

United States Government  
Department of Energy

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# memorandum

DATE: May 17, 2007

REPLY TO

ATTN OF: SC-22

SUBJECT: DOE REVIEW OF THE LINAC COHERENT LIGHT SOURCE (LCLS) PROJECT

TO: Daniel R. Lehman, Director, Office of Project Assessment, SC-1.3

I request that you organize and lead an Office of Science (SC) status review of the Linac Coherent Light Source (LCLS) project at the Stanford Linear Accelerator Center (SLAC) during July 10-12, 2007. The purpose of this review is two fold; 1) evaluate progress in all aspects of the project: technical, conventional facilities, cost, schedule, management, and environment, safety and health (ES&H), and 2) coordinate with OECM who will conduct a limited External Independent Review (EIR) to validate the revised performance baseline.

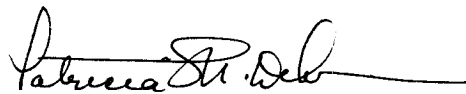
During the past several months, progress has been made in fabricating/assembling the LCLS technical hardware and construction activities. The project was forty-five percent complete as of the end of March 2007. The project team started implementing the plan to reutilize existing facilities to provide office space for LCLS operations in lieu of constructing a Central Laboratory Office Complex (CLOC). The FY07 continuing resolution (CR) has impacted the project cost and schedule due to the delay and shortfall in funding. The project team has evaluated the impacts and prepared a revised performance baseline as a result of the CR. A Baseline Change Request (BCR) has been prepared for the effects of the CR. At the same time, the CLOC construction will be removed from the baseline. The BCR will be processed after the completion of this review.

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

1. Is the proposed baseline sound, considering the reduced funding scenario imposed by the FY07 Continuing Resolution and the FY08 President's Budget? Are the project's cost, schedule, and technical baselines consistent with these limitations and the FY08 LCLS Construction Project Data Sheet? Is the information in the DOE Project Assessment Reporting System consistent with physical progress?
2. Are the construction field activities progressing in a manner consistent with the predicted costs and schedule? Has the CLOC replacement laboratories and office space been integrated into the appropriate project planning and execution documents?
3. Are the designs of the technical systems sufficiently mature to support the planned hardware procurements? Will the procurement plans and equipment installation and commissioning plans support the project schedule?

4. Is there adequate contingency (cost and schedule) to address the risks inherent in the remaining work and is it being properly managed? Is the contingency supported by and consistent with an appropriate project-wide risk analysis?
5. Are ES&H aspects being properly addressed given the project's current stage of development?
6. Is the project being managed (e.g., properly organized, adequately staffed) as needed to continue with construction? Is there adequate support from SLAC in all necessary areas (e.g., contracts, procurement, human resources)? Has the project responded appropriately to recommendations from prior DOE/SC reviews?

Thomas Brown, the LCLS Program Manager, will serve as the 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.



Patricia M. Dehmer  
Associate Director of Science  
for the Office of Basic Energy Sciences

cc:

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