July 9, 2003

Professor Richard Hazeltine, Chair
Fusion Energy Sciences Advisory Committee
Institute for Fusion Studies
University of Texas at Austin
Austin, TX 78712

Dear Professor Hazeltine:

The Office of Fusion Energy Sciences has a long-standing interest in the education and training of scientists and engineers needed to satisfy its programmatic goals. Anecdotal information indicates that the age distribution of the largest number of those currently trained and working in the fusion community is between 46 and 60. Other limited data show that the number of students graduating with a Ph.D. in fusion technology is dropping. And, although the number of Ph.D. degrees awarded in fusion science appears to be relatively stable, it is not clear that this trend will continue. With U.S. participation in ITER and plans to work toward having fusion power on the grid in the latter part of this century, there are questions as to whether the current education and training of scientists and engineers will provide the future leaders and researchers required for the U.S. fusion program. This letter provides a charge to the Fusion Energy Sciences Advisory Committee to address the issue of workforce development in the U.S. fusion program.

The key issues that should be addressed are the following:

- Where are we? Assess the current status of the fusion science, technology, and engineering workforce (e.g., age, skill mix, skill level).

- Where are we going? Determine the workforce that will be needed and when it will be needed in order to ensure that the U.S. is an effective partner in ITER and to enable the U.S. to successfully carry out the fusion program.

- How do we get there? Provide suggestions for ensuring a qualified, diversified, and sufficiently large workforce and a pipeline to maintain that workforce. The suggestions should be things that are reasonable and within the control of the Office of Science.

I would like FESAC to report its findings by January 31, 2004.

Sincerely,

/s/

Raymond L. Orbach
Director