



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

RELATED CORRESPONDENCE

March 11, 1985

DOCKETED
USNRC

John H. Frye, III, Chairman
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

85 MAR 12 P4:29
Dr. Emmeth A. Luebke
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

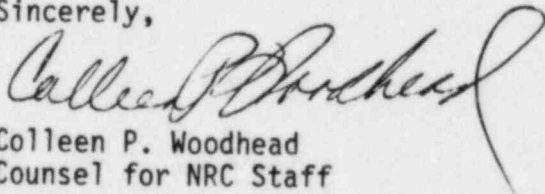
Glenn O. Bright
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

In the Matter of
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
(UCLA Research Reactor)
Docket No. 50-142 02
(Proposed Dismantlement)
(Proposed Renewal of Facility License)

Dear Administrative Judges:

I am forwarding to you for your information copies of recent NRC-UCLA correspondence concerning UCLA's dismantlement plans as well as UCLA's request for return of all NRC copies of the UCLA security plan. The Staff will continue to work with UCLA to assure that sufficient information is provided about the dismantlement plan, but will not authorize any dismantlement in view of the pending petition to intervene in the dismantlement proceeding.

Sincerely,


Colleen P. Woodhead
Counsel for NRC Staff

Enclosure: As stated

cc w/ encl.: Mr. Cormier
Mr. Hirsch

cc w/o encl.: Rest of service list

8503140133 850311
PDR ADDCK 05000142
G PDR

DS07



COMMUNITY SAFETY DEPARTMENT
OFFICE OF RESEARCH & OCCUPATIONAL SAFETY
LOS ANGELES, CALIFORNIA 90024

16 January 1985

Mr. Harold Denton, Director
Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

ATTN: SSPB

Docket No. 50-142
License No. R-71

Dear Mr. Denton:

The subject license has been amended to a "possession only" license in anticipation of decommissioning the reactor. UCLA has not yet elected a decommissioning mode, and is not likely to do so without better knowledge of the sources and extent of the residual radioactive material in the reactor core and biological shield.

In order to conduct a suitable radiation survey of residual radiation, it will be necessary to disassemble the reactor core. I note that UCLA has so disassembled and reassembled the reactor on several previous occasions for the purpose of maintenance. The assembly of an Argonaut core involves the careful stacking of many pieces of graphite and is far more demanding than disassembly in terms of worker hours and radiation exposure.

The UCLA plan does not include reassembly; the disassembly is well within the realm of UCLA experience, and unless your office advises us to the contrary, we will assume that we may proceed without authorization to conduct the intended radiation survey.

Sincerely,

A handwritten signature in cursive script that reads "Walter F. Wegst".

Walter F. Wegst, Director,
Research & Occupational Safety

cc: B. Cormier



COMMUNITY SAFETY DEPARTMENT
OFFICE OF RESEARCH & OCCUPATIONAL SAFETY
LOS ANGELES, CALIFORNIA 90094

16 January 1985

Mr. Harold Denton, Director
Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

ATTN: SSPB

Docket No. 50-142
License No. R-71

Dear Mr. Denton:

In regard to the subject license at 2.B.(2), UCLA no longer possesses the contained uranium 235 described in that paragraph. Further, because the 32 grams of plutonium as a plutonium-beryllium neutron source are exempted from the requirements of Part 73 at 10 CFR 73.67 (b)(1)(i), UCLA is no longer required to have an approved plan for the protection of special nuclear material pursuant to 10 CFR Part 73.

However, we want to maintain the security systems (i.e. locks, detection devices, alarms) intact and viable: to protect property; control access during the reactor dismantling operations; and also for potential use to provide security for whatever future use we may have for that building. The security systems and plan are UCLA's property and we wish to restrict the dissemination of information about what hardware is installed and how it works. Therefore, we request that all copies of our NRC-approved security plan and amendments thereto, be: (a) returned to UCLA; or (b) treated as UCLA proprietary information and kept from public disclosure.

Sincerely,

A handwritten signature in cursive script that reads "Walter F. Wegst".

