

January 29, 1991

50-199

Mr. Theodore Michaels, Project Manager
Standardization & Non-Power Project Directorate
Division of Reactor Projects III, IV, V and Special Projects
Office of Nuclear Reactor Regulations
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Revision To Attachment To Order Modifying Facility Operating
License No. R-94 To Convert From High To Low Enriched Uranium

Dear Mr. Michaels:

Your letter of March 12, 1990 forwarded an order modifying Facility Operating License No. R-94 (amendment No. 8) for the Manhattan College Zero Power (MCZPR) to require that the MCZPR convert to low-enriched uranium (LEU) fuel. Paragraph A, "License Conditions Revised and Added by this Order", No. 2.B. (2) permitted Manhattan College "to receive, possess and use up to 3.8 kg. of contained uranium 235 at enrichments equal to or less than 20%---". The 3.8 kgs. was based upon a fuel loading of 15 full fuel elements containing 235 gms. each of U235, 1 spare fuel element containing 235 gms. U235 and a partial fuel element containing 27.4 gms. U235 in one cylinder with the remaining 5 cylinders being dummy cylinders. This gives a total of 3787.4 gms. U235, which results in the 3.8 kg. designation in the attachment to the order.

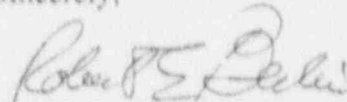
The DOE, however, has provided a partial fuel element with 3 cylinders containing fuel for a total of 129.5 gms. of U235 instead of the originally anticipated 27.4 gms. The additional 102.1 gms U235 brings the total to 3889.5 gms U235 in the 16 full and 1 partial fuel element exceeding the 3.8 kg. authorized.

In view of this limitation, the DOE has shipped us 15 full fuel elements and the partial fuel element to keep within the 3.8 kg. limit but permit us to load the core. The fuel arrived on January 25, 1991. The spare fuel element is being held at Babcock & Wilcox pending their receipt of a copy of a license amendment increasing the amount of U235 Manhattan College can possess and use.

It is therefore requested that an amendment be issued revising Paragraph A, No. 2.B.(2) line 3 to the "Attachment to order Modifying Facility Operating License No. R-94" changing "3.8 kg.-----" to "3.9 kg.----". This will permit us to receive the spare fuel element.

Please let me know if any additional information is required.

Sincerely,



Robert E. Berlin
Reactor Administrator

cc: Dr. W. Duggan
Dr. V. Antonetti
Dr. J. Lestingi