



BAY AREA SITE OFFICE

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DATE: October 10, 2019

MEMORANDUM FOR: Paul Golan, Site Manager, Bay Area Site Office

SUBJECT: Supplement Analysis to SLAC LCLS-II Environmental Assessment, DOE/EA-1975, July 2014

Attachment: A. Supplement Analysis to the SLAC LCLS-II Environmental Assessment, September, 2019

The purpose of this memorandum is to document a proposed upgrade to the Linac Coherent Light Source-II Project (DOE/EA-1975, July 2014), the environmental review of this proposed change, and the determination resulting from that review. The proposed change is the upgrade of the LCLS-II High Energy (LCLS-II HE) project. The proposed upgrade is described in Attachment A Supplement Analysis for the National Environmental Policy Act Environmental Assessment. Since DOE published the most recent FONSI in 2014, DOE and SLAC have designed an upgrade that would involve the fabrication and installation of an additional 20 cryomodules and could require up to approximately 26 or more cryomodules in the linac. LCLS-II HE would also require additional electrical and cryogen distribution facilities and other equipment upgrades. The proposed upgrade is within the scope of the original July 2014 Environmental Assessment (EA) project, but the EA did not identify the upgrade of the LCLS-II HE project. Accordingly, the Bay Area Site Office (BASO), SLAC National Accelerator Laboratory, and Office of Science Consolidated Support Center undertook a Supplement Analysis of the proposed upgrade and determined that the impacts of the LCLS-II-HE project are within the original scope and impact envelope considered in the 2014 EA completed for the LCLS-II such that there are no significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts and no additional NEPA environmental analysis is needed.

Description of Proposed Update and Determination: The proposed upgrade of the LCLS-II HE project is described in detail in Attachment A. There are no significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts, and any minor impacts would be addressed by implementing project-specific avoidance and minimization measures described in the July 2014 EA/FONSI.

Regulatory Requirements: The potential environmental impacts of the LCLS-II project, including the proposed update have been reviewed in compliance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) implementing regulations (40 Code of Federal Regulations [CFR] 1500-1508), the Department of Energy's

(DOE) National Environmental Policy Act implementing Procedures (10 CFR 1021), and DOE Order 451.1.

There are no extraordinary circumstances related to the proposed upgrade that affect the significance of the environmental impacts analyzed in the July 2014 EA and resulting FONSI.

The proposed upgrade will not threaten a violation of the applicable ES&H regulatory requirements; will not require construction or major expansion of waste storage, disposal, recovery, or treatment facilities; will not disturb hazardous materials that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; and will not adversely affect environmentally sensitive resources.

Overall Determination: The July 2014 EA for the Linac Coherent Light Source-II (DOE/EA-1975) presented an analysis of potential environmental consequences of the LCLS-II project. Based on a review of the proposed upgrade I have determined that:

- The above description of the proposed upgrade (including the Attachment hereto) accurately describe the proposed action.
- There are no extraordinary circumstances related to the proposed design change that would affect the significance of the environmental effects analyzed in the July 2014 EA/FONSI.


Therefore, I have determined that the proposed change is within the scope of the original July, 2014 EA/FONSI for the LCLS-II Project as described above and no additional NEPA analysis or documentation are needed.



Katatra Vasquez
NEPA Compliance Officer

10/10/19

Date



Paul Golan
Site Manager
Bay Area Site Office

10/10/19

Date

cc: Carol Borgstrom
Menlo Park Library
John Cummins