January 19, 2005

MEMORANDUM FOR DANIEL R. LEHMAN
DIRECTOR
CONSTRUCTION MANAGEMENT SUPPORT
DIVISION

FROM: ROBIN STAFFIN
ASSOCIATE DIRECTOR
OFFICE OF HIGH ENERGY PHYSICS

SUBJECT: NuMI CD-4 Review

I am requesting your office to perform an on-site review of the Neutrinos at the Main Injector (NuMI) project at Fermi National Accelerator Laboratory (Fermilab) on February 17, 2005. The purpose of the review is to judge the project's readiness to proceed to Critical Decision 4 (CD-4), Approve Start of Operations. General prerequisites for CD-4 are given in DOE M 413.3-1, Section 7.9.1. The review committee is asked to assess the status of the project with respect to both these general prerequisites and the attached NuMI project acceptance checklist, which was developed by the Project Director. Please provide a completed report of your review to me no later than March 18, 2005.

As you know, Phil Debenham, of this office, will serve as Executive Secretary to the review committee, consistent with his role as the program manager for this project. It is my understanding that you are working with him and members of the Fermilab staff to prepare for the review.

I wish to thank you in advance for agreeing to carry out this review. I look forward to receiving your committee's report.

Attachment:
NuMI Project Acceptance Checklist

cc:
J. Livengood, Fermi Site Office
R. Lutha, Fermi Site Office
S. Webster, Fermi Site Office
A. Byon-Wagner, SC-20
P. Debenham, SC-20
M. Procario, SC-20
D. Sutter, SC-20
L. Dever, SC-80
S. Tkaczyk, SC-81

Neutrinos at the Main Injector (NuMI)
Project Assessment Checklist

DOE M 413.3-1 Prerequisites for CD-4

Verify Performance Criteria Have Been Met

Accomplished by documenting, in a NuMI Commissioning Report, achievement of the commissioning goals identified in the NuMI Project Execution Plan (PEP) (Table 3.1a). For each of the six parameters to be measured, the NuMI Commissioning Report states the commissioning goal, describes in detail how the parameter is measured to demonstrate achievement of the commissioning goal, and provides the result of the measurement. The document includes information on the calibration of key measurement devices and pictures and/or readout of the verifying measurements.

Issue a Final Safety Analysis Report

Met by approval of the Final Safety Analysis Report, as listed below.

Prepare Operating and Maintenance Procedures

NuMI operations and maintenance has been integrated into Fermilab wide procedures similar to all experimental operations. This has been documented in internal Fermilab memorandums.

Complete Acceptance Testing and Correct Deficiencies

Satisfied by achievement of the commissioning goals identified in the PEP, as documented in the NuMI Commissioning Report.

Complete Operations Readiness Review

Met by completion of the Accelerator Readiness Review, as listed below. This has been documented in Fermilab and Fermi Site Office memorandums.

Provide a Trained and Qualified Operations and Maintenance Staff

NuMI operations and maintenance performed by existing qualified staff. This has been documented in internal Fermilab memorandums.

Complete and Issue a Project Transition-to-Operations Report

Letter to the file documents that transition to operations has occurred. This letter report from the NuMI Project Manager to the Fermilab Director will document completion of the CD-4 commissioning goals, document Fermilab division ownership and acceptance of NuMI related facilities, and document the activities that remain to be completed for project closeout.

	FNAL Accepting Official	DOE Accepting Official	Date
Safety Documentation			
Safety Assessment Document	_____	_____	_____
Shielding Assessment	_____	_____	_____
Accelerator Readiness Review	_____	_____	_____

	FNAL Accepting Official	DOE Accepting Official	Date
Project Deliverables			
A neutrino beam line in an underground enclosures at Fermilab, with sufficient radiation shielding to ensure compliance with applicable state and federal regulations when the beam line is operational.	_____	_____	_____
A near detector for the MINOS experiment in an underground hall at Fermilab.	_____	_____	_____
Two shafts to provide access to the underground facility at Fermilab, and a service building associated with each shaft.	_____	_____	_____
A far MINOS detector comprising two supermodules, in an underground hall at the Soudan Underground Laboratory in Minnesota. The hall can accommodate either (a) three supermodules or (b) two supermodules and an emulsion detector.	_____	_____	_____