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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 OL
THE REGENTS OF THE UNIVERSITY)	
OF CALIFORNIA)	
)	(Proposed Renewal of Facility
(UCLA Research Reactor))	License No. R-71)
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CBG MOTION FOR EXPEDITED RULING ON ITS SEPTEMBER 7, 1982, MOTION FOR PARTIAL SUMMARY DISPOSITION OF CONTENTION XIII, AND THE SETTING OF A MAY HEARING DATE FOR ANY REMAINING ISSUES AS TO CONTENTION XIII

I. Introduction

On September 7, 1982, the Committee to Bridge the Gap (CBG) moved the Atomic Safety and Licensing Board for summary disposition or, in the alternative, partial summary disposition, of Contention XIII. That contention asserts that the amount and enrichment of Special Nuclear Material (SNM) applied for by UCLA are excessive. The contention also alleges that the information contained in the application regarding criticality accident protection, mitigation, monitoring and response is insufficient to meet the requirements of 10 CFR Part 70. Affixed to the motion, as required, was a short, concise statement of material facts asserted by CBG to not be in dispute.

By letter dated October 29, 1982, the Staff informed the Board that it did not dispute CBG facts 2-10, 12-14, and 17-22. Thereafter the Staff supplied citations to support its assertion that genuine disputes do exist as to facts 1, 11, 15, and 16.

By letter dated January 7, 1983, the Applicant provided its identification of the facts it disputed and the citations on which it based its assertion that genuine disputes do exist. For Contention XIII, Applicant disputed facts 1, 11, and 15, relying on virtually identical citations as those of Staff. Like Staff, the Applicant did not dispute the remaining facts although, unlike Staff, the Applicant also did not dispute fact 16.

In its Memorandum and Order of February 8, 1983, the Board ruled on certain parts of the motions for summary disposition by Staff, Applicant and CBG. At page 36-37, the Board addressed three asserted facts as to Contention XIII: Staff #1 and CBG #11 and 15. The Board did so in the context of its consideration of inherent safety issues, leaving aside other portions of the contention viewed as dealing with matters such as proliferation risks.

One week after the Board issued its Order, Staff transmitted to the Board and parties a February 7 letter from J.E. Matos of the RERTR program (Reduced Enrichment for Research and Test Reactors), Argonne National Labs, to Dr. K.L. Mattern, USDOE, on the subject of potential convertibility of the UCLA reactor from HEU (93%) to LEU (<20%) fuel. The letter indicated no technical barriers to converting the UCLA reactor from HEU to LEU and appears to confirm CBG's assertions that TRIGA-type LEU fuel is currently available for use in the UCLA reactor, that advanced high-density fuels will be available shortly (the letter indicates by the end of the year), and that even without the high-density fuel and with maintaining the excess reactivity of the UCLA reactor (which CBG has contended should be reduced), flux reduction would be insignificant (~15%). Use of the higher density fuel, or reduction in the available excess reactivity, would mean no reduction whatsoever.

In view of this new development, it appears that no genuine

disputes remain as to Contention XIII except as to the criticality protection information matter and perhaps the Plutonium source matter. CBG therefore respectfully requests an immediate ruling on its Motion for Summary Disposition of Contention XIII, and a prompt scheduling for hearing of whatever matters remain in dispute thereon.

Because the Applicant has indicated that it would not comply with a License condition requiring conversion to LEU fuel, and would instead withdraw its Application, this matter should be resolved promptly as it may be dispositive of the Application, and make additional hearings unnecessary.

II. DISCUSSION

On August 17, 1982, the Commission issued a Policy Statement on the use of Highly Enriched Uranium (HEU) in research reactors. 47 FR 37007. This Policy Statement committed the agency to use its licensing authority to reduce, "to the maximum extent possible," the use of HEU in domestic and foreign research reactors. The Commission noted that to date U.S. research reactor operators "have shown little interest in converting to lower enrichment fuel," and concluded that it would take steps to encourage such conversion by U.S. research reactor operators.

No party disputes the fact that it is official U.S. policy to reduce the enrichment of research reactor fuels (CBG fact 10), nor that other Argonaut reactors have operated on LEU (CBG facts 12-14). The only asserted disputes on the HEU matter relate to the availability of LEU replacement fuel. Staff and Applicant both disputed CBG facts 11 and 15, at least until the recent Argonne letter described above.

