



ACCELERATOR & FUSION RESEARCH DIVISION

October 10, 2000

Dr. S. Peter Rosen, Associate Director
Office of High Energy and Nuclear Physics
U.S. Department of Energy, ER-209TN
19901 Germantown Road
Germantown, MD 20874

Dear Dr. Rosen: *Peter,*

We are writing this letter to ask for your help in restoring the FY01 budget for the Neutrino Factory and Muon Collider Collaboration (MC) to its original (constant-dollar) level in the President's Budget, namely \$4.685M. Our present guidance is that—despite the expected small increase in HEP funding for FY01—the MC funding will be reduced to \$3.18M, a 32% cut.

At this level of funding, the impact on the MC program will be severe. R&D work necessary to determine the feasibility of a Neutrino Factory, such as the target work at Brookhaven National Laboratory, and the cooling work at Fermilab and Lawrence Berkeley National Laboratory, will be greatly slowed down. Significant resources, such as the newly completed RF test area in Lab G at Fermilab and the almost completed A3 beam line at BNL would be highly underutilized. It would be impossible for the MC to keep on the schedule presented to the Gilman White Paper Writing Group in July of this year, namely, to start a ZDR in three years and a CDR in five years. Furthermore, there is the very negative psychological impact, both upon the active members of the Collaboration and upon the HEP community at large, that results from such a severe funding cut. Indeed, such a reduction comes at the very time we are attempting to secure significant funds from NSF to augment the MC R&D program. A clear lack of enthusiasm from DOE to support muon-related R&D is unlikely to be taken by the NSF as a sign of encouragement to invest in this program.

We believe that both the Neutrino Factory and the NLC offer significant possibilities for future HEP facilities. The austere budget for muon-related work, and the clear message to the HEP community that the neutrino factory is being viewed unfavorably by the DOE, will make it difficult to have our efforts taken seriously at Snowmass, with the inevitable result that HEP will "have all its eggs in one basket." We feel strongly that the Neutrino Factory and the NLC R&D efforts should be funded so that both can be ready when the country is ready to move on them. The present reduction will not, in our opinion, make that possible for the Neutrino Factory.

Sincerely,

Andrew M. Sessler
MC Spokesperson

Michael S. Zisman
MC Project Manager

c: Dr. John O'Fallon (DOE-HEP)
Dr. Mark Wilson (DOE-HEP)

Dr. Stephen Holmes (MCOG)
Dr. Thomas Kirk (MCOG)
Dr. Piermaria Oddone (MCOG)

Dr. Robert Palmer (MC Associate Spokesperson)
Dr. Alvin Tollestrup (MC Associate Spokesperson)