Docket No. 50-433

Dr. A. E. Profio
Nuclear Reactor Director
Department of Chemical and
Nuclear Engineering
University of California, Santa Barbara
Santa Barbara, California 93106

Dear Dr. Profio:

SUBJECT: NRC REVIEW OF UNIVERSITY OF CALIFORNIA, SANTA BARBARA, L-77
RESEARCH REACTOR DECOMMISSIONING PLAN

We are continuing our review of the Decommissioning Plan that has been submitted in support of your application for authorization to decommission your L-77 research reactor. During our review of the additional information you had submitted in support of your Decommissioning Plan, several questions have arisen for which we require additional information and clarification. These questions were discussed with you and your contractor, Rocketdyne, during a teleconference on January 13, 1986. You are requested to document responses to the enclosed questions within 30 days of the date of this letter. Following receipt of the information we will complete our evaluation of your plans for decommissioning. If you have questions regarding this review, contact Harold Bernard, Project Manager, at (301) 492-8529.

Sincerely,

Original signed by Herbert N. Berkow, Director Standardization and Special Projects Directorate Division of PWR Licensing-B

Enclosure: As stated

cc: See next page

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UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

February 20, 1986

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Sincerely,

Herbert N. Berkow, Director Standardization and Special Projects Directorate

Division of PWR Licensing-B

Enclosure: As stated

cc: See next page

University of California at Santa Barbara

cc: California Department of Health ATTN: Chief, Environmental Radiation Control Unit Radiologic Health Section 714 P Street, Room 498 Sacramento, California 95814

> U. S. Environmental Protection Agency Region IX Office ATTN: EIS COORDINATOR 215 Freemont Street San Francisco, California 94111

> Chief, Energy Systems
> Analyses Branch (AW-459)
> Office of Radiation Programs
> U. S. Environmental Protection Agency
> Room 645, East Tower
> 401 M Street, S.W.
> Washington, D. C. 20460

Mayor City of Santa Barbara 1500 Warburton Avenue Santa Barbara, California 95050

Director
Energy Facilities Siting Division
Energy Resources Conservation
and Development Commission
1516 - 9th Sireei
Sacramento, California 95814

Attorney General 555 Capitol Mall Sacramento, California 95814

Follow Up Questions To UCSB

Licensee's Response to Original Question #

3

In your response to our question you state in part that "... the carbon steel outer shield tank is not appreciably activated", and you imply that this tank will be disposed of as nonradioactive material. The regulations do not identify levels of licensed material that are below regulatory concern. All licensed material must be disposed in accordance with the regulations in 10 CFR 20. In your response indicate your commitment to dispose of any radioactive licensed material by means provided in 10 CFR 20.

9

In your response to this question it is implied that you may have to store licensed material, intended for disposal, after you have requested that your license be terminated. The regulations do not permit the possession of licensable material without a license, even if packaged for disposal and only stored prior to being shipped for disposal. Describe your provisions for disposition of all licensed material prior to requesting license termination. You will not be permitted to store radioactive reactor components under the General License for UCSB from the State of California.

10

Your response to this question does not include locations for the surveys on the walls, ceiling, drains, trenches or other locations. Describe more fully the locations of your sampling survey.

12 and Region V #5

As part of your final report to the NRC you will be required to certify that the release criteria of 5 microrem per hour above background at one meter from any surface has been met. The indicated Micro-R-Meter is not a true dose equivalent ratemeter and does not provide a direct measurement. Describe the means (e.g. calculations, etc.) that will be used to conclude that the above criterion has been met.

Region V #1

Describe your method for analyzing the shielding water in more detail. Your response does not sufficiently describe your analytical procedure to determine its acceptability.

Region V #3

It is not clear from your response that UCSB management has reviewed and identified the applicable portions of the Rocketdyne radiation protection program to assure that the Rocketdyne program complies with the conditions and commitments of the UCSB license. Please clarify your response.