COMMITTEE TO BRIDGE THE GAP

10915 STRATHMORE DRIVE
LOS ANGELES, CALIFORNIA 90024
(213) 478-0829

Joseph M. Hendrie, Chairman
U.S. Nuclear Regulatory Commission
1717 H Street N.W.
Washington, D.C. 20555

October 3, 1979

Dear Chairman Hendrie:

Information has come to our attention which raises serious questions about the safety of the reactor at the UCLA Nuclear Energy Laboratory. We believe that these problems are of such gravity that immediate action by the NRC is necessitated. We hereby request you to take the following actions:

1. Issue an order to shut down the UCLA reactor pending resolution of the safety questions that have been raised. We believe that an examination of the enclosed materials will convince you that the usefulness of continued reactor operation is far outweighed by the possibility of exposure of the public to unnecessarily high levels of radiation from that nuclear facility.

2. Because public concern over the safety of the reactor is great, we believe that the participation of the UCLA community is essential to the proper resolution of these issues. We therefore urge you to order public hearings on relicensing the reactor--Facility License Number R-71 expires in March of 1980--and to locate those hearings on the UCLA campus so that interested parties might attend.

3. It is our desire to assist the NRC in developing an adequate factual base to assess the safety of the UCLA reactor. To that end, we hereby request that we be granted formal intervenor status in that relicensing procedure. (Bridge the Gap is a non-profit incorporated educational organization, registered as a campus organization at UCLA where it was founded ten years ago. Our members include UCLA students, faculty and staff as well as community members. Our primary incorporated purpose is to represent the views of the campus community to the outside community. We have undertaken an extensive four-month investigation of the UCLA reactor and request that we be permitted to present our conclusions and represent the views of at least some members of the UCLA community be being granted formal intervenor status.)

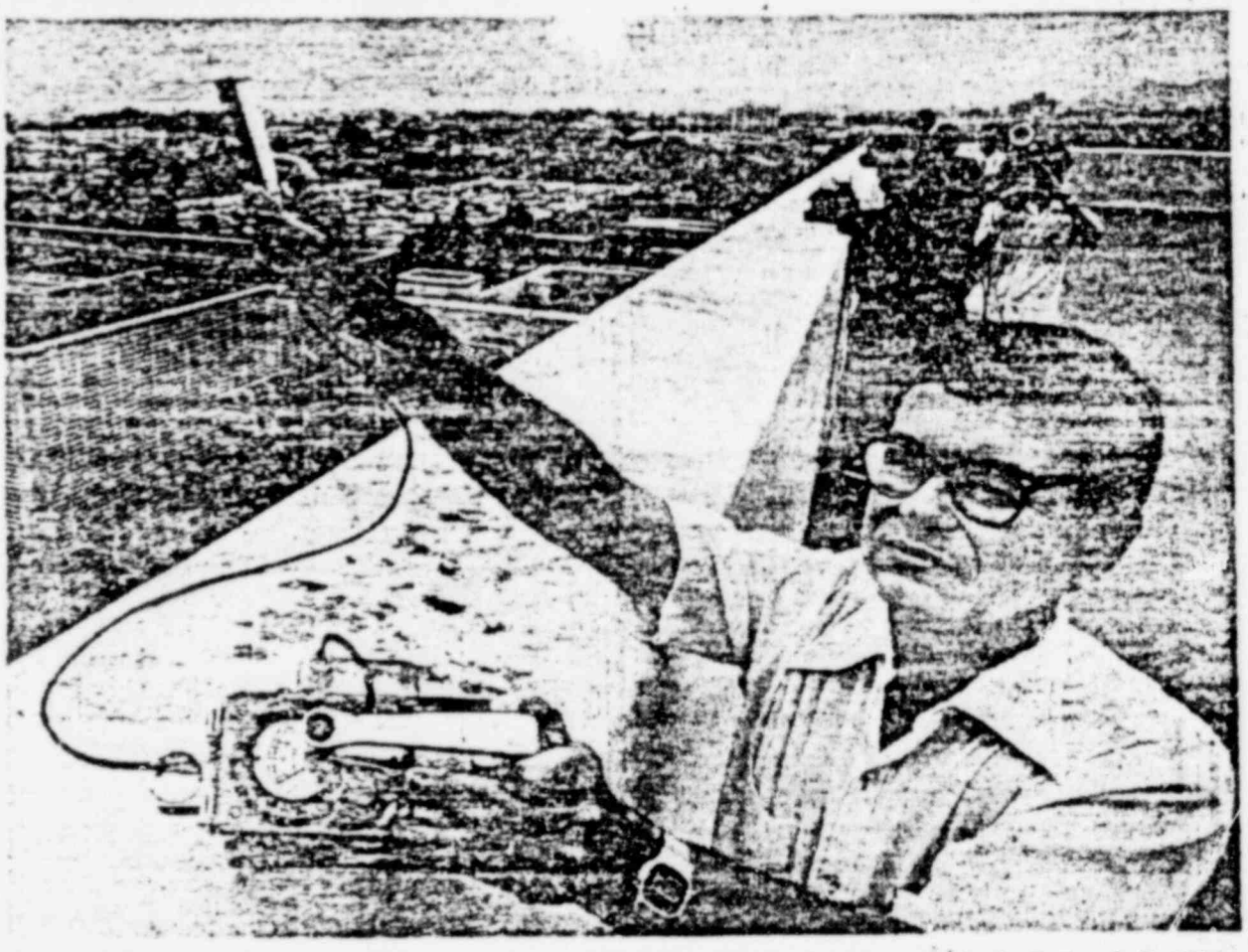
4. Pursuant to Title 10 CFR 2.715(b), we hereby request notice of any hearing which has been or will be ordered, and notice of any action to be taken without hearing pursuant to Title 10 CFR 2.105. Please let us know if for any reason you will be unable to comply with this request.

