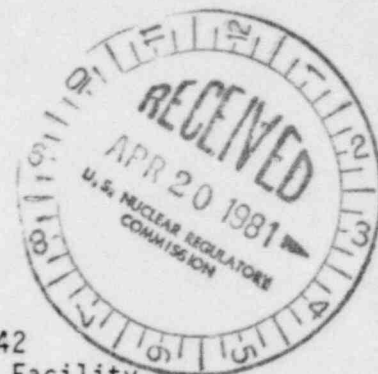


UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



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

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

NRC STAFF INTERROGATORIES TO INTERVENOR CBG

The NRC Staff hereby requests the Intervenor, Committee to Bridge the Gap, pursuant to 10 CFR § 2.740b to answer separately and fully in writing and under oath or affirmation the following interrogatories. Intervenor's response should be set forth in a manner such that each response is identified with the particular contention to which it pertains.

General matters

Question A

- (a) State the names, address and professional qualifications of the person or persons upon whose views Intervenor relies to substantiate each contention, and whom Intervenor will present as expert witness at hearing.
- (b) State by author, title, date of publication and publisher all books, texts and papers upon which each person named in the response to Interrogatory 1(a) and the Intervenor relies to substantiate his or her views.
- (c) Describe all independent calculations, physical and mathematical models upon which each person named in 1(a) or the Intervenor relies to substantiate that person's views.

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- (d) For each response to the interrogatories listed below, identify the person or persons who prepared, or substantially contributed to the preparation of the response.

Contention I

Question 1

Explain specifically why you believe the UCLA application is misleading by its reference to a 1968 report on experimental vibration performed.

Question 2

Since the application does not discuss the vibration test but merely notes its performance, why do you believe there should have been a discussion of the control blade damage?

Question 3

State the precise 10 CFR Chapter 1 regulation on which you base your allegation that an "original" SAR is required by the NRC.

Question 4

State the 10 CFR Chapter 1 regulation requiring that applications for license renewals contain only "original" information.

Question 5

Clarify and define your use of the word "original" in Contention I.2.

Question 6

Explain precisely and by page reference the parts of the 1960 Hazards Analysis you believe are inaccurate. (a) State the reason you believe each section designated to be inaccurate and (b) describe the evidence you can produce to prove the inaccuracy.

Question 7

State the specific environmental data you believe to be omitted from the application and (a) the reason you believe it should be included and (b) the specific evidence you can produce to support your statements in response to Questions 7 and 7(a).

Question 8

State specifically the evidence you possess to prove that the statement on p.5 of the application concerning the education and research use of the UCLA reactor is inaccurate.

Question 9

Do you believe that the UCLA research reactor is not used for student education and research? (a) If so, state your evidence to support this belief. (b) If your response to (a) includes activation analysis done for businesses, explain why this is not student education and research.

Question 10

State specifically why you allege that the application's statement that no structural weaknesses have been identified is inaccurate.

Question 11

Do you believe a control blade is part of the reactor structure?

Question 12

Do you regard the UCLA 1976 annual report reference to "minor problems that worsened with time" due to the 1971 earthquake as "earthquake vulnerability"? (a) If so, explain specifically and in detail what threat to public health and safety you think occurred at the UCLA reactor in 1971 and (b) state all evidence you possess to support your statements and reasoning in response to 12(a).

Question 13

Explain specifically and in detail the safety significance of UCLA's modifications of technical specifications listed in Contention I.3.c.

Question 14

Explain specifically and state your evidence as to why deep wells on the UCLA campus are significant.

Question 15

Do you believe that effluents from the UCLA reactor could pollute ground water? (a) If so, state all evidence you possess to support this belief.

Question 16

Explain specifically why you believe that the application's statement (on p.II/3-1) that even major accident releases would result in a small fraction of Part 100 guidelines is inaccurate. (a) Provide all evidence you could present to disprove the above statement.

Question 17 (Re: I.3.f.)

Explain specifically and in detail what more suitable or economical alternatives could accomplish the educational and research objectives of the UCLA research reactor. (a) Provide the evidence you could present in support of your assertions.

Question 18 (Re: I.3.g.)

Explain specifically and in detail all the evidence you could present to disprove the statement in the application that "SPERT and BORAX tests showed that plate type fuel elements survived step radioactivity insertions of \$3.54." (p.V/3-6).

Contention II

Question 19

State specifically and in detail all evidence you can present to show that more than half of the annual cost of owning and operating the UCLA research reactor is devoted to production of materials, products, or energy for sale or commercial distribution, or to sale of services other than research and development or education or training.

- (a) Provide a list of all sales or commercial distribution of materials, products or energy produced by or at the research reactor at UCLA on an annual basis since 1976.
- (b) For each item listed, explain the evidence you can present to substantiate the sale or distribution.
- (c) List all reactor services sold by UCLA that were not services for research and development or education or training on an annual basis since 1976.
- (d) Describe the evidence you can present to prove the existence of each item of non-research or education listed, which shows that the activity has no educational value.

Question 20

State specifically the financial figures and data you use to show:

- (a) the annual cost to UCLA of owning the research reactor, including specific amortization of the building and equipment.
- (b) the annual cost to UCLA of operating the research reactor, including all overhead expenses such as utilities, maintenance, watchmen, janitorial services and indirect costs such as library facilities, laboratories, and supplies.
- (c) the source of your financial data.
- (d) the specific manner of allocation of owning and operating costs you attribute to production of non-research or educational activities at the reactor.

Question 21

Demonstrate by mathematical computation and page reference your allegation that the application indicates that more than half of the reactor operating time is spent on non-educational projects. Distinguish in your response between port hours and operating time.

Question 22

Demonstrate your mathematical computation of the 52.5% NEL income from reactor earnings you derived from p.I/1-1 of the application as you stated in your Contention II explanation submitted August 25, 1980.

Contention III

Question 23 (Re: III.1.)

Explain why you believe the UCLA application should provide information required by 10 CFR Part 50, Appendix B concerning power reactors and reprocessing plants.

Question 24 (Re: III.2. & 3.)

Describe specifically and in detail all evidence you can present to show that there is a recent (1975 to date) failure of management to obtain Reactor Use Committee, Director, or Commission approval for (a) changes in reactor systems, (b) non-standard experiments or (c) facility changes.

Question 25

Describe specifically and in detail all evidence you can present to show that the present management organization responsible for the reactor at UCLA has failed to follow adequate safety procedures.

Question 26 (Re: III.5.)

Describe specifically and in detail the evidence you can present to prove that NCL personnel allowed unauthorized persons to operate the UCLA reactor. (a) State the unauthorized persons who operated the controls; the date and time of day; and exactly what control the unauthorized persons operated.

Contention IV

Question 27

(a) Clarify the difference between Contentions III and IV. (It appears that both allege inadequate managerial and administrative controls.) (b) Since you cited some of the same I&E reports as basis for both contentions, please state all evidence you can present to prove Contention IV which is different from evidence to support assertions in Contention III.

Contention V

Question 28

- (a) Provide calculations and references which indicate that the excess reactivity in the UCLA core is large enough that, when inadvertently inserted, it will create a power surge of such magnitude that it will raise the temperature of the fuel and the cladding to a value that will produce melting of the fuel cladding.
- (b) Provide an analysis of how the excess reactivity alone could be inserted into the UCLA reactor.

Question 29 (Re: V-1)

Provide the calculations and references that indicate the amount of excess reactivity the reactor should have to enable experiments, class instruction, safety rod calibrations, and actuation analyses that would not lead to "prompt criticality".

Question 30 (Re: V-2)

(a) Indicate the changes in the level of excess reactivity since Amendment 10 (February 1976) and (b) provide calculations that show that this produces greater power peaks during inadvertent instantaneous reactivity insertions and (c) whether such peaks are higher than indicated in the UCLA license renewal of 1970.

(d) Provide the references and calculations to show how use of the deflector in the core can avert repeated excursions.

(e) Provide the calculations and references to show how the small positive graphite temperature coefficient shown for the U of Washington reactor could change the fact that there is an inherent safety feature in the UCLA reactor by virtue of the large negative temperature coefficient of the remaining core components.

(f) Provide the calculations and references to illustrate how increasing the power level from 10 kw to 100 kw has any effect on (i) the amount of excess reactivity available, (ii) the safety margin, (iii) the increase in fuel temperature, (iv) the melting of the cladding, (v) the quantities and species of fission products out of the core, (va) through the superstructure, (vb) into and out of the reactor room, (vc) to the outside environment.

Question 31 (Re: V-3)

Show by calculations and references how and where in the 1960 UCLA Hazard Analysis, the licensed amount of excess reactivity permitted in the UCLA reactor could cause melting of the fuel cladding.

Question 32 (Re: V-4)

Indicate by calculations and references (a) the amount of change in the reactor void coefficient that has occurred since Amendment 10 and (b) the impact in excess reactivity and (c) subsequent reactor safety that such a change will impart.

Question 33 (Re: V-5)

Provide by calculations and reference how modification of the term in the proposed technical specifications has changed the excess reactivity calculations from 2.3% to 2.6%.

Question 34 (Re: V-5)

(a) Provide calculations and references that indicate what error bars should have been considered for Borax data used for the UCLA reactor calculations. (b) Provide calculations and references that indicate the effect that your answer to (a) will have on the extrapolation of Borax I data test results to the UCLA reactor.

Question 35 (Re: V-8)

Indicate by reference the new test data since the Borax and Spert tests that should be added to the references in the original UCLA Hazards Analysis Report (HAR) and the current license renewal application that have an effect on the excess reactivity and the effects of inadvertent instantaneous reactivity insertions.

Question 36 (Re: V-9)

Indicate which calculations in the UCLA HAR are unverified and which are unidentified assumptions.

Question 37 (Re: V-10)

Indicate by calculations and references how the pneumatic "rabbit" system together with the operating limits provided in the Technical Specifications can affect the excess reactivity to a level that will exceed the limits of excess reactivity stipulated in the Technical Specifications.

Question 38 (Re: V-12)

(a) Provide by calculations and references the evidence to show how a beam tube could be removed and, (b) taking into consideration the limitations provided in the Technical Specifications, how excess reactivity could be increased above the limitations in the Technical Specifications.

Question 39 (Re: V-13)

- (a) Provide the references and calculations that show that the UCLA has exceeded the excess reactivity limitations in the Technical Specifications.
- (b) Provide the calculations and references to indicate that it is impossible to prevent "possible excursions" that could lead to melting of the fuel cladding and significant release of fission products.

Question 40 (Re: V-14)

Provide by reference the changes in physical characteristics (i.e., eutectic characteristics) of the fuel material used in the UCLA reactor that are different from those that have been determined by use and experiments in the (a) MTR, (b) EBR reactors and (c) the other Argonaut reactors, and the (d) Spert and Borax Tests.



Question 41

Indicate by calculations and references those instances, since Amendment 10 was issued, when the UCLA reactor emissions exceeded 10 CFR 20 Appendix B Tables I and II.

Question 42

Indicate those conditions which presently exist that are causing current UCLA emissions to exceed 10 CFR 20.

Question 43

Indicate by reference and calculations why the current radiation monitoring system is not adequate to indicate that requirements of 10 CFR 20 are being met.

Question 44 (Re: VI-4)

(a) Provide calculations and references that indicate that the emissions from the UCLA reactor do not already satisfy the recommendations of 10 CFR 20.1(c). (b) Indicate by references and calculations that UCLA, since Amendment 10, has not satisfied the requirements of 10 CFR 20.106(b)(1) and (2) by averaging their annual emissions over a twelve month period. (c) Indicate by reference and calculations where and when, since Amendment 10, UCLA has requested higher limits for emissions than is contained in 10 CFR 20.106(b).

Question 45 (Re: VI-5)

- (a) Provide references and calculations to indicate what you mean by the word "practicable".
- (b) Provide references and calculations to indicate that UCLA emissions do not meet the requirements in (a) above.

Contention VII

Question 46

- (a) Explain specifically and in detail why you allege that unscheduled (reactor) shutdowns endanger public health and safety.
- (b) Describe specifically any evidence you can present to show a danger attached to unscheduled shutdown.

Question 47

- (a) By "abnormal occurrence" do you mean the term as used in section 208 of the Energy Reorganization Act of 1974?
- (b) If not, define the term precisely as you intend it.
- (c) List the specific abnormal occurrences you allege have occurred at the UCLA reactor giving the dates and evidence you can present to show that they occurred.
- (d) Explain specifically why you believe each abnormal occurrence listed in (c) posed a threat to public health and safety.

Question 48

- (a) Define precisely your meaning of the term "accident" as used in this contention.
- (b) Describe specifically and in detail each and every accident you allege has occurred involving the UCLA research reactor.
- (c) Describe the consequences of each accident listed in (b).

Contention VIII

Question 49

- (a) Explain specifically why you make reference to the 1800 rem dose to the thyroid estimated by Applicant for an eight hour exposure at 61 meters during a severe inversion as "unacceptably high public radiation dose."
- (b) Do you believe that in the event of accident a member of the public is likely to stand at 61 meters from the reactor building for 8 hours?
- (c) Do you believe that 10 CFR § 100 doses are based on a severe inversion?
- (d) Give precise information as to why the UCLA severe inversion calculation is not a valid upper limit.

Question 50

- (a) Explain specifically why you believe the SAR is inaccurate because it assumes a release of 10% volatile fission product.

- (b) Provide your scientific basis for challenging the above assumption, including mathematical computations and scientific references.
- (c) Provide the analysis of the fission products release you deem valid.

Question 51

- (a) Explain specifically why you believe the SAR is "flawed" because no non-volatile fission products are assumed to be released.
- (b) Describe all evidence you can present that the above assumption is invalid.

Question 52

- (a) Explain specifically and in detail, why you believe the SAR assumption that reactor operation has been long enough to attain equilibrium concentrations of short-lived fission products is invalid.
- (b) Describe all evidence including mathematical calculations which invalidate the assumption.
- (c) Explain and describe the assumption you believe to be valid for short-lived radioisotopes.

Question 53 (Re: 1.c.)

- (a) Explain why you challenge the SAR assumption that the reactor is housed in a two story building.
- (b) Explain specifically and in detail why you challenge the SAR assumption of public exposure outside the building.

(Question 54 (Re: 1.d.)

- (a) Explain specifically and in detail why the SAR use of a 20% leak rate is invalid.
- (b) Describe all evidence you can present to support your response to (a).
- (c) State the leak rate you believe to be valid for this (SAR) purpose.
- (d) Explain specifically why you challenge the SAR assumption of a 30 mile an hour wind.
- (e) Describe the evidence you can present to show the wind velocity is an invalid assumption.

- (f) Explain precisely why you challenge the SAR assumption that leak rate is proportional to wind velocity and provide all evidence you can present to the contrary.

Question 55

- (a) Why do you believe Applicant should test the assumptions of the SAR listed in this contention?
- (b) Are you asserting that common scientific principles may not be used in the SAR calculations?
- (c) Describe specifically each article of nuclear physics literature by publication and page reference which deals with dose and dispersion models contrary to those used in the SAR.

Contention IX

Question 56

- (a) Other than two inspection reports from 1974 and 1975 (50-142/74-01 and 50-142/75-01) what evidence can you present in support of Contention IX?
- (b) What evidence can you present to show that Applicant's instrument calibration has been inadequate since 1975?
- (c) What evidence can you present to show that the calibration errors of 1974-75 have not been corrected?
- (d) What evidence can you present to show that emission calculations have been in error since the 1974-75 inspection reports?
- (e) Show specifically how any calibration errors have posed a threat to public health and safety.
- (f) Describe specifically and in detail all evidence you can present to show that Applicant has "continuing problems with heat balance calibrations."

Question 57

Clarify the meaning of IX.6 as to

- (a) What you consider to be "adequate time".
- (b) The specific form of "maintenance" you intend.

- (c) To what components of the facility you refer by the term "maintenance".
- (d) What specific instruments do you believe have not been adequately calibrated?
- (e) Describe all evidence that specific reactor components and safety systems have not received adequate maintenance.

Contention X

Question 58

- (a) Describe specifically and in detail all of the alternatives you believe exist to provide the student research and education performed by the UCLA reactor.
- (b) Describe the evidence you can present to show that the alternatives you list are available for UCLA student use, and (c) the cost of each alternative.

Question 59

- (a) Define precisely and completely the definition you intend by the term "design basis accident" (DBA) in X.2.a.
- (b) Explain specifically and in detail why you allege that a design basis accident is "likely" at the UCLA research reactor.
- (c) Describe all evidence you can present to show that a DBA is likely.
- (d) Explain specifically why you believe a DBA would expose great numbers of people to dangerous radiation doses including calculations of
  - (i) initial releases from the reactor designated in terms of each radioisotope and your evidentiary basis
  - (ii) the leak rate from the building and the scientific reference for your leak rate postulate
  - (iii) your calculations for wind velocity and directions
  - (iv) your dispersion model
  - (v) the doses you calculate at distances from the reactor room of: 45 feet; 200 feet; 450 feet and 1000 feet

- (e) In your responses to (d)(i)-(v) provide all your mathematical calculations you used to obtain the numerical figures.

Question 60

- (a) Regarding X.2.c. explain your precise meaning as to "inherent safety features" and "engineered safety features" describing in detail each feature you intend and a thorough explanation of why you believe each feature should be required of UCLA.
- (b) Explain in detail the configuration of the containment structure you believe should be built by UCLA.
- (c) Reference the 10 CFR Chapter 1 regulation requiring containment for a reactor the size of the one at UCLA.
- (d) Provide your mathematical calculations of the difference in releases with and without a containment in the event of reactor accident, specifically describing the accident you assume.

Question 61 (Re: X.2.d.)

- (a) Describe specifically each training activity you believe creates a likelihood of DBA more likely and the precise consequence to the reactor from the activity listed.
- (b) List separately each item of evidence you can present to show the following since 1976:
- (i) lax administrative controls
  - (ii) abnormal occurrence (describe each in detail)
  - (iii) unscheduled shutdowns (describe the shutdown and any adverse consequences)
  - (iv) minor accidents (describe exactly the accident and the consequences to University personnel, students, and the public)

Question 62 (Re: X.2.e)

Explain your precise meaning of "significant damage" you allege resulted from the 1971 earthquake and the specific threat to public health and safety you allege.

Question 63 (Re: X.2.f.)

Explain precisely why you believe use of highly enriched fuel makes the reactor vulnerable to criticality accidents.

Question 64

Describe the precise meaning of "design basis accident" you intend in X.2.g. and (a) the specific manner you believe fission products could be released as a result of the DBA and (b) the mathematical calculations you use to estimate releases to the public therefrom.

Contention XII

Question 65

- (a) Describe all evidence you can present to show that addition of a containment would provide a significant protection to the public.
- (b) Provide your mathematical calculations showing the difference in releases with and without containment in terms of each accident you believe possible.

Question 66 (Re: XII.2)

- (a) Describe the specific defect you allege exists in the radiation monitor system, and (b) describe the precise correction you believe is necessary. (c) Describe the evidence you could present to substantiate the necessity of the correction you recommend.

Question 67 (Re: XII.3.)

- I. Explain precisely why you allege each of the following is required or is inadequate and what corrections or additions you believe are necessary and why:
  - (a) boron-injection system
  - (b) radioactivity removal system
  - (c) emergency liquid and gaseous emissions holding tanks
  - (d) HEPA filters
  - (e) ECCS
  - (f) spare control blade motors
- II. In response to (a)-(f) provide the evidence and mathematical calculations you can present to show that each alleged correction or addition above would provide a significant protection to public health and safety.