Those facts are as follows:

CBG FACT 11. Reduced enrichment fuels are currently available on which the UCLA reactor can run.

CBG FACT 15. Advanced reduced enrichment fuels of higher Uranium loading will soon be available on which all but the highest power research reactors can run.

CBG has demonstrated that TRIGA LEU fuel is currently available for conversion of flat-plate HEU reactors such as UCLA's. (see Exhibit U, CBG summary disposition motion for Contention XIII; and particularly the declaration by Mr. Aftergood for the same contention in CBG's summary disposition response, and attachments A-E thereto).

CBG has further demonstrated that advanced high-density LEU fuels will soon be available. (see Hafemeister declaration and exhibits C-H, U, attached to CBG motion for summary disposition).

Neither Staff nor Applicant has directly disputed the current availability of TRIGA LEU fuel. The dispute as to future availability of high-density LEU fuel seems to center on the issue of how soon is "soon." That dispute now seems to be resolved in the recent admissions by Staff found in the February 7, 1983 Matos letter, which indicates at page 2 that development and irradiation testing have been completed for small plate oxide fuel (the oxide fuel is indicated to be the appropriate type for UCLA's reactor); that testing of full scale plate fuel should begin this month (March 1983); and "that sufficient data to support licensing requirements is expected to be available around the end of 1983." (emphasis added)

The Matos letter also indicates: "The reactor could also use TRIGA LEU fuel in a rodged geometry." (emphasis added). Matos gives cost estimates for this conversion.

Thus, both of CBG asserted facts are now no longer in dispute-- the UCLA reactor could now use TRIGA LEU, and by the end of the year

advanced density fuel appropriate for UCLA will be available.

Furthermore, Matos gives data indicating that if the current excess reactivity level were to be maintained (and CBG has urged a major reduction) and if LEU not of high density were employed, the flux reduction would be minimal, on the order of 15%. This matter, put forth originally by Staff, now appears resolved.

Therefore, the three facts on Contention XIII related to HEU (CBG facts 11 and 15, Staff fact 1) as to current and future availability of LEU and flux level now seem resolved by the new information put forth by Staff. CBG's motion for partial summary disposition on these matters should now be granted.

Only two other asserted facts remain at issue as to Contention XIII. One deals with whether the information provided in the application as to criticality accident control is adequate. Staff and Applicant cite portions of the Application which they maintain demonstrate sufficient information to meet the provisions of the regulations; CBG maintains these portions do not adequately meet those provisions. This matter appears to be genuinely disputed and should be resolved at hearing. CBG respectfully suggests that this matter be resolved at the summer hearing on inherent safety matters, since criticality accidents are among the accident scenarios being considered.

The only remaining fact supporting CBG motion for summary disposition of Contention XIII is #16, which asserts that

The UCLA reactor does not use a Plutonium-Beryllium neutron startup source.

Significantly, the Applicant, whose reactor this is, does not dispute this fact. Staff does, but provides no citation. Staff asserts instead that the source requested in the reactor license application is not for the reactor but for the subcritical assembly (which is not part of the license application, nor even federally licensed, being licensed by the state). CBG maintains that no dispute exists, but is prepared to go to hearing

on the matter should the Board rule otherwise.

CBG therefore respectfully requests that the board, in light of the recent admissions by Staff regarding the availability of LEU, grant CBG's motion for partial summary disposition of Contention XIII, at least in so far as it deals with HEU, and that it set an early hearing date for all matters determined to be still in dispute. CBG respectfully suggests that that hearing occur during the May period previously proposed by the Board for the onset of the inherent safety hearings, now apparently postponed until later in the summer (with the exception of the criticality matter, which should be included in the summer safety hearing).

The University has asked for an early resolution of its motion for summary disposition as to class of license because of its intention to withdraw from the proceeding if faced with an adverse ruling on that matter. The Applicant has declared the same intention with regards Contention XIII. Surely rapid resolution of this matter is likewise called for. In fact, CBG would suggest that we go to hearing in May on Contention XIII and II (aside from those matters related to Contention XIII resolved through grant of CBG's motion for summary disposition thereof, and aside from the criticality matter).

The University has argued that much of Contention XIII is moot because UCLA refuses to convert to LEU, even if such a conversion were a condition of its license being renewed. The University has said it would withdraw its application and shut down its reactor rather than comply with an order to convert to LEU, as contemplated in the Commission's Policy Statement on HEU of August 17, 1982.

