State regulation 6 NYCRR Part 201-3.2(c)(6) and does not require an air permit or modification of the Knolls Laboratory’s current air permit.

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. This 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 Knolls Data Center Backup Power and Capacity Upgrades Project is categorically excluded from additional NEPA documentation under 10 CFR Part 1021, Subpart D, Appendix B, B1.4, B1.5, B1.7, B1.11, B1.15, and B1.31. Specifically, the categorical exclusions that apply are the following:

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.

B1.11 Fencing

Installation of fencing, including, but not limited to border marking, that would not have the potential to significantly impede wildlife population movement (including migration) or surface water flow.

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.

B1.31 Installation or relocation of machinery and equipment

Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts.

NRLFO
Approval:

David A.
Delwiche

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David A. Delwiche

CX Determination Date