United States Government

memorandum

DATE: October 5, 2004 REPLY TO ATTN OF: SC-10

SUBJECT: SEMI-ANNUAL DOE REVIEW OF THE SPALLATION NEUTRON SOURCE PROJECT

TO: Daniel R. Lehman, Director, SC-81

I would like to request that you organize and lead an Office of Science (SC) semi-annual status review of the Spallation Neutron Source (SNS) project in Oak Ridge, Tennessee during November 16-18, 2004. The purpose of this review is to evaluate progress in all aspects of the project: technical, cost, schedule, management, and ES&H.

The SNS project is now over 85 percent complete. Key activities include fabrication, installation, and commissioning of the Superconducting Linac, installation of Ring and Target Systems components, procurement and installation of Instrument Systems equipment, and completion of the Target and Central Laboratory and Office Buildings. Target Systems installation is on the project critical path. Based on concerns identified in the May 2004 DOE review, the committee should devote special attention to evaluating contingency management and identifying areas where improvements could be made to ensure that the project is completed on schedule and within the \$1, 411.7 million TPC.

In carrying out its charge, the review committee should respond to the following questions:

- 1. Are the project's cost, schedule, and technical baselines consistent with those in the FY 2005 Project Data Sheet and the current DOE-approved SNS Project Execution Plan (e.g., Total Project Cost of \$1,411.7 million, and CD-4 in June 2006), and is there adequate progress to meet the baseline objectives? Is the information in the DOE Project Assessment Reporting System consistent with physical progress?
- 2. Is the project being managed as needed for its proper execution? Are processes in place for an orderly handoff and closeout of the remaining partner laboratories? Do baseline plans provide for a smooth transition from a construction project into an operating user facility?
- 3. Is there adequate contingency (cost and schedule) 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?
- 4. Is adequate progress being made on installation and commissioning of the Linac, Ring, Target, and Instrument Systems? Are the installation and commissioning plans reasonable from the standpoint of previous experience, technical logic, costs, project-wide staffing plans, and transfer of responsibilities from the partner labs?

- 5. Are ES&H aspects being properly addressed for the completion of construction, continued equipment installation, and the new hazards introduced as a result of commissioning? Are Integrated Safety Management Principles being followed?
- 6. Has the project responded appropriately to recommendations from prior DOE/SC reviews?

Jeff Hoy, the SNS Program Manager, will serve as the Basic Energy Sciences point of contact for this review. I would appreciate receiving your committee's report within 60 days of the review's conclusion.

/s/

Patricia M. Dehmer Associate Director of Science for the Office of Basic Energy Sciences

cc:

- B. Weakley, SC-4
- L. Dever, SC-80
- S. Meador SC-81
- J. Hoy, SC-12
- G. Boyd, Oak Ridge Operations Office
- G. Malosh, Oak Ridge Operations Office
- L. Price, Oak Ridge Operations Office
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