Such a threat in no way makes moot the issue of whether UCLA should, as a condition of license renewal, be required to convert to non-weapons-grade uranium because of either safety or proliferation concerns. Conversion is the policy of this government; grant of a

license for weapons grade uranium when a safer alternative is available is unthinkable; and threatened refusal to use the alternative if found to be necessary is simply irrelevant to the Board's determination as to whether the alternative should be required. UCLA's request for weapons-grade uranium must be viewed in light of the availability of appropriate alternatives involving far less risk.

UCLA is free to refuse to comply with conditions of a license by declining a license so conditioned. But the Board is not free to refuse to impose conditions necessary for public safety and the common defense merely because an Applicant says it will not comply with those necessary conditions. If HEU poses significant proliferation risks, as has been determined by the Commission, and if conversion to LEU can reduce those risks substantially, a concept endorsed by the Commission, and if LEU conversion fuel is available, that issue must be reached by the Board if placed before it. UCLA is free to withdraw from the proceedings if it doesn't like the Board's ruling on the matter, but the Board's ruling must be based on the facts and the law, not any threatened response by an Applicant unhappy with an adverse ruling.

UCLA's argument that it could not afford the costs of conversion is dubious and irrelevant. However if it wishes to advance that argument, the University should be required to put forth evidence indicating no assistance available from outside sources and a true estimate of the actual costs. CBG is prepared to put forth evidence contradicting both assertions by UCLA as to lack of assistance and its estimate of \$500,000 cost for converting (the Staff's Matos letter estimates half that cost). Furthermore, CBG finds it extraordinary that UCLA should argue on the one hand that it is financially qualified to safely operate this reactor, that should any safety problem develop it has the financial resources to respond appropriately, and yet to argue on the other hand that if faced

with a \$250,000 conversion cost determined by the NRC to be necessary for either safety or proliferation reasons, or both, it would be financially unable to take the required measures. UCLA cannot have its cake and eat it too. Either it can afford to safely operate the reactor, and thus can make the necessary fuel modification if determined necessary, or it isn't financially capable of safely operating the reactor and must have its license denied on financial qualifications grounds.]

CBG has, throughout this proceeding, attempted to act responsibly in not blindly opposing UCLA's license request but rather advancing specific safety, environmental, and common defense concerns and showing how those concerns could be resolved (e.g., raise the exhaust stack, move the roof air inlet, put in decay tanks, convert to LEU, etc.). This is the usual fashion in which ASLBs resolve concerns verified in the hearing process, through grant of license with certain specified conditions.

But the University appears to be trying to improperly influence Board decisions by threatening to withdraw its application if such conditions are even considered.

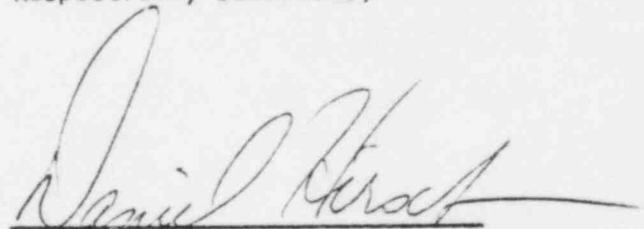
Although these threats must remain irrelevant to the Board's actual decision, they do make it imperative that the SNM issue, like the Class of License issue, be resolved early. UCLA has requested a prompt resolution of the latter issue; to that request we add our request for prompt resolution of the former. Thus CBG respectfully requests a prompt decision on its motion for summary disposition of Contention XIII, and the setting of a May date for hearing on any remaining matters related thereto.

III. Conclusion

The recent letter forwarded by Staff from the RERTR program at Argonne Labs indicates there is no longer any genuine dispute as to the

current availability of TRIGA LEU, the near-term availability of advanced high-density LEU, and the insignificant effects, if any, conversion would have on flux. In light of this new development, CBG respectfully requests immediate ruling by the Board on its motion for partial summary disposition of Contention XIII, and the setting of a May hearing date for any disputes remaining thereon, with the exception of the criticality matter, which should await the summer safety hearings. The Class of License issue can also be heard in May if the Applicant continues to desire an early resolution of that matter.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Daniel Hirsch", written over a horizontal line.

Daniel Hirsch
President
Committee to Bridge the Gap

dated this fifteenth day of March, 1983
at Los Angeles, California

