

**National Aeronautics and Space Administration
and
U.S. Department of Energy**

TO: Mr. Daniel Lehman, Director, Construction Management Support Division, SC-81

Date:

RE: NASA Critical Design Review (CDR) and DOE Start of Construction Review (CD-3) of the Large Area Telescope Project

The Large Area Telescope (LAT) is the principal scientific instrument to be flown on the National Aeronautics and Space Administration (NASA) Gamma-ray Large Area Space Telescope (GLAST) Mission, scheduled for launch in 2006. As part of the oversight of the LAT project, the Division of High Energy Physics requests that you co-chair a Start of Construction (CD3) review jointly with the NASA Critical Design Review (CDR), using an independent review team. This review has been scheduled for May 12 through May 16, 2003, at the Stanford Linear Accelerator Center (SLAC).

At the joint DOE and NASA review held in July 2002, the review team recommended approving the LAT project for preliminary design review (PDR) and baselining status. The NASA PDR status is focused on the technical design of each subsystem and the integrated instrument in addition to being concerned with the cost, schedule, and management structure. The DOE baselining status is focused on the technical design, cost, schedule, and management structure of the subsystems as well as the entire project. Quarterly status reviews, held in November 2002 and January 2003, highlighted unresolved technical issues and schedule delays in several subsystems, as well as the corrective action plan put in place to resolve these issues.

The purpose of the upcoming review is to carry out an integrated examination and assessment of the final design of the entire project, in anticipation of the start of fabrication. The committee should evaluate the project, keeping in mind changes since PDR and baselining approval as well as issues highlighted in past reviews.

In carrying out its charge, the review committee should address the following specific items:

- Review and evaluate the complete system design. Is the maturity of the design and development effort appropriate and does it justify supporting the project to proceed with full scale fabrication activities?
- Is the technical, cost, and schedule status of the project consistent with the baseline objectives and is the project progressing adequately? Is the information in the LAT Project Management Control System and the DOE Project Assessment Reporting System consistent with physical progress?
- Are the Project's risks being managed effectively?
- Is the management structure adequate and appropriate for guiding the project to completion?

Kathleen Turner is the DOE program manager for the LAT project and will serve as the DOE point of contact for the review.

A formal review report is requested to be sent to the DOE Division of High Energy Physics by July 15, 2003.

We appreciate your assistance in running this review. As you know, these reviews are an important element of the DOE oversight of the GLAST/LAT Project. They help to ensure that the project meets its commitments to keep the GLAST/LAT science program robust.

Robin Staffin
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