

## Memorandum

29-Sep-2015

**To:** Mike Lindgren, Chief Project Officer

**From:** Nigel Lockyer, Director

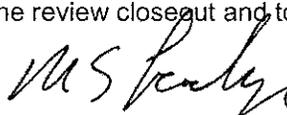
**Subject:** Director's Review of LBNF/DUNE

I request that your Office organize and conduct a Director's Review of the Long Baseline Neutrino Facility/Deep Underground Neutrino Experiment (LBNF/DUNE) project from October 27-29, 2015 at the Sanford Underground Research Facility (SURF) in Lead, South Dakota. This Director's Review will be in preparation for the DOE Office of Science CD-3A review scheduled for December 2-4, 2015.

The focus of this review is design, cost, schedule, management, ES&H, and other identified concerns relating to scope proposed as part of the CD-3A, which includes initial conventional facilities construction activities at SURF, the project's far site. Designs for these conventional facilities are at a preliminary level. The review committee should respond to the following questions:

1. Has the scope of work proposed as part of CD-3A been clearly defined? Are the designs related to the initial construction activities technically sound and sufficiently mature, are technical risks understood, and are requirements and interfaces with the cryostats, cryogenic systems, detectors, and logistic plans on track to support the planned start of initial construction activities? Is there an adequate plan to complete the final design in time to start these activities?
2. Is there a comprehensive plan to execute the initial construction activities?
3. Is the project being effectively managed, and is it properly organized and staffed to successfully execute the project plan as it relates to the initial construction activities?
4. Are the cost and schedule estimates for the initial construction activities credible, with adequate contingencies? Does the project have a plan to measure and report status of initial construction activities following a CD-3A decision? Are cost and schedule risks identified and managed appropriately?
5. Are the environmental, safety, and health aspects related to the initial construction activities being addressed appropriately?
6. Has the project responded appropriately to recommendations from past reviews, specifically in relation to the initial construction activities?
7. Is the project ready to proceed to the DOE CD-3A review?

The committee is asked to present a draft of their report at the review closeout and to issue the final report within one week of the review's conclusion.



Nigel Lockyer  
Director  
Fermi National Accelerator Laboratory

cc:  
G. Bock  
E. Gottschalk  
E. James  
J. Lykken