



U.S. Department of Energy

Categorical Exclusion Determination Form

Proposed Action Title: Critical Utilities Infrastructure Revitalization (CUIR) (SS-SC-21-02)

Program or Field Office: SLAC Site Office

Location(s) (City/County/State): Menlo Park, California

Proposed Action Description:

The CUIR is a site-wide utilities and infrastructure improvement project that will provide reliable, efficient, and sustainable utility systems to support SLAC's ongoing and future scientific research. The purpose of the CUIR is to modernize utility infrastructure to ensure reliable utilities for the laboratory. This is an update to the previous NEPA review that was conducted for the CUIR due to changes in the project scope that have been made since the previous analysis (SS-SC-21-01, dated 5/24/21); these changes include the installation of a new substation, a new feeder cable pathway on the roof, and cable boxes on the exterior wall of the Gallery. The CUIR is organized into 3 "subprojects" (SP) to efficiently execute utility improvements in alignment with lab priorities and operational downtime schedules: SP 1 – Critical Electrical System Improvements; SP 2 – Critical Civil Utilities Replacement and Upgrades; SP 3 – Critical Mechanical Utilities Upgrades.

Activities associated with SP 1 include the installation of a new substation near Sector 9; installation of a new feeder cable pathway on the entire length of the Gallery roof; installation of cable boxes on the exterior wall of the Gallery; replacement of two transformers in the Master Substation; expansion of the existing B016 Master Substation building (note: the area is paved and previously disturbed, and the expansion may be structurally independent from B016 but will only be separated by a small distance of less than 5 feet); installation of a new switchgear at Sector 4; and installation of new hardware at substation 726.

Activities associated with SP 2 include replacement and upgrades of the sewer system, domestic and fire protection water system, and storm drain system; and enhancement of meters, sensors, and monitors for civil utilities.

Activities associated with SP 3 include replacement of the west campus low conductivity cooling water system and equipment; upgrade of natural gas BTU meters; and enhancement of data analytics using smart meters and programmable logic controllers for mechanical utilities.

DOE determined that the CUIR was an Undertaking with the potential to affect historic properties under Section 106 of the National Historic Preservation Act (NHPA). A Section 106 report was prepared which made a finding of no adverse effect. The State Historic Preservation Officer (SHPO) concurred with the DOE's finding on November 28, 2023.

Soil disturbance, relocation, and disposal will occur in coordination with SLAC Environmental Protection. Storm water BMPs will be implemented for earth-moving activities to minimize storm water contamination, and all hazardous construction waste will be disposed of off-site and/or through SLAC Waste Management. If bird nests containing chicks or eggs are encountered during work (e.g., during rooftop cable tray installation), appropriate protection measures will be implemented in accordance with the Federal Migratory Bird Treaty Act.

Categorical Exclusion(s) Applied:

B1.3 - Routine maintenance
B1.7 - Electronic equipment
B1.15 - Support buildings
B2.2 - Building and equipment instrumentation
B4.10 - Removal of electric transmission facilities
B4.11 - Electric power substations and interconnection facilities

For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Subpart D of [10 CFR Part 1021](#).

Regulatory Requirements in 10 CFR 1021.410(b): (See full text in regulation)

The proposal fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D.

To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, 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 facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of

the proposal.

The proposal has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

I concur that the above description accurately describes the proposed action.

SSO Program Point of Contact: Chanh Lam

Date:

The above description accurately describes the proposed action, which reflects the requirements of the CX cited above. Therefore, I recommend that the proposed action be categorically excluded from further NEPA review and documentation.

SSO NEPA Coordinator: Risa Benwell

Date:

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

SSO NEPA Compliance Officer: Katatra Vasquez

Date Determined:
