

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of
THE REGENTS OF THE
UNIVERSITY OF CALIFORNIA
(UCLA Research Reactor)

Docket No. 50-142
(Proposed Renewal of
Facility License No. R-71)

March 2, 1982

AFFIDAVIT OF WENDY K. SCHNELKER

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ss.

I, WENDY K. SCHNELKER, being duly sworn, depose and state
as follows:

1. At approximately 9:15 a.m. on January 26, 1982, I was walking from the Nuclear Energy Laboratory on the second floor of Boelter Hall at UCLA on my way to Kerckhoff Hall, a building to the north of Boelter Hall. I was walking along the second-floor walkway on the outside of the west face of Boelter Hall.

2. At that time I saw two men and a woman walking from the west towards Boelter Hall. They were walking along the alley or walkway that leads from Westwood Plaza to the first floor entrance of the reactor complex/Boelter Hall Building. They walked towards the Boelter entrance and then entered.

3. I recognized the woman accompanying the two men as Ms. Jessica Laverty. I recognized her because she was formerly Counsel to the NRC Staff in the UCLA reactor case, and I had met her in the summer of 1980 when she and other representatives of the NRC Staff were in Los Angeles regarding the UCLA reactor case. One of the two men was later identified as being Commissioner Thomas Roberts.

Executed this 2nd day of March 1982 at Los Angeles, California.

Wendy K. Schnelker
Wendy K. Schnelker

Sworn and subscribed to before me this 2nd day of March 1982.

Dorothy Thompson
Notary Public



EXHIBIT LIST

EXHIBIT

- A CONTENTIONS AS ADMITTED
- B NRC STAFF POSITION ON CONTENTIONS 9/16/80 FILED BY JESSICA LAVERTY WHEN SHE WAS COUNSEL FOR STAFF IN THE UCLA PROCEEDING
- C SEPTEMBER 25, 1980, PREHEARING CONFERENCE TRANSCRIPT, IDENTIFYING JESSICA LAVERTY AS "LEAD COUNSEL FOR NRC STAFF" IN THE UCLA PROCEEDING
- D STIPULATION AS TO CONTENTIONS DRAFTED AND EXECUTED BY JESSICA LAVERTY FOR STAFF, 12/01.80
- E NOTICE OF APPEARANCE OF COUNSEL FOR WILLIAM CORMIER, REPRESENTING APPLICANT, SEPTEMBER 21, 1981
- F APPLICATION FOR LICENSE RENEWAL FOR UCLA REACTOR, FEBRUARY 28, 1980, COVER SHEET AND NOTARIZED CERTIFICATE, IDENTIFYING R.R. O'NEILL AS APPLICANT'S RESPONSIBLE OFFICIAL
- G NEWSPAPER CLIPPING QUOTING R.R. O'NEILL, OTHERS, AS TO JANUARY 26 EVENTS

EXHIBIT A

INTERVENOR'S CONTENTIONS ADMITTED AS AT ISSUE
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD
Re: APPLICATION FOR RENEWAL OF OPERATING
LICENSE FOR UCLA RESEARCH REACTOR, PURSUANT
TO BOARD ORDER ISSUED MARCH 23, 1981.

- I. The application, together with its supporting appendices, is deficient in failing to meet the minimum standards for such applications. Specifically:
1. The Application reference to experimental vibration of the reactor is misleading.
 2. The application submitted by UCLA was not "original" in all respects as shown by
 - a. its submission of a 1980 Safety Analysis Report (SAR) which repeats virtually verbatim its 1960 Hazards Analysis, and
 - b. its submission of an environmental impact appraisal which repeats virtually verbatim the language of a 1974 AEC memorandum on "Environmental Considerations Regarding the Licensing of Research Reactors and Critical Facilities."
 3. The application contains the following material and inaccurate statements:
 - a. "The reactor and its supporting laboratories will be used for the education of senior undergraduate and graduate students in nuclear engineering and related sciences. In addition to formal courses and demonstrations, the reactor will be used to support research at the M.S. and Ph.D levels." page 5.
 - b. "No structural weaknesses (earthquake vulnerability) have ever been identified." page 7.
 - c. "No attempt has been made to alter the content and provisions of the technical specifications other than the four changes noted in the forward to the technical specifications." page V/1. This statement is inaccurate because

- (i) the excess reactivity limits have been changed from 2.3% Δ k/k to \$3.54;
 - (ii) the definition of 'annual' for the purpose of instrument calibration requirements has been changed from 12 months to 14 months;
 - (iii) the requirement to do heat balance instrumentation calibrations has been removed;
 - (iv) the requirement that ALARA be met has been removed; and
 - (v) the specification regarding exhaust stack height, flow rate out of the exhaust stack, and access restrictions to the roof area have been removed.
- d. "No deep wells have been drilled on the campus of UCLA or in the vicinity of the campus." page III/3-1.
 - e. "Accidents ranging from failure of experiments to the largest core damage and fission product release considered possible result in doses of only a small fraction of 10 CFR Part 100 guidelines and are considered negligible with respect to the environment." page II/3-1.
 - f. "There are no suitable or more economical alternatives which can accomplish both the educational and the research objectives of the facility." page II/5-1.
 - g. "SPERT and BORAX tests showed that plate type fuel elements survived step radioactivity insertions of \$3.54." page V/3-6.

II. The Applicant has applied for the wrong class of license. Applicant has applied for a Class 104 license despite the fact that in the past, more than fifty percent of reactor funding and more than fifty percent of the hours of reactor usage have been devoted to the sale of services, rather than research or education. Given this history, and without any indication that Applicant intends to change reactor usage, Applicant under 10 CFR § 50.21(b) and 10 CFR § 50.22 should have applied for a Class 103 license. Specifically:

Applicant should apply for a Class 103 license because

- a. Applicant's financial statements indicate that more than half of the reactor funding comes from sources other than the UCLA School of Engineering and Applied Sciences, and

- b. the application indicates more than half of the reactor operating time is spent on commercial, non-educational projects.

III. Applicant has failed to demonstrate adequate managerial and administrative controls in the application, as required by 10 CFR § 50.34(b)(6)(ii), and further, has demonstrated throughout its operating history grossly inadequate controls. These inadequacies make it impossible to find that Applicant's managerial and administrative controls are adequate to responsibly protect the public health and safety. Specifically:

1. Applicant failed to provide the information required in 10 CFR § 50.34(b)(6)(ii).
2. Applicant failed to get prior approval from the Reactor Use Committee or the Reactor Director for changes in reactor systems and for non-standard experiments.
3. Applicant failed to get prior Commission approval for facility changes.
4. The Lab Director and/or Assistant Director were absent for extensive periods of time and provided inadequate supervision.
5. Unlicensed visitors to the reactor facility were invited to operate the reactor controls in violation of 10 CFR §§ 50.54j, k, l; 55.2; 55.3a and b; 55.d and f; and 55.9a and b.
6. Applicant kept inadequate records and lost a maintenance log, and
7. Applicant failed to hold administrative meetings and conduct reviews required by the Technical Specifications.

IV. Applicant has been consistently cited for violations of NRC regulations as well as violations of the provisions of its own Technical Specifications. This consistent pattern of regulatory non-compliance and the lack of assurances that the pattern will not continue in the future indicates that the Applicant cannot adequately demonstrate that future operation of the facility will comply satisfactorily with the regulations to protect the public health and safety.

V. The amount of excess reactivity which is permitted by the Technical Specifications to be installed in this reactor is too great in that it does not provide a sufficient safety margin and thus could lead to a serious power excursion which could bring about melting of the fuel cladding and significant release of fission products, seriously endangering the public health and safety. Specifically:

1. The amount of excess reactivity permitted at this facility under its license should be limited to less than that needed for prompt criticality.
2. The reactor has lost several significant self-limiting features in that
 - a. the level of excess reactivity has been changed so that it is now higher than that needed for prompt criticality,
 - b. a deflector plate which prevented repeated excursions has been removed,
 - c. the assumption that there is a large negative temperature coefficient appears to be wrong in light of information regarding a positive graphite temperature coefficient, and
 - d. the reactor's power level has been increased from 10 Kw to 100 Kw.
3. The licensed amount of excess reactivity ($2.3\% \Delta k/k$) could cause melting of the fuel cladding according to the 1960 Hazards Analysis.
4. The reactor's void coefficient has changed since the initial calculations were done.
5. Through the conversion of $2.3\% \Delta k/k$ as the excess reactivity limitation in the current Technical Specifications to 3.54 in the proposed Technical Specifications and the use of a β different from that used in the Hazards Analysis, the Applicant may have changed the limitation from 2.3% to 2.62% , thus presenting the potential for a serious excursion and melting of the cladding.
6. The assumption that Borax I test results can be extrapolated to the UCLA reactor is questionable, particularly in the absence of error bars for the Borax I data.
8. The analysis of excess reactivity characteristics of this reactor submitted in the application fails to include a current review of the nuclear safety literature relating to the relationship between excess reactivity and destructive power excursions.
9. Applicant's Hazards Analysis regarding excess reactivity is based on unverified and unidentified assumptions which can be used merely to estimate a range of excess reactivity additions and their possible hazard and is thus inadequate to support present licensed limits. Additionally, Applicant has not provided error bars for its computations and analyses.
10. The reactor has a pneumatic "rabbit" system that allows rapid insertion of excess reactivity. This system did not exist when the reactor was built and has experienced frequent operating problems since installation.

11. The proposed licensed limit on combined experiments (\approx \$3.54) or the current licensed limit (\approx 2.3% k/k) could cause melting of the fuel cladding.
12. Removal of a beam tube could cause insertion of excess reactivity into the reactor because neutron absorption would be removed and reflection savings would be increased.
13. Applicant has violated excess reactivity limits suggesting it is impossible to prevent possible excursions.
14. Applicant failed to analyze the possibility of eutectic melting.

VI. Applicant has in the past and is at present emitting excessive radiation, violating radiation standards, and conducting inadequate monitoring. Applicant has failed to demonstrate in its application or in its recent performance any evidence that these conditions can reasonably be expected to improve in the future, in the absence of which demonstration, grant of an operating and SNM license cannot be made without undue threat to public health and safety. Specifically:

2. Several conditions which cause present emissions to be in excess of applicable standards have not been changed; therefore, emissions which are in excess of applicable standards can be expected in the future.
3. Applicant has not in the past nor in the present application been able to reasonably demonstrate that exposure in unrestricted areas is not in excess of applicable standards because it lacks an adequate radiation monitoring system.
4. Applicant has not complied in the past and presently does not comply with the radiation standards in 10 CFR §§ 20.1c, 20.106(b)(1) and (2), 20.106(c), and Part 20, Appendix B.
5. Applicant does not now, has not in the past, nor can it reasonably assure that it will in the future meet the requirements of section V.d of its current technical specifications which states that "[t]he release of radioactivity from the reactor facility shall be kept to as low a level as practicable."

VII. The reactor has in the past experienced a persistent pattern of numerous unscheduled shutdowns, abnormal occurrences, and accidents. These occurrences are so pervasive that they evince a pattern of unreliability which makes it impossible for Applicant to reasonably assure that the reactor can be operated in a manner which does not endanger the public health and safety.

VIII. The analysis of an accident and the calculations regarding the resultant radiation exposure to the public contained in the Applicant's Safety Analysis Report is based on unrealistic assumptions which tend to minimize the expected public exposure. However, despite the minimization of the hazard the conclusion of the analysis postulates an unacceptably high public radiation dosage of 1800 rems thyroid.

1. The safety analysis is flawed because
 - a. Applicant assumes a release limited to only 10% of the volatile fission products and none of the non-volatile products,
 - b. Applicant assumes the reactor has been operated at 10 Kw long enough to have attained equilibrium concentrations of relatively short-lived fission products,
 - c. Applicant assumes the reactor is in a two-story building with possible exposure to the public occurring outside the building,
 - d. Applicant assumes a building leakage rate of 20% of the reactor room volume per hour for a 30 mile per hour wind, assumed to be directly proportional to wind velocity, and
 - e. Applicant has not adequately tested the assumptions upon which the analysis is based and failed to include a current review of nuclear safety literature regarding dose and dispersion models.

IX. The Applicant in the past has not adequately maintained its equipment nor calibrated its instruments properly, thereby increasing the chances of equipment failures and erroneous instrument reading. Due to this failure, the NRC cannot conclude that the issuance of a license for this facility will not be inimical to the public health and safety. Specifically:

1. Applicant has failed to calibrate instruments at the required intervals.
2. Applicant's personnel are not familiar with the calibration requirements of their own technical specifications.
3. Applicant has failed to maintain, or has lost, calibration records, making accurate calibrations and data interpretation impossible.
4. Applicant has significantly underestimated radioactive emissions for extensive periods of time due to errors in its calibration methods.

5. Applicant has had continuing problems with heat balance calibrations.
6. Applicant has not devoted adequate time to maintenance and calibration.

X. The relicensing of the UCLA nuclear reactor is a major Federal action which will significantly affect the quality of the human environment. Therefore, an Environmental Impact Statement must be prepared by the NRC. There are suitable alternatives to the operation of this reactor which would not involve a significant impact on the environment.

2. The relicensing of the UCLA research reactor will significantly affect the quality of the human environment because
 - a. A design basis accident at the reactor is likely, and would expose great numbers of people to dangerous radiation dosages.
 - b. The reactor is located on a densely populated campus with classroom and office facilities enveloping the reactor building on three sides and above the building.
 - c. The reactor lacks inherent and engineered safety features, including the lack of a containment structure.
 - d. A design basis accident is likely because of the reactor's use as a training facility and because of the history of lax administrative controls, abnormal occurrences, unscheduled shutdowns and minor accidents.
 - e. The facility is situated in a seismically active area and suffered significant damage in the 1971 earthquake.
 - f. The facility utilizes highly enriched (93%) fuel and is vulnerable to criticality accidents.
 - g. A design basis accident would result in fission product releases in amounts that would endanger the public health and safety.
3. Therefore, the NRC must prepare an EIS which considers the following alternatives:
 - a. Training, research and education could all be accomplished at other existing facilities located in southern California.
 - b. The reactor could be used as a simulator without fuel for the training of reactor operators.
 - c. Commercial users of the reactor could rent reactor time at other facilities in southern California.

Deferred

4. The benefits provided society by the reactor do not outweigh the costs of operating the reactor because
- Deferred*
- a. Only a very small percentage of the reactor operating time is devoted to training operators and educating students.
 - b. Most of the important and significant research done at UCLA which utilizes nuclear reactors is accomplished at other facilities.
 - c. The research that is done at this facility could be accomplished at other facilities in southern California.
 - d. A major percentage of the reactor operating time is devoted to commercial projects for paying customers.
 - e. The reactor costs the University over \$150,000 to operate and would cost over \$750,000 to decommission in 1980.
 - f. Over the proposed twenty year license period the beneficial uses of the reactor are likely to decline while the risks and costs associated with its operation are likely to increase.

XII. The safety features of the UCLA reactor are inadequate to protect the public health and safety. Certain engineered safety features are lacking; particularly lacking are features that are redundant and independent. Specifically:

1. The reactor is surrounded by a housing rather than by an adequate containment structure.
2. The high level radiation monitor system which activates the scram system is inadequate.
3. The reactor does not have an adequate boron-injection system, a radioactivity removal system, emergency liquid and gaseous emissions holding tanks, HEPA filters, an emergency core cooling system, or spare control blade motors.
4. The reactor lacks adequate shielding and access restrictions in areas where the public might be exposed to radiation.
5. The reactor has inadequate or non-existent interlock systems.
6. The reactor lacks missile shields, particularly for control blade drives.
7. Graphite used in reactors undergoes physical changes and thus poses a hazard.
8. The reactor has a history of fuel failures, particularly tie bolt failures.
9. The reactor's control blades are inadequate.

- XIII. The information which Applicant has provided regarding the special nuclear materials license is inadequate to meet the requirements of 10 CFR ~~70.22~~(a)(7) and (a)(8) and 70.24(a)(1), (2), and (3). Further²³⁵ more, the enrichment level requested and the quantity requested of U are excessive and thus pose an unnecessary threat to public health and safety.
- XIV. Applicant in its Safety Analysis Report has failed to analyze problems common to Argonaut typed reactors. In the absence of such an analysis, Applicant cannot reasonably assure that the operation of the reactor will not endanger the public health and safety.
- XV. The operating license for this facility should not be renewed because the adverse consequences which flow from its location and siting are too great. The following circumstances have exacerbated the adverse consequences of a facility accident and of normal operation. Specifically:
1. The density of the population in the unrestricted area immediately surrounding the reactor and within a ten mile radius of the reactor makes the probable consequences of an accident at the facility unacceptably great. This population density has increased greatly over the past twenty years.
 2. The reactor building which was originally separated from any other structures is now enveloped on three sides and above by classroom and office buildings. These buildings house a large population during working hours in close proximity to the reactor.
 3. The heating, air-conditioning, and air-flow systems of the new buildings enveloping the reactor building interface directly and indirectly with those systems at the reactor facility.
- XVI. The UCLA reactor and the principal component pieces of reactor equipment are so old that relicensing the reactor, particularly for a twenty-year period poses an unacceptable hazard. Because of the age of the reactor it is very difficult to obtain spare parts and key safety features required of newer facilities--specifically, an emergency core cooling system and a containment structure--are lacking in this facility. In addition, the following items of equipment are unreliable, difficult to repair and/or replace: reactor instrumentation and console instrumentation.
1. The reactor was built in 1959 by a company which is no longer in the reactor business.
 3. ⁴The reactor equipment is old and outdated and deteriorating. The Applicant has not devoted the money to properly update or maintain the equipment in the past and without a change in Applicant's practices the equipment will continue to deteriorate with age.

XVII. The UCLA reactor should not be licensed because the physical location and site characteristics of this reactor unacceptably endanger the public health and safety. Furthermore, the license application does not contain current information and analysis concerning the site related safety problems sufficient to support the issuance of a license. Specifically:

1. The reactor is located on one of the most seismically active regions of the country.
3. The reactor sustained significant damage in the 1971 earthquake.
4. The existence of three floors of classrooms, and offices, supported on columns, directly above the reactor structure creates a significant danger of collapse through the reactor building roof and onto the reactor itself in the event of an earthquake.
5. The application does not contain the current information on siting required by 10 CFR 50.34(b)(1).

XVIII. The Applicant does not possess and cannot give reasonable assurance of obtaining funds sufficient to cover the costs of operating the facility. Given this lack of assurance, Applicant fails to qualify financially for an operating license. Specifically:

1. Applicant has deferred maintenance in the past due to lack of funds.
2. Applicant, as a public institution and subject to yearly funding, cannot reasonably assure that it will obtain sufficient funding for operation of the reactor from year to year.
3. If Applicant, as contended by Intervenor, is operating a facility described in 10 CFR 50.21(b) or 50.22, Applicant has not met the requirement of 10 CFR 50.33(f) that: Applicant possess or have reasonable assurance of obtaining the funds necessary to cover the estimated cost of operation for the license period, plus the estimated cost of permanently shutting down the facility and maintaining it in a safe condition.

XIX. The Application's Safety Analysis is flawed because it does not include an analysis of the 'maximum credible accident' or a 'design basis accident'. In providing such an analysis the following hazard scenarios for the facility have not been considered.

1. Sabotage, such as explosives being thrown at or placed on the reactor itself, causing major damage and broken fuel plates.

2. Airplane crash such as a DC-10 or Boeing 747 scheduled to arrive at LAX or Burbank airports crashing into the reactor room, or into the void area above the reactor, causing the building or portions thereof to collapse breaking apart fuel assemblies and releasing radiation.
3. Multiple failure modes--worst possible series of events.
4. Operator error which leads to design basis accident.

XX. Applicant has in the past and is at present taking inadequate fixed site physical security precautions to protect against radiological sabotage as well as protection against theft and diversion of the special nuclear materials it possesses pursuant to 10 CFR 73.60 and 73.76, thus indicating that the Applicant's physical security plan is inadequate and its implementation of said plan is inadequate. Applicant has failed to demonstrate in its recent performance any evidence that its physical security measures can reasonably be expected to improve in the future, in the absence of which demonstration grant of an operating license and a SNM license cannot be made without undue threat to public health and safety.

1. Applicant has at its facilities areas containing vital equipment and special nuclear materials, areas which should be adequately protected against possible acts of radiological sabotage or attempts at theft or diversion of SNM, and to which access should be adequately controlled. Specifically:
 - a. the reactor room,
 - b. the control room,
 - c. the third floor equipment room,
 - d. the fresh fuel storage area, and
 - e. the "restricted area" immediately surrounding the reactor stack and exhaust fan on the eighth floor of Boelter Hall.
2. There exist areas adjacent to the above-mentioned vital and material access areas which should be sufficiently isolated and secured to prevent them from being used as penetration points or staging areas for penetration of the vital and material access areas. Specifically:
 - a. The "access court" used for truck loading and unloading, located between the reactor building and the Engineering Building to its west,
 - b. the Tokamak lab adjacent to the reactor room,
 - c. the main entrance (reception lobby) to NEL,

- d. the presently unrestricted roof areas of Boelter and Math Sciences adjacent to the "restricted area" around the reactor stack,
 - e. the rooms within Math Sciences whose windows open to the "restricted area" around the reactor stack, and
 - f. the entryway for the single locked door to the "restricted area" around the reactor stack.
3. Applicant's physical security measures for its vital and material access areas and the areas adjacent to them have been in the past and are at present inadequate to properly protect, isolate, and control access to those areas in that
- a. presence by guards and watchmen is too infrequent;
 - b. methods for detecting concealed guns, explosives, or incendiary devices that could be carried by people entering these areas, and SNM that could be carried by people leaving these areas, are inadequate;
 - i. Applicant lacks mechanical devices to detect firearms, explosives, incendiary devices, or SNM and
 - ii. Applicant fails to routinely search visitors and staff for firearms, explosives, incendiary devices, or SNM
 - c. physical barriers to penetration are inadequate;
 - i. fences and walls are too short, lack barbed wire at the top, and otherwise fail to fully enclose the area to be protected
 - ii. windows and doors in walls that are to act as physical barriers are made of construction and fastening of insufficient strength such that the integrity of the wall is lessened by the opening provided by the windows and doors
 - iii. dual or redundant barriers are lacking; penetration of these areas can be made by breaching a single barrier
 - d. security measures with regard to keys and locks are inadequate; and
 - i. doors that should be kept locked have been left open

- ii. locks are of insufficient construction and strength to prevent tampering and penetration
 - iii. too many keys to areas that are supposed to be locked have been given out
 - iv. control of those keys is inadequate in that copies can be made, keys can be lent to unauthorized personnel, and keys that are signed out are not required to be returned when not in use
- e. procedures to control access are inadequate.
- i. groups that are too large for adequate supervision are given tours of the facility by one or two staff people alone
 - ii. these tours include visits to vital and material access areas
 - iii. NEL personnel unassociated with the reactor have ready access to vital and material access areas through egresses connecting their parts of the NEL complex with the parts of the complex utilized by the reactor.

XXI. Applicant's present Emergency Response Plan is insufficient to demonstrate that the plan provides reasonable assurance that appropriate measures can and will be taken in the event of an emergency to protect public health and safety and prevent damage to property.

1. The prohibition against notifying non-university individuals until instructions to do so come from the Campus police unnecessarily delays emergency response.
2. The requirement that the evacuation of Boelter Hall and the Math-Sciences addition be cleared through the Vice Chancellor's office entails unnecessary delay.
3. The plan does not adequately provide for alternative personnel with evacuation authority.
4. The plan does not provide for alternative personnel with the authority to carry out the role of Health Physicist, as general director and supervisor of emergency response.
5. Applicant does not have adequate radiation measuring devices to accurately determine the extent and seriousness of an accident which would make the University initiate its emergency response plan.
6. There is no indication that a viable plan for evacuating the entire campus exists.

7. The plan does not provide for any emergency centers other than the UCLA Medical Center, despite the fact that it might be shut down in the event of a major accident.
8. The plan fails to indicate which equipment and what quantities of it are available at each equipment location listed in the plan.
9. The training exercises and drill specified in the plan are not carried out on a regular basis and therefore the plan will be ineffective in the event of an actual emergency.

XXIII. Applicant, in its license application has improperly dealt with intended changes to its facility. Specifically:

1. Applicant improperly relies on an intended future action-- installation of decay tanks--in defense of its ALARA performance.
 - a. Present and past observance of ALARA or other radiation standards cannot be defended by an action not yet taken.
 - b. Promise of intention to reduce the emissions in the future if relevant at all to the issue of license renewal, cannot be based on an action applicant asserts it intends to undertake in the future but has not yet proposed as an amendment to its license.
2. Applicant makes statements in its application regarding intended future actions that are contradicted by the facts and by each other.
 - a. On page V/3-11 of the application Applicant incorrectly states that an Amendment will be prepared and submitted prior to September 1, 1980, to authorize the installation of hold-up/decay tanks. No such Amendment was submitted prior to September 1, 1980.
 - b. The statement on page V/3-11 is further contradicted by a statement on page V/7-1, indicating the preparation of such a license amendment will "commence upon receipt of information confirming the acceptability of the present application."
3. If Applicant is permitted to rely on future intended actions in defense of a claim that relicensing will not likely lead to emissions unduly harmful to the public health and safety, then all intended future actions linked to the decay tanks should be included, not merely those future actions which might tend to reduce emissions.
 - a. The intention to increase the reactor use factor which Applicant has communicated to the Commission and public as being tied into the installation of decay tanks, and which would tend to increase emissions.
 - b. The intention to increase reactors maximum permitted power, which Applicant has publicly stated its intention to do and which would likewise increase emissions.

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

NRC STAFF'S POSITION ON CONTENTIONS
OF COMMITTEE TO BRIDGE THE GAP.

A. Introduction

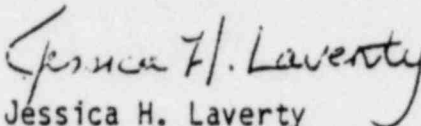
Pursuant to a notice published in the Federal Register on April 25, 1980, the Committee to Bridge the Gap (CBG or Petitioner) filed a timely petition for leave to intervene requesting that a hearing be held and that Petitioner be admitted as a party to such hearing on the application of the Regents of the University of California (Licensee) for renewal of the operating license for the UCLA Research Reactor. On July 21, 1980, the Atomic Safety and Licensing Board (Licensing Board or Board) assigned to the proceeding issued an order scheduling a prehearing conference in the matter for September 18, 1980. Pursuant to Petitioner's request, the prehearing conference was rescheduled for September 25, 1980 in a Licensing Board Order issued on August 11, 1980.

The Licensing Board's August 11 Order provided that Petitioner could, if it so desired, supplement its petition to intervene by August 25, 1980. Responses

C. Conclusion

Based on the foregoing, the Staff concludes that CBG has submitted at least one good contention and thus should be admitted as a party to this proceeding. The Staff urges that the Licensing Board rule on the admissibility of CBG's contentions in a fashion consistent with the Staff's position in this document.

Respectfully submitted,


Jessica H. Lavery
Counsel for NRC Staff

Dated at Bethesda, Maryland
this 16th day of September, 1980

NUCLEAR REGULATORY COMMISSION

In the Matter of:

THE REGENTS OF THE UNIVERSITY) DOCKET NO 50-142
OF CALIFORNIA)
(UCLA Research Reactor)) (Proposed Renewal of
Facility License)

DATE: September 25, 1980 PAGES: 1 thru 75

AT: Los Angeles, California

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

Room 324
Federal Courthouse
300 N. Spring St.
Los Angeles, Cal.
Thursday, September 25, 1980

Met, pursuant to notice, at 9:30 a.m.

BEFORE:

ELIZABETH S. BOWERS, Esq., Chairman
EMMETH D. LUEBKE, Ph.D., Member
OSCAR H. PARIS, Member

APPEARANCES:

FOR THE NUCLEAR REGULATORY COMMISSION STAFF:

JOSEPH R. GRAY, Esq.
JESSICA LAVERTY, Esq.
HAROLD BERNARD

FOR THE REGENTS OF THE UNIVERSITY OF CALIFORNIA:

CHRISTINE HELWICK, Esq.
GLENN R. WOODS, Esq.
WILLIAM H. CORMIER, Esq.

FOR THE COMMITTEE TO BRIDGE THE GAP:

DAN HIRSCH
JOHN BAY
JOE BRADLEY, Esq.
MARK POLLOCK, Esq.

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1 He has a distinguished career in private industry as an expert
2 on nuclear reactors. He also is a full-time member of the
3 Atomic Safety and Licensing Panel, and has been for the last
4 ten years. And Dr. Paris joined us in 1976 as a full-time member.

