## Docket No. 50-142

NOV 9 1982

Dr. Sean C. Hawley Battelle Pacific Northwest Laboratories P. O. Box 999 Richland, Washington 99352

Dear Dr. Hawley:

In its Order dated November 1, 1982, the Atomic Safety and Licensing Board (ASLB) required Dr. M. Robkin of the University of Washington to provide his resume and to answer questions C-1, C-17, C-18, C-19, C-22 and C-24 posed by the Committee to Bridge the GAP (CBG). The questions are delineated in pages 6 thru 9 of the enclosed ASLB Order.

Please have Dr. Robkin respond as soon as possible and inform Hal Bernard regarding the approximate date of his response.

Sincerely,

Cecil O. Thomas, Acting Chief Standardization & Special Projects Branch Division of Licensing

Enclosure: As stated

cc: See next page

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University of California at Los Angeles

cc w/ enclosure(s):

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Mr. John Bay 3755 Dividadero #203 San Francisco, California 94123 UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges: John H Frye, III; Chairman Dr. Emmeth A. Luebke Dr. Oscar H. Paris

In the Matter of

924230319

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA Docket No. 50-142 OL (Proposed Renewal of Facility License)

(UCLA Research Reactor)

November 1, 1982

MEMORANDUM AND ORDER (Regarding CBG's Objections to Certain Portions of July 26, 1982 Prehearing Conference Order)

## BACKGROUND

During the prehearing conference of June 30, 1982, Committee to Bridge the Gap (CBG) raised a discovery dispute between itself and the NRC Staff. The disagreement concerned the scope of discovery to be permitted on the subject of the professional associations of the authors of the so-called Battelle Study (Analysis of Credible Accidents for Argonaut Reactors, NUREG/CR-2079 PNL-3691). (Tr. 726 <u>et seq</u>.) This study was prepared by the Pacific Northwest Laboratory operated by Battelle Memorial Institute. The authors are S.C. Hawley and R.L. Kathren of Pacific Northwest Laboratory and M.A. Robkin of the University of Washington. CBG seeks information concerning the

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relationships which the authors may have with another Argonaut licensee, the University of Washington, which CBG alleges may have created conflicts of interest leading to a biased study. (Tr. 729.)

During discovery, CBG posed a series of 15 identical interrogatories to Messrs. Hawley, Kathren, and Robkin aimed at eliciting information concerning their association with other Argonaut reactors. In addition, CBG posed 11 more questions on this point to Robkin.

Pursuant to agreement reached at a meeting between CBG and Staff on November 24, 1981, Staff filed a series of responses to the interrogatories on March 17, April 19, and May 10, 1982. Staff believed that its agreement with regard to discovery was satisfied on May 10, 1982. (Tr. 729). All three individuals answered the 15 identical questions, but Professor Robkin failed to answer the 11 additional questions put to him. CBG now objects that some of the answers were insufficient, and complains of Professor Robkin's failure to answer the additional questions. (Tr. 726-27).

On July 26, 1982, this Board issued a Prehearing Conference Order which ruled that the Staff did not have to furnish any additional information to CBG with respect to this matter because interrogatories in question were not likely to lead to the discovery of admissible evidence. (Order at 7.) The Board was unwilling to consider conflict of interest considerations where there was no allegation that the authors have any relationship with UCLA or any financial interest in writing a favorable report. (Id. at 6-7.) We declined to assume that a

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scientist's or engineer's professional association with or use of a device so biases his or her professional judgment as to render that judgment suspect. (Id. at 7.)

On August 6, 1982, CBG filed objections to certain portions of the Prehearing Conference Order for the purpose of "preserv[ing] those objections for the record." (CBG Objections to Certain Portions of July 26, 1982 Prehearing Conference Order, August 6, 1982, at 1). In this document, CBG reasserted its need for further information on the professional associations of the authors of the Battelle Study, particularly Messrs. Robkin and Kathren, whom the Staff does not intend to call-as witnesses. (Id. at 4-5.) CBG pointed out the fact that the Battelle Study was used as a substitute for an earlier study performed for the Staff by a University of California employee and is currently being relied upon both by Staff and by opplicant. (Id. at 2.) It is also troubled by the fact that two of the three researchers are on the payroll of an Argonaut licensee, and the third nas close ties to the same licensee. (Id.)

In its objection, CBG also raised questions of impropriety concerning a comment which appeared on the record of the Radiation Safety Committee at UCLA on December 15, 1980. Briefly, the comment stated, six months before the Staff position was released, that the Staff would "shift from neutral to support of UCLA" in the spring. (<u>Id</u>. at 2.)

On August 13, 1982, the Board issued a letter which informed the parties that it elected to treat CBG's objections as a motion for

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reconsideration. Responses were requested by August 23, 1982. Applicant's response was filed on August 20, $\frac{1}{}$  and Staff's response was filed on August 23. $\frac{2}{}$  The Applicant took the position that the dispute existed only between CBG and Staff, and concurred in the Board's denial of CBG's request for additional information. (University Response at 2.)

The University agreed with the Board that further inquiry was not likely to lead to admissible evidence, since it cannot be assumed that mere professional association with or use of a particular device so biases professional judgment as to render that judgment suspect. (Id. at 1.) Applicant also asserted that no one at UCLA had any advance knowledge of the outcome of the Staff's study of the Argonaut reactor. (Id. at 2.)

The Staff argued that its April 19 responses to the CBG interrogatories agreed upon on November 24, 1981, were adequate. (Staff Response at 2, 5.) These responses, Staff asserted, included the professional qualifications of the authors and answers to questions concerning their association with the University of Washington. (Id. at

<sup>1/</sup> University Response to to CBG Objections to July 26, 1982 Prehearing Conference Order, August 20, 1982.

<sup>2/</sup> NRC Staff Response to Intervenor Objections to Board Order, August 23, 1982.

5.) Staff also maintained that the contacts enumerated do not violate the NRC's policies against organizational conflicts of interest. (Id. at 8.) Staff reiterated its lack of knowledge of the basis of the comments appearing on the record of the Radiation Safety Committee at UCLA. (Id. at 4.)

Although CBG's allegations are insufficient to convince the Board that a conflict of interest exists, we are troubled by inferences which may be drawn from the author's association with an Argonaut licensee and the Applicant's reliance on a study done for the Staff. Based on the information presented, the Board revises its ruling of July 26 to require.Professor Robkin to furnish his resume and to answer certain of the questions posed by CBG.

## DISCUSSION

CBG has phrased its objections in terms of conflict of interest. We believe, however, that the substance of its complaint goes more to the credibility of the witnesses and the weight to be accorded to the study which they authored. These are clearly appropriate subjects for exploration at a hearing and consequently cannot be eliminated from discovery.

The questions thus becomes whether CBG has shown that further discovery on this point is likely to lead to admissible evidence. We

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have chosen to apply this lesser standard, while recognizing that a higher threshold must be met for discovery against the Staff,  $\frac{3}{2}$ because of the background in this proceeding of voluntary discovery pursued by the parties. We do not mean to imply that by engaging in voluntary discovery at the urging of the Board the Staff has waived the more stringent standard. We address the less stringent standard first because we believe it probably comes closer to that which the Staff and CBG have put into practice during their negotiations, and second because that is the standard the Staff has raised in its objections. (Tr. 728, Staff Response at 5.)

In order to judge whether CBG's questions are likely to lead to the discovery of admissible evidence, we must first look at the specific questions, answers, and objections in issue.

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The specific questions with the answers which CBG regards as insufficient are the following:

Question C(1) addresses to Robkin:

Please provide a current c.v. or resume and indicate in addition any other technical qualifications upon which you base your expertise as to the matters addressed in the report in question.

