## **Department of Energy**

Washington, DC 20585

November 14, 2006

| MEMORANDUM FOR | DANIEL R. LEHMAN, DIRECTOR<br>OFFICE OF PROJECT ASSESSMENT   |
|----------------|--|
| FROM:          | THOMAS J. VANEK, ACTING ASSOCIATE DIRECTOR<br>FOR FUSION ENERGY SCIENCES /signed/  |
| SUBJECT:       | Cost and Schedule Review of the National Compact<br>Stellarator Experiment (NCSX) at the Princeton Plasma<br>Physics Laboratory (PPPL) |

I would like to request that your office organize and lead an Office of Science (SC) review of the NCSX project.

The purpose of this review is to evaluate the project's latest cost and schedule performance. This information will help SC determine whether the NCSX Project is meeting the SC performance goals, and provide recommendations to address any issues you may discover.

The review is planned to be held on December 19-20, 2006, at PPPL. In carrying out its charge, the review committee should evaluate the following:

- 1. Are the project's current cost and schedule estimates credible and realistic for the remaining work?
- 2. Is there adequate cost and schedule contingency to address the risks inherent in the remaining work and is it being properly managed? Is the contingency supported by and consistent with an appropriate project-wide risk analysis? How much additional contingency would be required to achieve a high level of confidence in completing the project successfully?
- 3. Evaluate the NCSX Project Team's transition-to-operations plan. Have facility and infrastructure improvements been identified and planned to support first plasma at CD-4?
- 4. Is the project being managed (e.g. properly organized, adequately staffed) at this point and are future staffing plans adequate? Is there adequate support from PPPL and ORNL management?

5. Has the NCSX Project Team responded to the findings and recommendations from the May 10, 2006 Lehman Review? Does the Committee agree with the responses from the Team?

Barry Sullivan, the NCSX Program Manager, will work closely with you as necessary to plan and carry out this review. I would appreciate receiving your Committee's report within 30 days of the conclusion of the review. This review will play an important role in ensuring that the NCSX project can be completed within cost and on schedule.

Thank you for your help in this matter. If you have any questions or need additional information, please contact Barry at (301) 903-8438.

cc: J. Decker, SC-2 G. Nardella, SC-24.2 B. Sullivan, SC-24.2 J. Makiel, SC-PSO J. Faul, SC-PSO R. Goldston, PPPL