



*U.S. Department of Energy
and the
National Science Foundation*



July 16, 2008

To: Mr. Daniel Lehman, Director, DOE Office of Project Assessment, SC-28

Subject: Request to Review the Dark Energy Survey project

The Department of Energy (DOE) Office of High Energy Physics (OHEP) and the National Science Foundation (NSF) request that you conduct a review of the Dark Energy Survey (DES) project on September 9-10, 2008 at Fermi National Accelerator Laboratory (FNAL).

The DES experiment will utilize the existing Blanco Telescope at the Cerro Tololo Inter American Observatory (CTIO) in Chile to study the nature of dark energy. The project includes the fabrication of a new camera (DECam) optimized for the study of dark energy, the CTIO facilities improvement project (CFIP) for upgrades to the telescope and CTIO facility, and a data management system (DESDM). Funding is being provided by the DOE, NSF and other U.S. and foreign institutions.

For DOE, this review will serve to verify the DECam project's readiness for approval of Critical Decision 3b (Approve Start of Construction). Critical Decision (CD) 2 for approval of the performance baseline was approved for the DECam project on April 29, 2008. CD-3a, for initiating early procurement of long lead items, was approved on May 20, 2008.

For NSF, the review will serve to assess the status of the CFIP and DESDM projects.

In carrying out its charge, the review committee is requested to evaluate the progress and status of all 3 DES projects as well as the coordination between them. For the DECam project, the committee should evaluate whether the final design of DECam is complete and if it's prepared to enter the next stage. In carrying out this charge, the committee should address the following specific items:

1. Technical: Is the final design sufficiently mature so that the project can initiate procurement and fabrication? For those elements that are not finalized, has the project convincingly shown that there are no major issues that need to be addressed and that they have a clear path forward towards final design?
2. Baseline Cost and Schedule: Are the current project cost and schedule projections consistent with the approved baseline? Are the allocations of contingency adequate for the risks?

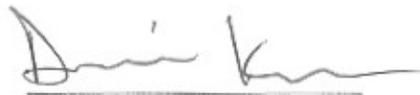
3. Management: Is the management structure adequate to deliver the proposed final design within specifications, budget and schedule? Has the project responded satisfactorily to recommendations from the previous review?
4. Fabrication: Has there been adequate progress on the fabrication activities approved under CD-3a? Is the project satisfactorily prepared to execute the remaining fabrication activities?
5. Documentation: Is the DECam documentation required by DOE Order 413.3A for CD-3b complete? Have the CD-2 documents been updated to reflect any changes resulting from the final design?

Kathleen Turner is the DOE program manager for the Dark Energy Survey and will serve as the Office of High Energy Physics contact for the review. Nigel Sharp is the NSF program manager for the Dark Energy Survey and will serve as the NSF Division of Astronomical Sciences contact for the review.

We appreciate your assistance in this matter. As you know, these reviews play an important role in our programs. Both agencies look forward to receiving the committee's report within 60 days of the review.



Craig Foltz
Acting Director
Division of Astronomical Sciences
National Science Foundation
Arlington, VA



Dennis Kovar
Associate Director
for High Energy Physics
Office of Science
Department of Energy
Germantown, MD

Subject: DES Review charge letter to Lehman

Filed: KTurner:vb:7/16/08:Q/Vera/DES charge letter.doc

Concurrence

SC-25	SC-25	SC-25
KTurner	MProcario	DKovar
		
7/16/08	7/21/08	7/22/08