

Department of Energy

Washington, DC 20585

February 12, 2008

MEMORANDUM FOR

Daniel R. Lehman, Director Construction Management Support Division

FROM:

Raymond Fonck Associate Director for Fusion Energy Sciences

SUBJECT:

Cost and Schedule Review of Revised Baseline for the National Compact Stellarator Experiment (NCSX) at Princeton Plasma 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 proposed cost and schedule re-baseline, and the project's path forward.

The review is planned to be held on April 8-10th, 2008, at PPPL. In carrying out its charge, the review committee should evaluate the following:

- 1. Is the project's bottoms-up estimate to complete credible? Is there an adequately mature design available on complex activities, such as machine assembly, to support the estimate?
- 2. Is the contingency supported by and consistent with an appropriate project-wide risk analysis based on the use of a comprehensive Risk Registry? Is there adequate cost and schedule contingency in the proposed baseline to achieve a high level of confidence in completing the project successfully?
- 3. Has the project adequately incorporated developmental, fabrication, and component assembly experiences in the bottoms-up estimate to increase the success of final machine assembly and improve reliability during research operations?
- 4. Is the project being properly managed and organized at this point, and are future staffing plans at both PPPL and Oak Ridge National Laboratory (ORNL) adequate? What is the level of confidence that the NCSX project team can complete the project within the proposed baseline? Is there adequate support from PPPL and ORNL management?



- 5. Ensure that the Critical Decision 4 workscope definition, as defined in the July 2005 baseline, will be met.

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 15 days of the conclusion of the review. This review will play an important role in ensuring that the NCSX project can be completed within the proposed cost and schedule.

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

cc:

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