

Department of EnergyOffice of Science Washington, DC 20585

MEMORANDUM FOR KURT FISHER

DIRECTOR

OFFICE OF PROJECT ASSESSMENT

FROM: MICHAEL PROCARIO

DIRECTOR, FACILITIES DIVISION OFFICE OF HIGH ENERGY PHYSICS

SUBJECT: Request that the Office of Project Assessment conduct an

Independent Project Review of the status of the High Luminosity-

Large Hadron Collider Accelerator Upgrade Project

I request that your office conduct an Independent Project Review of the High Luminosity-Large Hadron Collider (HL-LHC) Accelerator Upgrade Project (AUP) at Fermi National Accelerator Laboratory (FNAL). The purpose of the review is to assess the project's status and progress since the last Department of Energy review, held on December 12-15, 2022, at FNAL. This status review will be held on July 23-25, 2024, at FNAL with Zoom video access available.

Your review committee is requested to perform a general assessment of the project's progress, status, the identification of potential issues and address the following questions:

- 1. Is the project making adequate technical progress to ensure that the completed project will perform as planned and the key performance parameters will be met?
- 2. Are the resource-loaded schedule and the estimate-to-complete up-to-date, accurate, and credible?
- 3. Does the project understand its dependencies on outside resources such as international collaborators, funding from other agencies, and participation by researchers with other funding sources?
- 4. Are the major procurements being managed successfully?
- 5. Is Environmental Safety and Health being handled appropriately?
- 6. Has the risk analysis been updated to reflect the real risks of completing the project and are the contingencies acceptable?
- 7. Has the project satisfactorily responded to the recommendations from previous reviews?
- 8. Are there any other significant issues that require management attention?

As Program Manager for the HL-LHC AUP, Dr. Athanasios Hatzikoutelis will serve as the contact person for the Office of High Energy Physics for 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.

cc: Harriet Kung, DDSP
Juston Fontaine, DDO
Gina Rameika, DDSP/HEP
Kurt Fisher, OPA
Athanasios Hatzikoutelis, DDSP/HEP
Chih-Ming (Jerry) Kao, FNAL
Giorgio Apollinari, FNAL
Marc L Kaducak, FNAL