



February 20, 2007

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Dear Gerry, Mike:

The second annual review of the US R&D program for the International Linear Collider (ILC) by the Department of Energy and the National Science Foundation will be held April 30 – May 2, 2007 at Fermilab. This review will serve as DOE and NSF's primary peer review of the US portion of the ILC accelerator activities. Our goal is to evaluate the achievements and future planning of the US ILC program, and those activities needed to position the US as a possible host.

We ask that the review addresses the ongoing ART effort, including:

- ART organization and management of the program;
- The FY2006 R&D program accomplishments;
- The R&D plan, milestones and resource needs for FY2007 and beyond; and
- Plans for US activities relating to development of test infrastructure and industrial partnerships;

We recognize that preparing a US candidate site is not currently within the ART purview, but the funding for this activity is presently within the ILC budget, so we ask that the activities related to developing such a site be presented to the committee also. This may be done using the LCSGA and the US national labs where this work is being done.

The review should address both the laboratory and university efforts as appropriate. We ask also that the ART activities be evaluated in the context of the global activities being coordinated by GDE. The ILC detector R&D effort in US will be covered in a separate review.

We will ask the consultants to provide feedback to ART during the closeout of the review, and will request their confidential statements that will serve as the basis for written evaluation of the program by the DOE and NSF.

Paul Grannis will chair the review and serve as the primary contact for the review. Marvin Goldberg will be the primary NSF liaison, and with Grannis, will prepare the final program evaluation.

We ask that talks and supporting materials be made available through a web site prior to the review to aid the preparation by our consultants.

We look forward to this review and hope that, in addition to providing the basis for the DOE and NSF evaluation, it will prove useful for ART in charting its course as the ILC enters its next phase.

Sincerely,

Robin Staffin
Associate Director
DOE Office of High Energy Physics

Joseph Dehmer
Director
NSF Division of Physics

Guidance for Consultants

The ART has completed its first full year of R&D and design activities contributing to the GDE Reference Design Report and value cost estimate. The GDE has initiated global R&D planning for several of the key subsystems. ART has also conducted extensive planning exercises for its program in FY2007, and has prepared plans for the out-year program based upon rough budget guidance. In FY2007, the GDE and ART are entering a more rigorous R&D and engineering design phase intended to produce a detailed project design and cost estimate in several years. We ask that the consultants examine the overall structure of the ART effort and its proposed R&D program. Listed below are some questions on which we seek advice, but the consultants are encouraged to expand on these as they see fit.

Goals: Are the ART R&D goals appropriate and well integrated into the world program? Is the intended effort planned for the engineering design appropriate?

Scope and quality of the R&D: Is the US ILC R&D appropriately matched to the GDE needs? What is the quality of the past achievements and are the future R&D objectives and milestones well formulated? Are the groups conducting the work well matched for carrying out the program?

Resources: Are the resource needs identified by ART appropriate for carrying out the planned program? Are the proposed allocations to the individual areas in the ILC R&D program appropriately balanced? Are there areas where there should be expanded or reduced effort?

Management: Is ART organized so as to guide the US ILC R&D effectively? Are the management roles and tools well defined and well matched to the effort. Are the mechanisms for establishing priorities and conducting proposal reviews suitable.