Question 68 (Re: XII.4.)

- (a) Explain your precise meaning as to "adequate shielding" in this subpart, as well as (b) "access restrictions" and (c) areas where the public might be exposed to radiation and (d) what radiation dose you

allege the public is receiving in each area you identify in (c). (e) Describe all evidence you can present to substantiate your response to (d).

Question 69 (Re: XII.5.)

(a) Describe specifically the interlock systems you believe to be inadequate, explaining in detail (b) your reasoning as to why they are inadequate and (c) your view of an adequate interlock system and (d) your evidence to prove the inadequacy of the present system.

Question 70 (Re: XII.6.)

Describe all evidence you can present to prove that (a) no missile shields exist (b) the necessity of missile shields.

Question 71 (Re: XII.7.)

- (a) Describe specifically all evidence you can present to show that graphite used in 100 kw research reactors undergoes hazardous physical changes.
- (b) Describe in detail the hazard you mention in response to (a) and the precise consequences to public health and safety.

Question 72 (Re: XII.9.)

(a) Describe the specific evidence you can present to show that the reactor's control blades are inadequate and (b) how any problems with control blades have affected public health and safety.

Contention XIII

Question 73

Explain specifically and in detail why you believe the Applicant's possession of SNM in the amount of a fresh core and present core is "excessive".

Question 74

Explain specifically and in detail why you believe that SNM for one irradiated (4700 gms) core and one fresh core (4700 gms) is dangerous to the public.

Question 75

- (a) Explain precisely how you believe UCLA could operate the reactor for its present functions with a lower enrichment level and



- (b) describe all evidence you could present to substantiate your response to (a).

Contention XIV

Question 76

(a) Describe each problem common to Argonaut reactors; (b) the evidence you possess to show their existence; and (c) the exact safety significance of each problem. (d) Identify the source of your information on each problem.

Question 77

Describe all evidence you can present to show that problems important to safety at other Argonaut reactors exist also at UCLA.

Contention XV

Question 78

Describe all evidence you can present to show that (a) consequences of an accident to the population on campus and near UCLA would be significant and (b) the number of persons who would be affected and (c) the doses you predict for the population. (d) Include all mathematical calculations for doses and (e) all sources of demographic information you use in your response to (b).

Question 79

In terms of potential doses, what significance do you give to the fact that additional buildings have been constructed near the reactor building? Provide your calculations to substantiate your response.

Question 80

Explain specifically how the air-conditioning and air-flow systems of the new building interface directly and indirectly with the air-flow systems at the reactor building, and provide your evidence to support this statement.

Question 81

What safety significance do you attach to the interface of systems described in XV.3? Provide the exact doses you calculate and the method of calculation used.

Contention XVI

Question 82

- (a) Specifically list and describe each component of the UCLA reactor that you believe is a danger because it is old, and state its age.
- (b) State the evidence you can present to show the item is a threat to public health and safety.

Question 83

Explain specifically and in detail why you allege that "difficulty" in repairing or replacing instrumentation is a danger to public health and safety.

Question 84

Of what safety significance is the fact that the UCLA reactor was built by a company no longer in business?

Contention XVII

Question 85

What magnitude earthquake do you believe should be considered as the SSE in Los Angeles? Why?

Question 86

- (a) Describe specifically and in detail the consequences of a severe earthquake to the nearby population from reactor damage.
- (b) Describe your evidence to support these consequences, especially your method of calculations, computer models, and assumptions.

Question 87

(a) Specifically describe the damage to the reactor from the 1971 earthquake you characterize as "significant," and (b) explain the consequences of the damage to public safety.

Question 88

State specifically what information you believe should be provided by UCLA to comply with 10 CFR 50.34(b)(1) in terms of studies, literature, reports known to you.

Contention XVIII

Question 89

State and specifically describe all evidence you can present to show that the University of California will not obtain or allocate sufficient funds to maintain the UCLA research reactor in a safe condition.