5 Now, the reason I am saying "full-time member" is,
6 you see, our panel consists of 53 people and about 14 or 15 of
7 those are full time. And the other people on the panel are at
8 universities or the national laboratories, and they serve on an
9 ad hoc basis, and they are either nuclear engineers or physicists
10 or environmental scientists. Some are lawyers and economists,
11 because in our responsibility we not only have health and safety
12 and environmental considerations, but we also, since 1970, have
13 been involved in antitrust hearings.

14 Let me call, before we get into the matter today, for
15 appearances of the parties. If the Applicant is here, for the
16 Regents?

17 MS. HELWICK: Yes, we are. We are represented by
18 Christine Helwick and Glenn R. Woods, who will be joining me
19 shortly. And to my right is Mr. William Cormier from the UCLA
20 campus.

21 MRS. BOWERS: And the NRC staff?

22 MR. GRAY: I am Joseph Gray, counsel for the NRC staff.
23 I am accompanied today by Jessica Laverty, lead counsel for the
24 NRC staff is this UCLA Research Reactor operating license
25 renewal proceeding, and by Mr. Harold Bernard, who is the

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

STIPULATION

The NRC Staff (Staff), the Regents of the University of California (Applicant), and the Committee to Bridge the Gap (Intervenors), by their respective attorneys or authorized representatives, hereby stipulate and agree as follows:

1. A hearing having been granted with respect to the above application and Intervenors having been admitted as parties to the proceeding by the Licensing Board's Memorandum and Order dated October 2, 1980, Intervenors agree that the sole contentions they are asserting in this proceeding are those set forth in Attachment A (Stipulated Contentions) and Attachments B and C (Unstipulated Contentions), subject to the reservation set forth in paragraph 6 below. The renumbering and wording of the contentions set forth in Attachments A, B and C supercede that set forth in Intervenor's Supplement to the Petition to Intervene dated August 25, 1980.

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
	)	Docket No. 50-142
THE REGENTS OF THE UNIVERSITY	)	(Proposed Renewal of Facility
OF CALIFORNIA	)	License Number R-71)
)	
(UCLA Research Reactor)	)	September 21, 1981
<hr/>		

NOTICE OF APPEARANCE

Notice is hereby given that the undersigned attorney herewith enters an appearance in the above-captioned matter. In accordance with § 2.713(b), 10 CFR Part 2, the following information is provided:

Name	-	William H. Cormier
Address	-	Office of the Administrative Vice Chancellor Room 2241 Murphy Hall University of California, Los Angeles 405 Hilgard Avenue Los Angeles, CA 90024
Telephone	-	Area Code 213 - 825-4010
Admission	-	Supreme Court of the State of California
Party	-	Applicant

Dated: September 21, 1981



William H. Cormier
UCLA Representative for Applicant

THE REGENTS OF THE UNIVERSITY
OF CALIFORNIA

EXHIBIT

APPLICATION FOR A CLASS 104 LICENSE
FOR A RESEARCH REACTOR FACILITY

Based on

Code of Federal Regulations, Title 10, Part 50

to

U.S. Nuclear Regulatory Commission

R. R. O'Neill, Dean
School of Engineering and Applied Science
University of California
Los Angeles

February 1980

CERTIFICATE

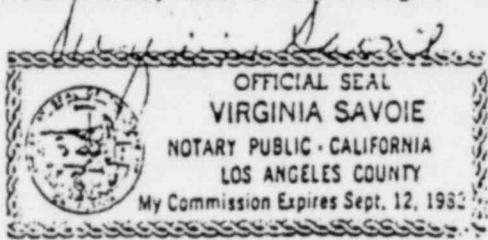
The applicant or any official executing this certificate on behalf of the applicant certify that these applications are prepared in conformity with Title 10, Code of Federal Regulations, Parts 50 and 70, and so solemnly swear (or affirm) that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

On 2-26-80, before the undersigned, a Notary Public for the State of California, personally appeared R. R. O'Neill, known to me to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same.



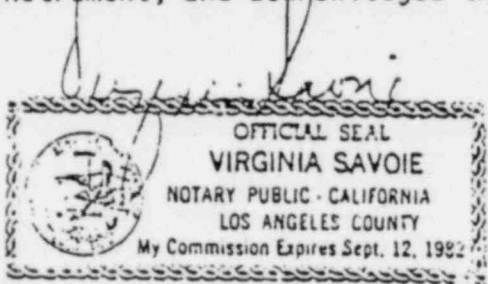
R. R. O'Neill
R. R. O'Neill, Dean
School of Engineering and Applied Science

On 2-27-80, before the undersigned, a Notary Public for the State of California, personally appeared W. F. Wegst, known to me to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same.



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

On 2-27-80, before the undersigned, a Notary Public for the State of California, personally appeared J. W. Hobson, known to me to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same.



