

Matthew Quinn
Senior Radiation Safety Officer

ES&H Division
P.O. Box 500, MS 371
Kirk Road and Pine Street
Batavia, Illinois 60510-5011
USA
Office: 630.840.5175
mquinn@fnal.gov

Date: March 1, 2024
To: Alexander Valishev, Head – AD
From: Matthew Quinn, Senior Radiation Safety Officer
Re: Approval of Linac Maximum Credible Incident Document

Message:

I have reviewed the document *Linac MCI Justification*, version 1.1 dated February 27, 2024. This analysis details the maximum credible incident for the Linac of $2.58E18$ protons in one hour and the required credited controls to ensure doses are kept below 5000 mrem inside of buildings, 500 mrem outside of buildings, or 100 mrem in areas where the public is invited. A combination of passive shielding and active interlocked detectors are required to meet these dose limits. I concur that the analysis is satisfactory in terms of methodology, completeness, and compliance with the Fermilab Accelerator Safety Envelope dose requirements, and thus approve of this MCI analysis and planned operations within its scope.

Cc:
M. Clay
M. Convery
J. Fulgham
J. Malo
L. Prost
W. Schmitt
M. Schoell
J. Stanton