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January 5, 1988

U.S. Nuclear Regulatory Commission
 Document Control Desk
 Washington, D.C. 20555

Subject: Amendment (Addition) to UVAR TS 3.6

Gentlemen,

On July 2, 1987 a modification to Amendment 8 of Facility License No. R-66, Docket 50-62 (for the University of Virginia Reactor or "UVAR") was requested by us. (Amendment No. 8 was issued on August 4, 1971. It authorizes the possession, storage and use in the UVAR reactor pool of 70,000 Curies of cobalt-60, in the form of rods.) This request is now vacated, in view of the NRC determination that it is more proper for the experimental use of Co-60 to be addressed in UVAR Technical Specification 3.6 entitled "Limitations to Experiments". Accordingly, the Reactor Safety Committee approved amendment is enclosed for your review and approval.

Yours sincerely,

Robert U. Mulder, Director
 U. of Virginia Reactor Facility

Sworn to and subscribed before me this 6th

day of Jan., 1988

Witness my hand and official seal.

Delores E. Van Notary Public

My Commission Expires 9/17/89.

cc: USNRC Region II Administrator, Atlanta, Georgia
 Project Manager Mr. Al Adams, USNRC, Washington D.C.

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PROPOSED ADDITION TO UVAR TECHNICAL SPECIFICATION 3.6

To clarify the conditions under which Co-60 rods may be used in the UVAR reactor pool, the following paragraph shall be added to UVAR Technical Specification 3.6 on "Limitations to Experiments", following NRC approval:

- "(11) The Co-60 rods possessed under the UVAR Operating License shall be used and stored in the UVAR pool at distances greater than 5 feet from the operating UVAR reactor. Irradiation facilities utilizing the Co-60 rods shall be designed to prevent physical damage to the Co-60 rods. UVAR pool water samples, taken for identification of possible fission and activation product concentrations by gamma spectroscopy, shall also be monitored for the presence of Co-60 to assure that substantial leakage from the Co-60 rods to reactor pool water does not occur. The NRC is to be notified upon verification of major damage to the Co-60 rods, resulting in Co-60 concentrations in reactor pool water in excess of federal regulatory limits for restricted areas. "

BASIS

Distance from UVAR Reactor

The Co-60 rods are to be kept a safe distance away from the UVAR reactor when it is operated, to avoid neutron activation and possible failure of the rod cladding, which may result in leakage of Co-60 to the reactor pool water.

Pool Water Sampling Frequency

The reactor pool water sampling frequency adopted to monitor fission products is also adequate for monitoring Co-60 leakage. Leakage of Co-60 from the Co-60 rods is no worse than fission product leakage from reactor fuel elements.

NRC Notification

Title 10 of the Federal Code of Regulations specifies the maximum permissible radioisotope concentrations in water for spills in restricted areas (10 CFR 20, Appendix B, Table 1), and the reporting requirements for instances where these limits are exceeded (10 CFR 20.403).