



**Department of Energy**  
Washington, DC 20585

February 23, 2012

MEMORANDUM FOR: DANIEL R. LEHMAN  
DIRECTOR  
OFFICE OF PROJECT ASSESSMENT  
OFFICE OF SCIENCE

FROM: EDMUND J. SYNAKOWSKI *EJ Synakowski*  
ASSOCIATE DIRECTOR OF THE OFFICE OF SCIENCE  
FOR THE OFFICE OF FUSION ENERGY SCIENCES

SUBJECT: OFFICE OF SCIENCE PROJECT REVIEW FOR THE  
NATIONAL SPHERICAL TORUS EXPERIMENT (NSTX)  
UPGRADE PROJECT

I request that your office organize and lead an Office of Science (SC) project review of the NSTX Upgrade Project at PPPL on May 2-3, 2012. The purpose of this review will be to assess the current status of the Project's performance.

The NSTX Upgrade Project received Critical Decision (CD-0) approval in February 2009, CD-1 approval in April 2010, CD-2 approval in December 2010, and CD-3 approval in December 2011. The project is currently in the construction/execution phase, with significant field construction, fabrication and procurement activities underway.

In carrying out its charge, the review committee is requested to consider the following questions:

1. Construction Efforts: Are construction efforts being executed safely? Does the project have adequate resources and the appropriate skills mix to execute the project per the plan?
2. Baseline Cost and Schedule: Are the current project cost and schedule projections consistent with the approved baseline cost and schedule? Is the contingency remaining adequate for the risks that remain?
3. Management: Evaluate the management structure as to its adequacy to deliver the scope within budget and schedule. Are risks being actively managed? Has the project responded satisfactorily to the recommendations from the previous SC project review?

4. Earned Value Management (EVM): Has Princeton University/ PPPL implemented all required actions in the Corrective Action Plan that was developed following the EVM System certification review from October 2011?

Barry Sullivan is the program manager for this project and will serve as the contact person for this review. He can be reached at 301-903-8438. I would appreciate receiving your committee's report within 60 days of the review's conclusion.

cc:

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