Department of Energy
Washington, DC 20585

JUL 21 2016

MEMORANDUM FOR: STEPHEN MEADOR
DIRECTOR
OFFICE OF PROJECT ASSESSMENT

FROM: JAMES SIEGRIST JLS
ASSOCIATE DIRECTOR FOR HIGH ENERGY PHYSICS
OFFICE OF SCIENCE

SUBJECT: REQUEST TO CONDUCT AN INDEPENDENT PROJECT REVIEW OF THE LBNF/DUNE PROJECT

I request that your Office organize and conduct an Office of Science Independent Project Review (IPR) of the Long Baseline Neutrino Facility/Deep Underground Neutrino Experiment (LBNF/DUNE) Project on August 11–12, 2016 at Fermilab. Your office has already reviewed the project's readiness for CD-3A (Approve Initial Far Site Construction) in December 2015. Since that time the Department has determined that the project funding profile presented at the CD-3A review cannot be supported and has provided guidance for a new funding profile. The overall scope proposed for CD-3A has not changed, but an impact on the project schedule is anticipated with the new funding profile. The purpose of this review is to evaluate the project's response to that profile and to confirm that it is still ready for CD-3A approval as well as evaluate progress on the CD-3A scope since that last review.

LBNF/DUNE is a major international project hosted by Fermilab consisting of two multinational efforts: (1) construction of LBNF by DOE with minority participation by international partners; and (2) fabrication of DUNE, with leadership by international partners and minority participation by DOE. DOE's participation in both efforts is being managed as a single line-item construction project under DOE Order 413.

LBNF will construct a high intensity beam-line and related facilities at Fermilab, and will excavate and fit out caverns, including components of the cryogenic system, for the DUNE detector at the Far Site. The Project's CD-3A scope includes pre-excavation tasks, excavation of drifts, utility cavern and two chambers, as well as building and site infrastructure associated with these excavations at the Far Site.

As part of your assessment, your committee should address the following items:

1. Has LBNF made satisfactory progress in preparing to execute the CD-3A scope? Are there adequate resources in place to support the work needed for CD-3A? Is the system to track performance associated with these activities in place and functioning?

2. Are the requirements, the design and the interfaces pertaining to the far site conventional facility (FSCF) CD-3A scope under effective configuration control and management?

3. Is the LBNF/DUNE Project appropriately and effectively managed, including risk and contingency?

4. Has the project responded appropriately to the recommendations of the 2015 DOE IPRs that are related to the CD-3A scope?

Dr. William Wisniewski will work with you, as necessary, to plan and carry out this review. We appreciate your assistance in this matter. As you know, these reviews play an important role in our program. I look forward to receiving your Committee's report within 60 days of the review.

cc:
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James Siegrist, SC-25
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