

**Charge for the Director's CD-1 Review  
of the  
SLI Modernization FNAL-11-002 Utility Upgrade Project (SLI-UUP)  
August 6, 2010**

This charge is for the committee to conduct a Director's CD-1 Review of the SLI Modernization FNAL-11-002 Utility Upgrade Project (SLI-UUP) at Fermilab. The review team is to assess the project's efforts at meeting DOE O 413.3A requirements for CD-1 approval. Additionally, constructive comments on presentation content, format, and style are also requested to help the project prepare for the DOE CD-1 Independent Project Review.

Approval of CD-1 by DOE officials is based on a Conceptual Design documented in Conceptual Design Report (CDR) for the project. The project scope with defined options, preliminary cost, and schedule range are to be defined at this point in the project based on the conceptual design. Some additional documents that support the CD-1 determination are a Preliminary Project Execution Plan (PEP), a Preliminary Project Management Plan (PMP) and the Preliminary Hazard Analysis report.

A detailed independent technical design review was conducted by Thomas Jefferson National Accelerator Facility (TJNAF) by reviewing the project's Conceptual Design Report (CDR). The results of this design review are to be made available to this review team. This committee is to evaluate the results of that review to determine if the design review committee acceptably answered the question: Will these designs meet the requirements and specifications, and are the designs sound?

The cost, schedule and scope are usually based on an initial set of documentation such as the following: WBS – Work Breakdown Structure, WBS Dictionary, BOE – Basis of Estimate documentation, risk and contingency analyses, RLS – Resource Loaded Schedule, and time phased funding and cost profiles. The level of detail is to be commensurate with the conceptual design and the phase of the project. The committee is asked to review each of these items, for quality, completeness, and accuracy. The committee is asked to review and assess the quality of and comment on the additional formal project management documentation required for CD-1 approval. Additionally, confirm that the project is prepared for the DOE Independent Project Review (IPR) scheduled for August 24, 2010.

In performance of a general assessment of the project's preparations for CD-1, the committee should respond to the following questions:

1. Have performance requirements been appropriately and sufficiently defined for this stage of the project? Is the conceptual design sound and likely to meet the performance requirements?
2. Has a credible and sufficient alternatives analysis been performed that supports the proposed technical scope, cost, and schedule?
3. Are the cost and schedule estimates credible and realistic for this stage of the project? Is adequate contingency included?
4. Is the project being managed (i.e., properly organized, adequately staffed) as needed to begin the Preliminary Design and to support the project through construction to successful completion?

5. Are ES&H aspects being properly addressed given the project's current stage of development? Are Integrated Safety Management Principles being followed?
6. Is project documentation (e.g., Acquisition Strategy, Preliminary Project Execution Plan, Preliminary Hazard Analysis Report, Preliminary Project Management Plan, and Risk Management Plan) complete and ready for CD-1 approval?
7. Is the SLI Utility Upgrade Project appropriately prepared for the DOE Independent Project Review scheduled for August 24, 2010?

Finally, the committee should present findings, comments, and recommendations at a closeout meeting with SLI-UUP's and Fermilab's management. The closeout presentation document is considered the final review report.