Walter F. Wegst, Director
Office of Research and
Occupational Safety

UNIVERSITY OF CALIFORNIA, LOS ANGELES

UCLA

BERKELEY · DAVIS · IRVINE · LOS ANGELES · RIVERSIDE · SAN DIEGO · SAN FRANCISCO



SANTA BARBARA · SANTA CRUZ

COMMUNITY SAFETY DEPARTMENT
OFFICE OF RESEARCH & OCCUPATIONAL SAFETY
LOS ANGELES, CALIFORNIA 90024

16 January 1985

Mr. Harold Denton, Director
Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Docket No. 50-142
License No. R-71

ATTN: SSPB

Dear Mr. Denton:

This will advise you that UCLA has returned all of the reactor fuel described in license R-71 (as amended) to the Department of Energy at the Idaho Chemical Processing Plant (ICPP). Receipt of the shipments has been acknowledged and closes out the inventory of reactor fuel held by UCLA.

Sincerely,

A handwritten signature in cursive script that reads "Walter F. Wegst".

Walter F. Wegst, Director,
Office of Research & Occupational Safety



COMMUNITY SAFETY DEPARTMENT
OFFICE OF RESEARCH & OCCUPATIONAL SAFETY
LOS ANGELES, CALIFORNIA 90024

February 15, 1985

Mr. Harold Denton, Director
Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn: SSPB

Docket No. 50-142
License No. R-71

Dear Mr. Denton:

This will follow up on my letter of 16 January, 1985, regarding disassembly of the UCLA reactor. The attachment herewith responds to a verbal request from the NRC technical staff for more information concerning UCLA plans. The attachment derives in part from a "Request for Proposal" that UCLA is preparing, to solicit bids for the work there described.

As described in the attachment, the Work Plan is to be a contractors task and UCLA does not intend to submit a dismantlement plan until contractor proposals have been received and reviewed.

In the interim, the reactor staff is proceeding with the selective sampling of reactor constituents to gain a better perspective of realistic decommissioning alternatives. We believe it is in the best interests of the University and the public to utilize the collective knowledge of the present staff to the fullest extent while that staff still exists.

At the present time, approximately 0.6 cubic feet (420 lbs.) of lead and 12 cubic feet (1200 lbs.) of graphite have been removed from the central region of the core. After sampling these materials to determine the principle radio-nuclides present, some of these materials will be packaged for transport and burial. The information gained in this program will contribute materially to our understanding of decommissioning procedures. We hope you will concur.

Sincerely,

A handwritten signature in cursive script that reads "Walter F. Wegst".

Walter F. Wegst
Director, Office of
Research & Occupational Safety

WFW:si

cc: Director, U.S. NRC Region V

PREPARATIONS FOR DECOMMISSIONING

THE UCLA REACTOR

1.0 OBJECTIVE:

To evaluate decommissioning alternatives for the UCLA argonaut research reactor located on the UCLA campus in the School of Engineering and Applied Science.

2.0 THE WORK PLAN:

2.1 Conduct a radiation survey of the core constituents, the concrete biological shield, and such other facilities as must be assayed to define the decommissioning requirements and costs. The survey is to be in sufficient detail to provide:

- a. A shipper's description of radioactive materials.
- b. A prognosis of the future radioactivity of major materials (principally graphite, lead, concrete and embedded components).
- c. Data for predicting man-rem doses for various decommissioning alternatives.

2.2 To accomplish the radiation survey, the reactor core is to be disassembled and sorted into major categories: Graphite, lead, other metals.

The metallic parts (non-lead) are to be surveyed only to the extent necessary to satisfy 2.1.a. Those materials are to be cut as necessary, packaged for transport and burial, and shipped to a burial site.

The removal of metallic parts is to include the protruding portions of partially embedded parts, but excludes the embedded portions of those parts.

The graphite and lead are to be palletized in such a way as to conveniently permit:

- a. Their packaging for transport and burial.
- b. Their restacking in the empty core space for shipment at a later date.

2.3 The concrete is to be sampled and assayed to the extent necessary to distinguish between radioactive material and exempt material, and to identify the principal nuclides responsible for the radioactivity.