Contention XIX

Question 90

(a) Describe specifically and in detail what consequences you believe would occur if explosives were thrown at the reactor, including the specific explosive and the amount assumed, and (b) describe all calculations used.

Question 91

Describe the consequences you believe would occur to the saboteur postulated by this contention, and provide your basis.

Question 92

Specifically describe the difference you calculate in harmful consequences to nearby persons between an explosion which damages the reactor and the same explosion without damage to reactor.

Question 93

Provide all evidence you can present of all airline routes over or near Boelter Hall as well as light aircraft overflights.

Question 94

Describe specifically the potential consequences to persons occupying Boelter Hall in the event of (a) a large aircraft crash onto the building (b) a small aircraft crash (c) as distinguished from harm resulting from an aircraft crash into another building on UCLA campus. (d) Provide all mathematical calculations used in your response.

Question 95

(a) Define your precise meaning by "multiple failure mode" in XIX.3. and (b) what consequences you estimate from this series of events, and (c) explain the possibility of the multiple failure mode.

Question 96

(a) Define specifically each and every operator error you allege could lead to a DBA and (b) describe the DBA resulting as well as (c) its threat to public safety.

Contention XXI

Question 97

Explain precisely what time delay you believe would result as alleged in subpart 1.

Question 98

(a) Explain specifically why you allege that "unnecessary delay" would result by clearing evacuation through the Vice-Chancellor's office and (b) what better procedure should be instituted and (c) why.

Question 99

(a) Explain specifically why you allege that alternative evacuation personnel are inadequate; (b) what you believe should be provided and (c) why.

Question 100

What different provisions do you believe should be made by your allegation in XXI.4.?

Question 101

What evidence do you have that UCLA has no "viable plan for evacuating the entire campus"?

Question 102

(a) Explain specifically why you believe the UCLA medical center should be shutdown in case of a major accident and (b) explain your specific meaning by "major accident" and (c) provide all calculations showing the UCLA medical center would be adversely affected.

Question 103

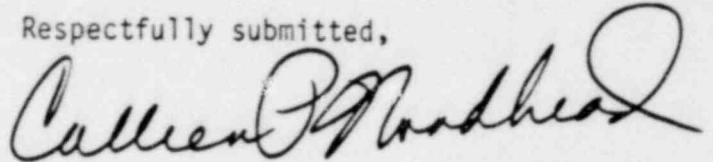
Explain your specific meaning as to details you believe necessary concerning equipment and its quantities as alleged in subpart 8.

Question 104

(a) Explain why you allege that training exercises are not performed on a regular basis and (b) your evidence in support of this claim.

The Intervenor's attention is directed to 10 CFR § 2.740(e)(1)-(3) which sets forth a duty to supplement certain responses to interrogatories upon the acquisition of further knowledge. This section requires supplements to interrogatories to provide information concerning persons with knowledge of discoverable matters; identity of expert witnesses; and corrections and/or changes in previous responses.

Respectfully submitted,

A handwritten signature in cursive script, reading "Colleen P. Woodhead". The signature is written in black ink and is positioned above the typed name and title.

Colleen P. Woodhead  
Counsel for NRC Staff

Dated at Bethesda, Maryland  
this 20th day of April, 1981

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF INTERROGATORIES TO INTERVENOR CBG" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, or, as indicated by an asterisk, through deposit in the Nuclear Regulatory Commission's internal mail system, this 20th day of April, 1981:

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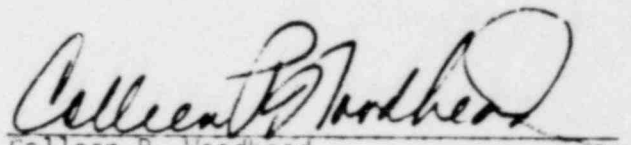
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Atomic Safety and Licensing Board  
Panel\*  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Atomic Safety and Licensing Appeal  
Panel (5)\*  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Docketing and Service Section (7)\*  
Office of the Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

  
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