



January 20, 2006

Dr. Gerald Dugan
Director, Americas Regional Team
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Cornell University
Ithaca, NY 14853-5001

Dear Gerry:

The first 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 4 – 6, 2006 at Fermilab. This review will serve as DOE and NSF's primary peer review of the US portion of the ILC R&D activities. Our goal is to evaluate the scope and quality of the accelerator research and development activities, the prioritization of activities within the budgetary advice, the planning for the next few years, the efficacy of the management of the effort by the Americas Regional Team (ART), and the integration of the US work into the larger ILC Global Design Effort (GDE) effort.

We ask that the review addresses the ongoing ILC R&D program, covering the major areas of US activity including:

- ART organization and its integration into the larger GDE effort
- US R&D program and deliverables in FY06
- Expected program activities and milestones for FY07
- Machine availability and risk assessment studies
- US role in plans for world-wide ILC test facilities
- US effort in preparation of the Reference Design Report, site studies and cost estimate

In each of these areas, the review should address both the laboratory and university efforts as appropriate, and should present the plans for developing the appropriate industrial engagement. We also ask that the intended development of the activities in each area over the next several years be indicated, and that the collaborative connections with research groups outside the US be noted.

The ILC detector R&D effort in US will be covered in a separate review.

We will ask the consultants to advise us on all aspects of the US component of the GDE/ART activities. We will ask them to provide feedback to ART during the closeout of the review. We also request confidential statements from the

consultants that will serve as the basis for written evaluation of the program by the DOE and NSF. The questions for the consultants to consider in making their evaluations are appended.

Paul Grannis will chair the review and serve as the primary contact for the review. Jon Kotcher will be the primary NSF liaison to the review. Together, Grannis and Kotcher 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. This is particularly important for this first-ever ART review so as to provide the basis for our consultants to gain a broad overview this new program.

We look forward to this first formal review of the US R&D program for the ILC, and hope, in addition to providing the basis for the DOE and NSF evaluation, that it will give a useful opportunity for ART to make its own evaluation at this formative juncture.

Sincerely,

Robin Staffin
Associate Director
DOE Office of High Energy Physics

Joseph Dehmer
Director
NSF Division of Physics

Questions for Consultants

This is the first DOE/NSF review of the Americas Regional Team effort on the ILC R&D program, so it is appropriate to take a broad view of the US ILC activities. We ask that the consultants examine the overall structure of the ART effort as it is being initiated, to help guide its organization as well as commenting on the quality of the R&D efforts. 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 R&D goals for ART appropriate given the world-wide ILC planning? Is the effort on preparation of the Reference Design Report/cost estimate and the future development of a technical design report appropriate? Do the goals meet the stated desire to propose a bid to host within the US?

Scope and quality of the R&D: Is the scope of US ILC R&D appropriately matched to the GDE needs? Are the R&D objectives and milestones well formulated? Are the groups conducting the work well matched to carry out the program? Are the plans for industrialization of components well formulated?

Resources: Are the planned resources adequate to carry out the planned program? Are the resource 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? Is the integration of the ART organization into the broader GDE functioning well? 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.