May 20, 2004

Professor Richard D. Hazeltine, Chair
Fusion Energy Sciences Advisory Committee
Institute for Fusion Studies, RLM 11.218
University of Texas at Austin
1 University Station, C 1500
Austin, TX 78712-0262

Dear Professor Hazeltine:

I would like to express my appreciation to FESAC for successfully completing the request made for a committee of visitors (COV) to review the Office of Fusion Energy Science’s procedures for reviewing and funding work in the theory and computational program. A special thanks goes to the COV Panel, chaired by Dr. Bill Nevins (LLNL), for a thorough examination of the program and for the excellent report that clearly states the panel's findings and recommendations.

I consider the ongoing COV process to be an important way for me to insure that the Office of Fusion Energy Sciences review and award process is both sensible and fair and results in a balanced portfolio of excellent science. This first effort went very well, from my perspective, and I believe our future reviews will benefit from the COV Panel’s recommendations.

I have attached a detailed response to your report.

Sincerely,

(signed)

N. Anne Davies
Associate Director
for Fusion Energy Sciences
Office of Science

Enclosure

Recommendation: We recommend adoption of a “results-oriented” scoring system in their guidelines to referees, a greater use of review panels, and a standard format for proposals.

OFES Response: OFES plans to change the scoring system in future solicitations and will require that researchers use a standard format in preparing proposals. It is the experience of the theory team that, generally, the written reviews give them clear guidance on the scientific merit of the proposals. So we will continue to use them as the primary way of determining scientific quality. The OFES plans to continue to use review panels to resolve differences between closely rated proposals from related topical areas.

Recommendation: We recommend that the “folders” documenting funding decisions contain all the input from all of the reviewers, that OFES document their rationale for funding decisions which are at variance with the recommendation of the peer reviewers, and that OFES provide a Summary Sheet within each folder.

OFES Response: OFES plans to add further documentation to the folders especially to explain the rationale for the decisions.

Recommendation: We recommend that the OFES communicate a clear and consistent policy on the level at which successful proposals are funded to both PI’s and reviewers and document their rationale for the funding level of successful proposals.

OFES Response: OFES will document the rationale for the funding level of funded proposals. Efforts will also be made to provide clearer guidance as to the levels of funding that are potentially available.

Recommendation: We recommend that larger theory groups include an additional review criterion including clear evidence of collaborative work and the extent to which the group addresses problems requiring a team effort and that the threshold (currently 6 FTE’s) for holding an on-site panel review of theory groups be reduced.

OFES Response: We currently have additional criteria that are applied to large theory groups. For practical reasons we will continue to use the threshold of about 6 FTE’s for holding an on-site panel review, but consideration will be given to reducing the threshold number in instances where that appears to be appropriate.

Recommendations: We recommend that the OFES track the success rate for proposals by new investigators and that OFES consider ways that increase the success rate for proposals from new investigators.
**OFES Response:** In the future we will track the success rate for new investigators. The OFES maintains a very successful young investigator program that encourages the placement and support of young new faculty at Universities and Colleges. We expect to continue supporting the Junior Faculty Development Program.

**Recommendation:** We recommend that experimentalists be invited to participate in the peer review process for theory grants and that reviewer evaluation criteria include efforts to validate theoretical models.

**OFES Response:** OFES has consistently used experimentalists on the onsite reviews we have conducted of the large theory groups. We will also attempt to include experimentalists for panel reviews of the theory program when we use them. In future solicitations we will add a question for the reviewers to comment on whether the results of the proposed research will be appropriately validated against experimental results.