Please find enclosed a preliminary summary of our research regarding possible radiation hazard from the UCLA reactor. We look forward to your early response to our requested actions and for your cooperation in this important matter.

Sincerely yours,

Daniel O. Hirsch, President
Campus Committee to Bridge the Gap

cc: Senator Alan Cranston, Representative Anthony Beilenson
Assemblyman Mel Levine, Councilman Zev Yaroslavsky
City Attorney Burt Pines



RADIATION CHECK—Jack Hornor, reactor operator, takes reading at Math-Science Building.

UCLA Reactor Discharges Radioactive Argon but Officials Deny Danger Exists

BY DAVID JOHNSTON
Times Staff Writer

Thirty feet from the air conditioning intake duct for a UCLA classroom building, a small nuclear reactor Wednesday discharged radioactive argon into the air at 50 times the concentration normally allowed by federal safety officials.

Just how much radioactivity from the plume has entered the Math-Sciences Building since it opened in 1967 is unknown, since UCLA officials have never fully monitored radiation levels in the nine-story structure.

The low-level radioactive plume was disclosed by Bridge the Gap, a small Westwood anti-nuclear-power group favoring development of renewable energy sources.

Daniel Hirsch, the group's president, said the UCLA Argonaut Nuclear Reactor was one of eight small, little-known nuclear facilities, licensed by the federal government and scattered throughout metropolitan Los Angeles, that he said expose an unknowing public to low levels of radiation.

Hirsch and Sheldon C. Plotkin, a job safety engineer, said even the low levels of radiation emitted by the UCLA facility posed a danger to public health. They called for shutting down the reactor "until its safety can be conclusively determined."

Neill C. Ostrander, the reactor manager, told reporters during a tour of the facility that mathematical calculations and a simulation test using a sulphur gas indicated radiation inside the Math-Sciences Building was only slightly above naturally occuring levels.

He said flatly that no public health danger existed. When asked by reporters whether long-term exposure to low levels of radiation could affect human health, Ostrander said there was "no measurable public health danger."

Ostrander acknowledged that the reactor Wednesday emitted 50 times the maximum concentration of radioactive argon normally allowed. But, he noted, Nuclear Regulatory Commission rules allow for exceptions to this standard and the university had been granted such an exception.

Hirsch, who with others has made a four-month study of the UCLA reactor and Nuclear Regulatory Commission records concerning it, attacked the university for not telling students and professors about the radioactive discharge.

"People have a right not to be exposed to any radiation without their

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UCLA REACTOR

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knowledge," he said.

He said the documents showed a pattern of sloppy operation by UCLA and that almost every time the reactor violated federal safety rules the government responded by issuing exceptions and amendments to those rules for UCLA.

The lab has operated the small reactor for unclassified research and commercial work since 1960. It is a standard research facility and its design bears little resemblance to nuclear power reactors such as those at San Onofre, and Three Mile Island in Pennsylvania.

It operates about 600 hours a year, Ostrander estimated, and during half that time runs at full capacity. If it were used to generate electricity it could produce about 30 kilowatts, enough to light nearly 20 homes.

Radiation safety officials consider the beta and gamma rays given off by the radioactive argon-41 it produces among the least harmful forms of radiation.

The Nuclear Regulatory Commission documents gathered by Bridge the Gap indicate that until 1974 UCLA officials were not aware that the reactor was emitting argon-41 at concentrations far above the maximum allowed. The documents also indicate that a manual used to adjust a monitor that measures the radioactive gas had been lost.

