

memorandum

DATE: FEB 16 2011

REPLY TO

ATTN OF: Office of Basic Energy Sciences, SC-22

SUBJECT: DEPARTMENT OF ENERGY REVIEW OF THE LINAC COHERENT LIGHT SOURCE -II
(LCLS-II) PROJECT

TO: Paul Bosco, Director, Office of Engineering and Construction Management

I request that your office organize and conduct an Independent Cost Review of the LCLS-II project at SLAC National Laboratory on April 26-28, 2011, for the Office of Basic Energy Sciences. Robert B. Raines, Office of Engineering and Construction Management, and Daniel R. Lehman, Director, Office of Project Assessment, Office of Science, have agreed to serve as Chairperson and Deputy Chairperson respectively. The purpose of this review is to determine if the project has fulfilled the requirements for CD-1, "Approve Alternative Selection and Cost Range," and is ready to request CD-1 approval.

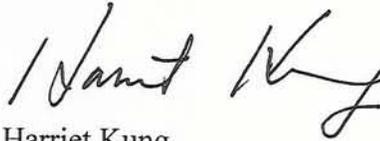
The project received CD-0 "Approve Mission Need," on April 27, 2010, with a Total Project Cost in the range of \$300 million to \$400 million and a FY 2017 completion date. The LCLS was designed to support rapid extension of its capabilities and capacity, so as to remain the world's premier x-ray free electron laser facility. The upgraded project, LCLS-II, will build upon the known characteristics of LCLS yet enable technologies for reaching into spectral regions not addressed by LCLS. LCLS-II will not just benefit a single special field, it will serve the entire range of science from advanced materials to energy and life sciences.

In carrying out its charge, the review committee should respond to the following questions:

1. Conceptual Design: Is the conceptual design sound and likely to meet the technical performance requirements in the Mission Need Statement?
2. Project Scope: Are the Project's scope and specifications sufficiently defined to support the preliminary cost and schedule estimates?
3. Cost and Schedule: Are the cost and schedule estimates to include life cycle costs, credible and realistic for this stage of the project? Do they include adequate scope, cost and schedule contingency?
4. Management: Is the project being properly managed at this stage? Has the management team met all the prerequisite requirements for CD-1 approval? Is the project ready for CD-1?
5. ES&H: Is ES&H being properly addressed given the project's current stage of development?

Charge Memorandum (Example)

Philip F. Kraushaar, the LCLS-II Program Manager, will serve as the Office of Basic Energy Sciences point of contact for this review. I would appreciate receiving your committee's report within 60 days of the review's conclusion.



Harriet Kung
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for Basic Energy Sciences

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