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

## Dear Professor Hazeltine:

Funding U.S. participation in the ITER project will place considerable pressure on the Office of Science budget in future years. I am committed to a strong base fusion research program during ITER construction but want to be sure that the program is cost-effective. In particular, I do not believe that we should continue running existing facilities just because we can do more research on them but because we can do unique and important research on them. Accordingly, I would like you to assess characteristics of the three major U.S. toroidal magnetic fusion facilities in the context of the international fusion programs and determine what contributions they can make to fusion science and the fundamental vitality of the U.S. Fusion Program during the next five years.

I would like you to consider the following issues in your assessment:

- 1. What are the unique and complementary characteristics of each of the major U.S. fusion facilities?
- 2. How do the characteristics of each of the three U.S. fusion facilities make the U.S. toroidal research program unique as a whole in the international program?
- 3. How well do we cooperate with the international community in coordinating research on our major facilities and how have we exploited the special features of U.S. facilities in contributing to international fusion research, in general, and to the ITER design specifically?
- 4. How do these three facilities contribute to fusion science and the vitality of the U.S. Fusion program? What research opportunities would be lost by shutting down one of the major facilities?

I would like to have your assessment by the end of August.

Sincerely,

/s/

Raymond L. Orbach Director Office of Science

## Facilities Charge

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