Professor Robkin answered:

<sup>3/</sup> Discovery against the Staff is governed by special provisions. 10 CFR § 2.744 limits documentary discovery against the Staff to items not reasonably obtainable from other sources. Pennsylvania Power and Light Company (Susquehanna Steam Electric Station, Units 1 and 2), ALAB-613, 12 NRC 317, 323 (1980). Interrogatories may be addressed to the Staff only "where the information is necessary to a proper decision in the case and not obtainable elsewhere." 10 CFR § 2.720(h)(2)(ii), Id.

I am a Professor of Nuclear Engineering and a Professor of Environmental Health on the faculty of the University of Washington (U.W.), Seattle, Washington. A statement of my professional qualifications is attached to this affidavit.

However, unlike Hawley and Kathren, who also furnished statements of professional qualifications and resumes, Robkin did not furnish a resume. Staff has not indicated why.

We believe that a request for a resume from one of the authors of a study which is clearly the subject of admitted contentions is not unreasonable. Staff should supply CBG with Professor Robkin's resume.

Question B(3) addressed to Kathren:

Do you now, or have you within the last five years, received a paycheck from any of the five current Argonaut reactor licensees? If so, please explain.

Kathren answered by referring to his answer to Question B(2), which stated:

Affiliate Assistant Professor Radiological Sciences, University of Washington, Joint Center for Graduate Study, Richland, 1978 to date; Coordinator in Radiological Sciences, Joint Center for Graduate Study, Richland, 1980 to date. Have also given occasional lectures/seminars at the University of Washington, Seattle, in Radiological Sciences and Environmental Health classes and have taught continuing education classes through Joint Center for Graduate Study, Richland.

CBG objects that this does not constitute an explicit answer to the question (Tr.735). Explicitness aside, it is an adequate answer. CBG is well aware that the University of Washington is an Argonaut licensee. CBG's objection is overruled.

Questions B(4) and C(4), addressed to Kathren and Robkin, asked:

Do you have personal acquaintance with any of the current or past staff of the reactor facilities at any of the five Argonaut facilities? If so, please identify each such individual and describe the nature of the acquaintance.

Kathren answered:

My professional acquaintances and associations are many, and I am unaware of the specific background experience of each nor am I cognizant of the current or past staff of the five Argonaut facilities. Needless to say, I am acquainted with some members of the staff at the University of Washington Argonaut reactor. If specific names of interest are provided, I will endeavor to accurately identify the nature of my association with each.

Robkin answered:

I have acquaintance with the staff of the U.W. reactor. I have known all of the staff since we are in the same Department and since I have taught classes which utilized the reactor. These staff members include Mr. W.P. Miller, Associate Director for Reactor Operations; Mr. DeLoss L. Fry, Assistant Director for Facilities Engineering; Mr. Astor G. Rask, Chief Electronics Engineer; and Professor W.S. Chalk, Director of the Nuclear Reactor Laboratory. In each case, the relationship has been a professional one.

CBG asserts a need to followup, particularly with regard to Kathren's answer. We fail to see any relevance to this inquiry. One's personal acquaintances simply do not impinge on one's scientific or engineering credibility. CBG's objections are overruled.

We now consider the additional questions posed to Professor Robkin which he did not answer. CBG asserts the need for answers to seven of the total of 11 questions (Tr. 737.) These seven questions are:

> C(17) Do you teach any courses which utilize the U of W Argonaut? If so, please specify which classes, what use the reactor is put to, and how many hours per year roughly of reactor time you so use.

C(18) Have you in the past taught any classes that use the reactor: Please give details.

C(19) Do you now, or have you in the past, used the U of W reactor for any research, neutron activation, or other non-teaching activity? If so, please detail with specificity the uses to which you have put the reactor, the research you have conducted with it, and roughly the hours of reactor use so involved.

C(21) Do you have colleagues at the University of Washington who use the reactor for teaching or research or other activities? If possible, please identify colleagues who are principal users and the use put.

