

**National Environmental Policy Act (NEPA) Categorical Exclusion (CX) Determination**

**A. SSO NEPA Control #: SS-SC-11-01**

**B. Brief Description of Proposed Action:**

The Stanford Synchrotron Radiation Lightsource (SSRL) is proposing to upgrade a portion of the existing Stanford Positron-Electron Asymmetric Ring (SPEAR) to meet seismic standards. The proposed work includes : 1) the replacement of concrete roof blocks, placement of footings and new concrete walls, and installation of seismic connections at the old Beam Line 4; 2) the replacement of existing concrete roof blocks with precast roof blocks, placement of new footings, and installation of seismic anchors and connections at the northeast section of the Booster ring; 3) the installation of seismic anchors between the existing walls and roof blocks of the Booster Ring (both north and south of Building 140); 4) the installation of steel tube diagonals to create braced frames on the east and west sides of Building 140; and 5) the replacement of tension rods under the roof of Building 140.

**C. Number and Title of the Categorical Exclusion Being Applied:**

B2.5 Safety and environmental improvements of a facility, including 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 may 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 or belowground tanks and related piping if there is no evidence of leakage, based on testing that meets performance requirements in 40 CFR part 280, subpart D (40 CFR part 280.40). This includes activities taken under RCRA, subtitle I; 40 CFR part 265, subpart J; 40 CFR part 280, subparts B, C, and D; and other applicable state, Federal and local requirements for underground storage tanks. These actions do not include rebuilding or modifying substantial portions of a facility, such as replacing a reactor vessel.

**D. Regulatory requirements in 10 CFR 1021.410 (b)**

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

For classes of actions listed in Appendix B, the following conditions are integral elements; i.e., to fit within a class, a proposal must not:

- A. Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including DOE and/or Executive Orders;
  - B. Require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities, but may include such categorically excluded facilities;
  - C. Disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist the environment such that there would be uncontrolled or unpermitted releases; or
  - D. Adversely affect environmentally sensitive resources (including but not limited to those listed in paragraph B.(4)).
- B. There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal; and
  - C. The proposal is not “connected” to other actions with cumulatively significant impacts, and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211.

**D. Determination:**

Therefore, I recommend that the proposed action be categorically excluded from further NEPA review and documentation.

SIGNATURE ON FILE  
\_\_\_\_\_  
Dave Osugi  
NEPA Coordinator  
SLAC Site Office

1/21/2011  
Date

Based on my review of information conveyed to me and in my possession (or attached) concerning 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 of actions, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

SIGNATURE ON FILE  
\_\_\_\_\_  
Gary S. Hartman  
SC NEPA Compliance Officer  
Integrated Support Center, Oak Ridge Office

1/24/2011  
Date

**SSO File: DOE O 451.1B**