



Department of Energy
Office of Science
Washington, DC 20585

April 28, 2006

Dr. Piermaria Oddone, Director
Fermi National Accelerator Laboratory
P.O. Box 500
Batavia, Illinois 60510

Dear Dr. Oddone:

The annual review of the research program of the Fermi National Accelerator Laboratory (Fermilab) by the Department of Energy (DOE) is scheduled for May 15-18, 2006. This serves as the DOE's primary peer review of the laboratory's research program, with the goals being to evaluate the quality of the research performed by the laboratory as a user facility as well as by the laboratory staff. The review should also assess the balance of the current research portfolio, and the laboratory's plan for its future.

We ask that you address Fermilab's efforts in the following major areas of research:

- Collider physics, including CMS, CDF, and D-Zero;
- Neutrino physics with MiniBoone, MINOS, and NOvA;
- Experimental astroparticle physics, including SDSS, CDMS, Auger, and the Dark Energy Survey;
- Theoretical particle physics and astrophysics, including cosmology;
- Accelerator R&D linear collider, including superconducting magnets, high-intensity proton sources, muon acceleration and storage, accelerator modeling, and the LHC Accelerator Research Program;
- ILC R&D;
- Research and development efforts to support the above programs and any new initiatives that the Lab is pursuing.

The Tevatron Operations Review has done a separate evaluation the operation and improvement in the performance of the Tevatron accelerator complex. The report from the Operations Review as well as reports of DOE reviews of Fermilab construction projects will be provided to the consultants for their information.

For each of the major areas of the research program, the consultants will be asked to comment upon:

- Scientific and technical merit and importance of the area;
- Quality and impact of the recent research;
- Adequacy of the allocated resources;
- Feasibility for carrying out the proposed plans;
- Comparison with other research groups engaged in similar activities.



We will ask our consultants to provide evaluations of: (i) the research activities of laboratory during this past year including the research activities of the laboratory staff, (ii) goals for the research program in the next year, (iii) and the long-term research plan for the laboratory. We also expect a discussion by Laboratory Management of the overall balance and priorities of the research program.

We plan to keep the basic structure of the review that we used last year with the exception that the consultants will arrive on the afternoon of May 15 for a comprehensive executive session. We have tried this at other labs and found that the review is much more productive, if the committee is well briefed by OHEP staff before the review starts.

As we have done in past DOE program reviews, we will invite our consultants to provide immediate feedback to the Laboratory, but we will also request from them confidential statements in writing that will be used in our evaluation of your program.

Michael Procario will chair the review and serve as our contact on all aspects of the review. A tentative list of members of the review committee is enclosed for your information. In a recent survey of our consultants, all have expressed appreciation for receiving any material available from the Laboratory prior to the review. We hope you will be able to honor this request as much as possible, and post presentation from this past year's review.

We look forward to this upcoming review.

Sincerely,



Robin Staffin
Associate Director
Office of High Energy Physics

Enclosure

cc: Joanna Livengood, FSO