C(22) Do you now, or have you in the past, sat on any supervisorial committee for the U of W reactor (reactor hazards committee, etc.)? If so, please detail said involvement.

C(23) Are you personally acquainted with any members of said supervisorial committees; if so, in what capacity?

C(24) Were the University of Washington reactor shut down, would any of your research or teaching activities have to be modified or curtailed? If so, please specify what activities would have to be altered and how. If not, please specify precisely why no alteration would be needed.

As we stated earlier those questions which seek to probe the personal acquaintances of Professor Robkin need not be answered in order to assess his professional credibility. There is no need to inquire into the activities of Professor Robkin's colleagues. Thus, questions C(21) and C(23) need not be answered.

Professor Robkin's own relationship with the Argonaut reactor, on the other hand, raises questions as to his ability to impartially evaluate its merits. The degree to which his work is associated with the reactor should be disclosed more fully in order to assess the impact a negative evaluation might have on him. The Board therefore directs Professor Robkin to answer questions C(17), C(18), C(19), C(22) and C(24). As we stated in our Order of July 26, 1982, CBG asks us to assume that a scientist's or engineer's professional association with or use of a device so biases his or her professional judgment to render that judgment suspect. (Order, at 7.) We decline to make this assumption. The Board recognizes that the sources to be drawn upon for the most expert and competent evaluation of complex technology are those who are most familiar with that technology. It is often true that those with sufficient knowledge of the technology to perform an evaluation are somehow connected with its development and/or use. This is not fatal to the objectivity of the study.

Questions of conflict of interest or bias resulting from professional interests have arisen most frequently in the context of challenges aimed directly at the decisionmaker. The import of the professional associations of a Licensing Board member on his ability to render an unbiased decision was addressed early in the history of the Licensing Board Panel. (Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), ALAB-12, 4 AEC 413 (1970).) In <u>Shoreham</u>, the Appeal Board rejected the Lloyd Harbor Study Group's request that two of the Board's members be disqualified for bias because of professional affiliations with, respectively, an industrial corporation and the engineering department of a university. In its ruling, the Appeal Board set forth the Commission's policy regarding such conflicts:

.... [W]e fail to see the basis for the Study Group's presumed conclusion that private affiliation in an area involving nuclear activity is, necessarily, a disqualifying factor .... [T]he experience which comes from private involvement in the nuclear field has, with good reason, not

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been considered a disabling circumstance. . . This is a long-established and well-known course on the part of the Commission and has as its sound objectives the utilization in the licensing review process of "technical experts with extensive experience in industrial and academic nuclear programs." Id. at 414-15 (footnote omitted).

Indeed, this conclusion was reached by the Congress when it enacted § 191 of the Atomic Energy Act. That provision specifically authorizes the Commission to appoint Board members from private life. In commenting on this provision in its report, the Joint Committee on Atomic Energy stated that "[i]t is expected that the two technically qualified members [of a board] will be persons of recognized caliber and stature in the nuclear field." (Senate Report No. 1677, July 5, 1962; 1962 U.S. Code Cong. & Adm. News 2207 at 2211.) Clearly Congress did not intend that professional experience in the nuclear field should be deemed® to disqualify one from service on a board. Consequently that experience cannot be deemed to constitute a disqualifying conflict of interest for a staff consultant.

Nor is this conclusion unique to the Commission. The standard for objective agency decisionmaking in NEPA cases was articulated by the Eighth Circuit in Environmental Defense Fund v. Corps of Engineers of the United States Army, 470 F.2d 289 (8th Cir. 1972). The test is one of good faith objectivity, rather than subjective impartiality. <u>Id</u>. at 296; <u>accord</u>, <u>Carolina Environmental Study Group</u> v. <u>United States</u>, 510 F.2d 796, 801 (D.C. Cir. 1975).

However, a problem arises with respect to credibility when the associations that give rise to this expertise are of such a nature that

an impartial decision may not be possible. Where the use of a device is integral to a consultant's job, an unfavorable evaluation of the device may have devastating personal consequences. The consultant may not then be able to make an objective study of that device.