- 2.4 The process pit is regarded as a potential decontamination site, and is to be cleared of extraneous equipment and piping. The heat exchanger, primary water piping, related flow meters and valves are to be removed. The holding tanks, primary water pumps, and sump pump are to be retained for use in holding, diluting, or otherwise purifying any contaminated water produced by dismantlement-decontamination work.
- 2.5 Based upon the results of the radiation survey and the volumes and masses of the principal constituents, cost estimates are to be prepared for both prompt and deferred decommissioning.
- 2.6 Deferred decommissioning is not yet defined in detail, but in general a viable plan would hinge upon certain key transitions such as the passage of a material into a "low specific activity" or "exempt" status. Radiation worker exposure and cost can be expected to decline with time.
- 3.0 PRESENT STATUS:
- 3.1 The reactor fuel has been removed from the site. The control blade drive shafts have been severed at the exterior surface of the biological shield and the external drive systems removed. All primary water and shield tank water have been drained and removed.
- 3.2 The reactor core has been uncovered and fifteen graphite stringers have been removed from the central region of the core. The stringers are to be sampled for Wigner energy and specific activity measurements.
- 3.3 Removal of the central graphite created a void 12 inches by 20 inches by five feet deep which extends from the core top to the concrete pedestal. The radiation field in the void has a fairly uniform value of one rem per hour.
- 3.4 The staff and others are assembling a Request for Proposal to solicit bids for the continuation toward decommissioning.
- 3.5 The reactor operating staff remains at nearly full level, a level which will not be sustained very much longer. Meanwhile, the staff is acquiring some of the information essential to an informed decision regarding decommissioning alternatives.
- 3.6 All concrete shielding remains on the site and could be readily restored to its usual geometry to create a SAFSTOR or ENTOMB mode of decommissioning.



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

February 21, 1985

Docket No. 50-142

Dr. Walter F. Wegst, Director
Office of Environmental Health and Safety
Center for Health Sciences
University of California, Los Angeles
Los Angeles, California 90024

Dear Dr. Wegst:

This is in reply to your January 16, 1985 letter informing us that you will be disassembling part of your reactor core in order to facilitate a radiation survey and the subsequent preparation of a dismantling and decommissioning plan.

This is to advise you that your letter did not include sufficient information to enable us to determine the extent of your disassembly or to evaluate your plan for doing so. Fundamentally, every amendment for dismantling, decontamination and termination requires a plan conforming to the guidance document ("Guidance and Discussion of Requirements for an Application to Terminate a Non-power Reactor Facility Operating License," September 15, 1984) previously sent to you. NRC staff then reviews the plan for safety and adherence to established guidance. We would expect to receive such a plan from UCLA before you proceed with disassembly.

The staff recognizes that each reactor may be unique, and that UCLA cannot define the ultimate dismantling procedure at this time. With these unknowns, UCLA should submit a plan to NRC in two or more stages. The initial plan should indicate the steps to be taken to reach a prescribed dismantling stage, the various future alternative dismantling options and/or the course(s) to be pursued in Stage 2 (the survey stage).

Stage 2 should provide UCLA with sufficient radiation contamination information to enable completion of the dismantling and decommissioning plan (Stage 3). The Stage 3 plan must also be submitted for our review.

In summary, we would accept an initial plan from UCLA that indicates a multi-phased approach for dismantling and decontamination. This initial plan and each subsequent phase should be submitted to NRC for review and approval.

Sincerely,

Cecil O. Thomas

Cecil O. Thomas, Chief
Standardization and Special
Projects Branch
Division of Licensing, NRR

cc: See next page

University of California
at Los Angeles

50-142

Mr. Neil C. Ostrander, Manager
Nuclear Engineering Laboratory
School of Engineering and
Applied Science
University of California
at Los Angeles
Los Angeles, California 90024

Committee To Bridge The Gap
1637 Butler Avenue #203
Los Angeles, California 90025

Mr. John Bay
Chickering & Gregory
3 Embarcadero Center
Suite 2300
San Francisco, California 94111

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

Attorney General
555 Capitol Mall
Sacramento, California 95814

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

Mr. James R. Heelan
Director, Society Services
American Nuclear Society
555 N. Kensington Avenue
La Grange Park, Illinois 60525

Roger Kohn, Esq.
P. O. Box 1186
Ben Lomond, California 95005

Mr. Daniel Hirsch
P. O. Box 1186
Ben Lomond, California 95005

Robert M. Meyers
City Attorney
Lynn Naliboff
Deputy City Attorney
1685 Main Street, Room 310
Santa Monica, California 90401

William H. Cormier, Esq.
Office of Administrative Vice
Chancellor
University of California
405 Hilgard Avenue
Los Angeles, California 90024

Roger L. Kohn
524 Eleventh Street
Manhattan Beach, CA 90266

Christine Helwick, Esq.
Glen R. Woods, Esq.
Office of General Counsel
590 University Hall
2200 University Avenue
Berkeley, California 94720

Roger Holt, Esq.
Office of City Attorney
200 North Main Street
City Hall East, Room 1700
Los Angeles, CA 90012

Ms. Sandy Hillier
California Coastal Commission
1540 Market Street
San Francisco, California 94102