

Department of Energy

Washington, DC 20585 February 22, 2002

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

Dear Professor Hazeltine:

In response to our earlier request, FESAC has provided me with clear advice on the scientific status of burning plasma physics. FESAC has recommended that the Department proceed apace toward decisions that would enable the U.S. fusion energy sciences community to address experimentally the important scientific issues involved in burning plasma physics.

In accordance with the FESAC recommendations, we are supporting the Fusion Summer Study later this year, with its focus on a detailed examination and assessment of the benefits to be achieved in the various possible approaches to an experimental program in this field.

The next step in this process is for FESAC to establish a high-level panel that would use the results of the Summer Study to recommend a strategy for burning plasma experiments. This panel's report should show how ITER would fit into the U.S. fusion program, if it were to go forward with our participation. The panel should also indicate how a FIRE or Ignitor type of device would fit in our program, if ITER were not to go forward. The panel's proposed strategy should provide flexibility for us to join ITER, should the Administration decide to enter negotiations, and if we are able to negotiate acceptable terms, and that allows us to decline to join if the terms are not acceptable to both the community and the Administration.

Given the importance of a timely decision process, I ask FESAC to have the panel complete its report as quickly as possible after the Summer Study in July. It is important that FESAC itself review the panel report and send me the full Committee's recommendation by the end of the summer, in September 2002.

In parallel, we will ask the National Research Council to prepare to review FESAC's recommendations and report to us with their assessment by the end of 2002.

This set of actions will provide the Department with the essential fusion community view, as well as an external review, on the critical question of how to pursue burning plasma physics.

Thank you in advance for your efforts to provide your report to us on a timely basis.

Sincerely,

James F. Decker Acting Director

Office of Science