

**Charge for the Fermilab Director's/Department of Energy's
Performance Management System Review
of the
NOvA Project
June 19-20, 2007**

This charge is for the Committee to conduct the Fermilab Director's/Department of Energy's Performance Management System Review of the proposed NOvA project at Fermilab. This review is to ensure that the NOvA Project will employ an Earned Value Management System that meets the objectives of ANSI/EIA-748-A-1998 32 Guidelines in accordance with DOE O 413.3A and DOE M 413.3-1. This review is to ensure that policies, procedures, systems and practices for controlling and reporting of project performance is in place no later than CD-2.

NOvA received Critical Decision CD-1 "Approved Alternative Selection & Cost Range" on May 2, 2007. A Fermilab Director's CD-2/3a Review, chaired by Ed Temple, is scheduled for June 4-6, 2007 and the Department of Energy CD-2/3a Review, chaired by Dan Lehman, is being scheduled for late summer or early fall of this year. DOE's guidance to NOvA is to not exceed a Total Project Cost (TPC) of \$260M. The purpose of the NOvA project is to fabricate the NOvA near and far detectors and to provide a detector hall for the far detector, as well as upgrade the Fermilab Recycler and Main Injector accelerators and the NuMI beamline. The ensemble will permit the experimenters to study neutrino oscillations, in particular, to search for the oscillation of muon-type neutrinos to electron-type neutrinos. If these oscillations can be observed then the experimenters may be able to determine the mass-ordering of the neutrinos and to observe Charge Parity (CP) violation in the neutrino sector. Determination of the mass-ordering is a unique contribution made possible by NOvA's very long baseline.

The focus of this review is to assess whether NOvA is compliant with the performance management system standard as defined in DOE M 413.3-1. Specifically, the committee is to address the following items during the review:

1. Is the system effectively documented?
2. Will the system produce timely and accurate reports in a readable and meaningful format?
3. Will the system satisfy Fermilab's and DOE's information needs?
4. Are the relevant personnel adequately knowledgeable about operation of the system and do they make use of the information?
5. Has the NOvA Project addressed how Earned Value will be handled for the work covered under the Cooperative Agreement (CA) and will it give project management the information needed to monitor progress?
6. Does the NOvA Project meet the objectives of the ANSI/EIA-748-A-1998 EVMS Guidelines under the:
 - a. Organization category?
 - b. Planning, Scheduling and Budgeting category?
 - c. Accounting Considerations category?
 - d. Analysis and Management Reports category?
 - e. Revisions and Data Maintenance category?
7. Does the proposed performance management system meet current DOE Earned Value Management System (EVMS) assessment and reporting requirements?

Finally, the committee should present findings, comments, and conclusions at a closeout meeting with NOvA's and Fermilab's management and provide a written report soon after the review.