Editorial note: Since this letter was written, Professor Einstein has agreed to serve on the proposal as a co-PI.



DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING MASSACHUSETTS INSTITUTE OF TECHNOLOGY CAMBRIDGE, MASSACHUSETTS 02139-4307 Room 1-342

Telephone (617) 253-3598 Fax: (617) 253-6044 Email: einstein@mit.edu

February 24, 2005

Professor Matthew Mauldon Virginia Tech – Civil and Environmental Engineering 200 Patton Hall, Mail Code 0105 Blacksburg, VA 24061

Dear Matthew:

As you requested, I am writing you to confirm my strong interest in collaborating with the VT-team in the Kimballton-DUSEL project and specifically in working with you in the upcoming S-2 Phase. My reasons for being interested are threefold:

Rock Mechanics and Engineering. This is the scientific/technologic aspect of my interest. Controlled excavation and access to three-dimensional exposure of rock will make it possible to do advanced research on fracture characterization and flow through fractured rock. More technologically oriented are the possible evaluation of different excavation procedures and, most importantly, the performance of supported and unsupported underground openings. All these are, by the way, not questions which only interest me but most engineering researchers and practitioners working in rock and underground construction.

There is a complex and intriguing risk assessment and management component in this project. It will provide a unique opportunity to systematically assess where uncertainties in planning, construction and operation (including experimentation) may occur and to structure the managerial procedures accordingly. This is along the lines of what I have been doing in other big underground projects, although they were not as complex regarding the operation. What is particularly interesting is the fact that this is not purely application oriented but some good research on risk analysis/management procedures can be conducted in this context.

As an educator, it is particularly intriguing to have the opportunity of such a unique laboratory and collaboration with educators in different technical and scientific fields.

So to summarize, I am very glad that you contacted me and that I was able to work on the S-2 proposal. I am really looking forward to the DUSEL implementation at Kimballton.

Best regards,

Herbert H. Einstein Professor of Civil and Environmental Engineering