In the present situation, we are specifically concerned with the opinions expressed by Prof. Robkin on the safety of the Argonaut reactor. Prof. Robkin submitted a report which, after editing, was incorporated as the "Graphite Fire" section of the Battelle study. (Response to interrogatory C8.) The Battelle study constitutes the Staff's principal analysis of the safety of the Argonaut reactor. Even more, UCLA has now substituted it for its own hazards analysis. Prof. Robkin is a Professor of Nuclear Engineering and Chairman of the Radiation Safety Committee at the University of Washington. (Maurice A. +C.3-13 Robkin - Professional Qualifications, response to interrogatory C2.) He has utilized the University of Washington Argonaut for some of his classes. (Response to interrogatory C4.) His connections with the Argonaut reactor are more than passing. Further assurance may well be required that these connections are sufficiently attenuated from the work done for the NRC Staff to satisfy the requirement of good faith objectivity.

The cases provide limited guidance on what constitutes bias on the part of a Staff consultant, rather than a decisionmaker. At least two circuits seem to have adopted the idea that bias is not shown if the views expressed are formed in the course of performing the advisor's proper functions for the agency. Rombough v. Federal Aviation

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Administration, 594 F.2d 893, 900 (2d Cir. 1979); <u>Starr v. Federal</u> <u>Aviation Administration</u>, 589 F.2d 307, 315 (7th Cir. 1978) (refusal to disqualify Federal Air Surgeon from decisionmaking regarding rule requiring commercial pilots to retire at age 60, although he had participated in preparation of a position paper that opposed relaxation of the rule). Here the possibility has been raised that the authors of the Battelle study have formed a bias concerning the Argonaut reactor which results from their use of that machine for a Commission licensee, rather than from the performance of review functions for the Staff. Under the teaching of these cases, this possibility cannot be dismissed at the outset as having no relevance to this proceeding.

We do not now rule that the authors of the Battelle Study have formed biased views of the UCLA Argonaut reactor through their work with a Similar reactor. However, we do agree with CBG that this possibility may not be dismissed at the threshold and that CBG is entitled to more information on that possibility.

In reaching this result, we assume that, as the Staff has suggested, the contract awarded has passed muster under the NRC's contracts review process. The agency has promulgated formal rules dealing with organizational conflicts of interest under Section 170A of the Atomic Energy Act of 1954, as amended. (42 USC Section 2210a(b).) These rules can be found at 41 CFR Part 20. As the Staff points out, the fact that an entity may work both for the NRC and for a licensee is not, in itself, a conflict of interest. (Staff Response at 10.) If the work being done for the regulated party does not bear any necessary

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technical relationship to the work requested by the NRC, a conflict of interest does not result for purposes of awarding a contract. (Id. at 11.) Nevertheless, the fact that the contract has passed muster under 41 CFR Part 20 does not necessarily preclude allegations with regard to bias on the part of individuals who performed the contract.

We now turn our attention to CBG's allegation of Staff impropriety concerning the comment appearing in the record of the Radiation Safety Committee at UCLA on December 15, 1980, to the effect that the Staff would support UCLA's application. This matter was disposed of at the Prehearing Conference of June 30, 1982, where the Staff asserted that it had no knowledge about why the comment was written. (Tr. 743.) Further inquiry to the Staff on this matter will not yield different information.

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## ORDER

In consideration of the foregoing, it is this 1st day of November, 1982, ORDERED that Professor Robkin shall respond to CBG interrogatories C 17, C 18, C 19, C 22 and C 24, and shall further respond to interrogatory C 1 by furnishing a copy of his resume.

THE ATOMIC SAFETY AND LICENSING BOARD

John H Frye, III, Chairman ADMINISTRATIVE JUDGE

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ADMINISTRTIVE JUDGE

Bethesda, Maryland November 1, 1982