

Nov 14, 2006

R Goldston
Director, PPPL

SUBJECT: IMPROVING THE CONFIDENCE LEVEL OF MEETING BASELINE COST
REQUIREMENTS ON THE NATIONAL COMPACT STELLARATOR
EXPERIMENT (NCSX) PROJECT

In conjunction with our continuing concerns regarding the current level of contingency for the remaining work within the NCSX Project, the Princeton Site Office met with Dr. Orbach (DOE Under Secretary for Science) and OFES management to discuss the marginal confidence level that our office has regarding the NCSX Project's ability to successfully meet CD-4 requirements within the current cost baseline.

During our meeting, it was agreed that it is necessary to understand the Project's requirements to improve the current level of confidence. Therefore, we require that the NCSX project team develop a revised cost estimate that significantly minimizes future risk to the cost baseline and maximizes opportunity for successful project completion. Specifically, we require the following information:

1. Prepare an estimate-to-complete that reflects a high level of confidence in your ability to complete all remaining NCSX project work to achieve CD4 performance criteria as currently planned. Include a risk based contingency analysis that accurately accounts for all remaining high risk work activities. Consider risk mitigation techniques such as the use of developmental trials to evaluate materials and assembly procedures.
2. In developing this estimate, consider the following two options:
 - a. FY08 funding fixed at \$15.9M per current budget baseline. Any additional funds required are provided in FY09 and beyond.
 - b. Additional funding required in FY08 and FY09 to complete the project as currently scheduled (July, 2009).
3. Examine the workscope that has been removed from the project since CD2 and propose a prioritized list of the "critical few" elements that should be restored to the project at this time. Consider those that minimize future cost and complexity by installing now, as well as those most critical to near term research needs. Also consider additional component testing to minimize risk to future machine operations. Provide cost and schedule implications for each.

The Office of Fusion Energy Science will appropriately charge the upcoming SC Project Review on December 19-20 to examine your response. It is required that your response be available at least one week prior the SC Project Review.

If there are any questions or comments, please contact Jeffrey Makiel (X3721).

[Signature on file](#)

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NCSX Federal Project Director

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