



Department of Energy  
Office of Science  
Washington, DC 20585

January 21, 2004

Dr. Michael Witherell  
Director  
Fermi National Accelerator Laboratory  
P.O. Box 500  
Batavia, Illinois 60510

Dear Dr. Witherell:

*Mike*

The next annual Department of Energy (DOE) review of the Fermi National Accelerator Laboratory High Energy Physics Program is scheduled for March 23-25, 2004. This review will occur very soon after the Run II luminosity and Tevatron operations reviews, so while we will discuss Run II accelerator performance in the form of a summary from the February review, we will concentrate more on the rest of the program. We ask that you and your staff address the following topics:

- The findings of February Run II Luminosity Review and the lab's reaction to it, as well as the status of the Collider Detector at Fermilab (CDF) and D-Zero experiments;
- The status of the neutrino program including operation of MiniBooNE, construction of NuMI/MINOS, and the ability of the proton source to support these efforts;
- The status of lead/host laboratory activities for the U.S. Large Hadron Collider (LHC) Accelerator Project, the Compact Muon Solenoid (CMS) Project, and the U.S. LHC Research Program;
- The status of other significant elements of the Fermilab program, including theory and non-accelerator experiments;
- The progress of research and development (R&D) and planning for BTeV;
- The status of long range R&D programs and the results of the long range planning activities that the lab has been carrying out;
- The relative priority of the elements of the Fermilab program and the funding requirements associated with these elements, and
- The lab's ES&H performance.

The review serves as the DOE's primary peer review of the laboratory's program. We plan to ask the consultants to provide us with distinct evaluations of last year's work, immediate goals for next year as well as for the long-term future. The questions they will be asked are:

**What is your evaluation of the lab's program for the last year?**

Consultants will be asked to evaluate how well the lab executed its program in the last year. This will be taken in the context of what the program is, such as: Are running experiments producing physics results? Are commissioning experiments making progress to routine data taking? Are facilities performing efficiently and serving their users well? Is construction proceeding on schedule and on budget?



**What is your evaluation of the lab's planned program for the coming year?**

Within the context of the lab's already approved program, are the goals set for the next year scientifically interesting and worthwhile to pursue? Are they practical and achievable?

**What is your evaluation of the long-term plan that the lab has presented?**

Consultants will be asked to determine whether the lab is pursuing a sensible strategy of developing new initiatives that maximizes future scientific output and address questions such as: Is the procedure for selecting new initiatives sensible? Is the research and development on new initiatives well managed?

In order for the consultants to do these evaluations, we ask that your speakers clearly delineate what work was accomplished in the last year, which work is planned for the next year, and what plans are being made for the long-range future. It may not be appropriate for all speakers to address all questions.

As we have always done, we will invite the consultants to provide immediate feedback to the lab, but we also request confidential letters from them that will be used for our ultimate evaluation.

Mike Procaro will chair the review for DOE, and will serve as our point of contact on aspects of the review. In a recent survey of our consultants, they have expressed appreciation when a lab has provided advance materials for a review. I hope that you will be able to do so this year. We look forward to this important review.

Sincerely,



Robin Staffin  
Associate Director  
Office of High Energy Physics

Enclosure

cc: Jane Monhart, Fermi Group  
Aesook Byon-Wagner, SC-20  
Phil Debenham, SC-20