J. W. Hobson
J. W. Hobson, Vice Chancellor and
Responsible Officer
University of California, Los Angeles

Boelter attorney may have violated legal procedure

By Andrew Basiago
Staff Writer

The attorney representing UCLA in the Boelter Hall nuclear reactor relicensing battle may have violated federal legal procedure Tuesday by meeting with members of the Nuclear Regulatory Commission while the relicensing's court-appointed intervenor was not present.

Attorney William Cormier violated ex parte rules by not including a representative from the Committee to Bridge the Gap, the intervenor, when he, NRC Commissioner Thomas Roberts, two NRC aides and School of Engineering and Applied Sciences Dean Russell O'Neill met in O'Neill's office before a scheduled tour of the reactor by NRC officials, Bridge the Gap attorney Dorothy Thompson said.

As court-appointed intervenor, the Committee to Bridge the Gap, the group opposing the reactor's relicensing, takes part in pre-hearing and hearing portions of the relicensing procedure. Bridge the Gap is allowed to present its own information regarding the reactor's safety and to submit questions challenging information UCLA officials present in testimony.

"An ex parte violation occurs when the decision-making body (the NRC in this case) in a legal contest meets one side of the contest without the other side being present," Thompson said, adding that Bridge the Gap will file a formal complaint with the NRC about the violation. "We will consider asking for the disqualification of Commissioner Roberts from sitting in on the relicensing process," she said.

Roberts is one of five NRC board members who oversee the licensing board hearing the Boelter Hall case.

Although a Bruin staff writer observed Cormier meeting the NRC officials shortly after 9:20 a.m. in O'Neill's administrative office and reported that the group was still meeting behind closed doors when he left at 9:40 a.m., Cormier later denied that a 20-minute meeting had occurred. He later told Bridge the Gap President Daniel Hirsch that he had only greeted the NRC official and that the greeting lasted only 10 minutes from 9:50 to 10:00 a.m. He said that after the greeting, he escorted the NRC representatives to the reactor's entrance for the tour.

O'Neill also denied a meeting had taken place, but agreed that they had greeted NRC officials for about 15 minutes. "We did not discuss the reactor controversy, but the crisis in engineering too many students and



RUSSELL O'NEIL

not enough funds," O'Neill said. He added he knew a meeting to discuss the reactor without the presence of the contesting party would have been illegal.

"I think we understood you're not supposed to do that, and we observed that to the letter, for that would be inappropriate," O'Neill said.

NRC officials were also responsible for the violation, Thompson said, adding that the violation was another example of the NRC's practice of letting only the university express its opinions to the NRC commissioner.

"During the tour of the reactor, we were forbidden to give the commissioner any information or express to him our contentions," Thompson said. "We spoke through William Cormier throughout."

Roberts would not make any comments to The Bruin while visiting UCLA. He was appointed five months ago by President Reagan, and toured UCLA's reactor after returning from a visit to the San Onofre nuclear power plant near San Luis Obispo.

Hirsch said he was angry that Bridge the Gap could not inform Roberts of any reactor safety issues during his visit.

"We were permitted to be there during the tour but couldn't point anything out to the commissioner," Hirsch said. Roberts also refused a Bridge the Gap request for a two-minute meeting before the tour to discuss Bridge the Gap's contentions, Hirsch said.

Bridge the Gap is challenging the reactor's relicensing because, it contends, the reactor generates an excessive level of argon gas and employs bomb-

grade uranium inadequately protected from theft or sabotage, among other reasons.

"The NRC has long been

criticized for being too cozy with the industry it is to regulate," Bridge the Gap member Wendy Schnelker said.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

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In the Matter of

THE REGENTS OF THE UNIVERSITY
OF CALIFORNIA

(UCLA Research Reactor

Docket No. 50-142

(Proposed Renewal of Facility
License)

CERTIFICATE OF SERVICE

I hereby certify that copies of "MOTION FOR DISQUALIFICATION OF COMMISSIONER THOMAS ROBERTS" and "RELATED AFFIDAVITS AND ATTACHMENTS" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, this 13th day of March, 1982:

Commissioner Thomas Roberts
U.S. Regulatory Commission
Washington, D.C. 20555

Ms. Colleen P. Woodhead
Counsel for NRC Staff
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Commissioner Nunzio Palladino
Chairman
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

John H. Frye, III
Chairman
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Commissioner John Ahearne
U.S. Regulatory Commission
Washington, D.C. 20555

Dr. Emmeth A. Luebke
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Commissioner Victor Gilinsky
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Commissioner Peter Bradford
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Oscar H. Paris
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

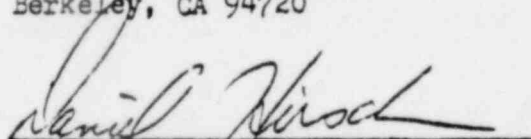
General Counsel
Office of General Counsel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

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Office of Administrative Vice Chancellor
University of California
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Los Angeles, CA 90024

Ms. Jessica Laverty
Legal Assistant to Commissioner Roberts
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Christine Helwick
Glenn R. Woods
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Office of the Secretary
Docketing and Service Section
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555


Daniel Hirsch
President