A federal inspector, J. B. Baird, examined the facility last week and found "no violations or instances of noncompliance with the terms of the (reactor) license," UCLA said.

Hirsch, however, questioned the granting of the exceptions to safety rules granted UCLA and the failure of the university to notify the federal government about the air conditioning duct as evidence that Baird's findings were irrelevant.

Ostrander said a mathematical computation suggested only 1.25% of the gas emitted from the reactor stack would be taken in by the air conditioning duct. He said a simulation test using a sulphur gas indicated less than 0.5% of the gas was taken in.

UCLA reactor is unsafe, says group

Charges radioactive argon gas is emitted at dangerous levels

By Mitch Margo
Herald Examiner staff writer

A UCLA anti-nuclear power group yesterday called for the shutdown of a 20-year-old nuclear reactor which the group claims is emitting cancer-causing radioactive argon gas in dangerously high levels.

A university organization called The Committee to Bridge the Gap charged that because of negligence by UCLA administrators and the state Nuclear Regulatory Commission, students and faculty have been subjected to the small reactor's Argon-41 gas without knowing it.

"There are many problems with the reactor," said Dan Hirsch, president of the committee. "The four-month study (a master's degree thesis) we are basing our charges on states that because of the way the reactor is set up, the argon gas is flowing out of the reactor stack and being taken in by the air conditioning vent and circulated into the math-sciences building." The reactor is in a building next to that building.

Hirsch charged that UCLA and the NRC have known about the problems since 1974, "but at that time, instead of remedying the situation, the NRC just eased its regulations allowing the reactor to continue operating."

A spokesman for the NRC said that as long as the reactor is in a "restricted area," it could continue to emit the argon gas. But Hirsch charged its maximum emission is 50 times that allowed by previous NRC regulations.

The committee showed slides which Hirsch said illustrated that the restricted area was not adequately guarded.

"The university community doesn't have to go into that area to be exposed to the beta and gamma rays the argon gives off," Hirsch said. "Just being on the roof of the math-sciences building — an area where there are astronomy laboratories and where students gather for lunch — is dangerous."

Hirsch said his committee favors the complete shutdown of the reactor until the university can prove there is no danger. He also said steps can be taken to reduce the levels of radiation in the area, but charged UCLA has said these are too costly and not needed.

UCLA officials have countered that there is "no risk at all," and the charges of the committee "are just the reaction of an anti-nuclear power group."

Tom Collins, assistant dean of administration in the School of Engineering and Applied Science, said the radiation emitted by the reactor, which operated for 340 hours last year, "is less than the amount of radiation you get when you get a dental X-ray."

Both the committee and the school administration commented that an NRC inspector viewed the reactor last week. But while the university said the inspector did not find any violations, the committee maintained that the university does not have adequate measuring devices to determine how much argon is being breathed by students and faculty.

Shutdown of nuclear plant at UCLA urged

By DOROTHY REINHOLD
Evening Outlook Staff Writer

An anti-nuclear group Wednesday called for the shutdown of a nuclear reactor at UCLA, claiming that radioactive gas is being spewed into populated areas of the Westwood campus.

The Committee to Bridge the Gap charged that argon-41 released from the reactor's stack is a public health hazard. The group also said the Nuclear Regulatory Commission (NRC) consistently has refused to enforce regulations at the plant, thus allowing the hazard to continue.

Spokesmen for both the NRC and UCLA said they do not consider the reactor emission to pose a health hazard.

A report prepared by Bridge the Gap stated the emissions of radioactive argon-41 at the reactor stack are 50 times greater than the concentration normally permitted by the NRC, even when the time the reactor isn't operating is averaged in.

Neill C. Ostrander, the reactor manager, conceded it emitted 50 times the maximum concentration of radioactive argon normally allowed, but said the NRC had granted the university an exception.

"There is no measurable public health danger," Ostrander said.

NRC spokesman Jim Hanchett said a NRC examiner made an unannounced inspection of the reactor late last week and failed to detected any health or safety problems.

"Our inspector found that UCLA was in compliance with the conditions of their license," Hanchett said.

Tom Tugend, a spokesman for UCLA's School of Engineering and Applied Science which operates the reactor, said in response to Bridge the Gap's comments, "According to our own findings and the findings of the NRC, we are well below the permissable limits set by the NRC for this type of reactor.

"UCLA is running a safe installation," he said. "It prides itself on its noted research contributions to nuclear safety."

Dan Hirsch, president of Bridge the Gap, said at a press conference Wednesday that emissions from the stack are fanned out by prevailing winds and sucked into a ventilation duct on the university's nearby Math and Sciences Building.

Additionally, he said, the radioactive gas endangers students using nearby rooftop astronomy observatories, a meteorology laboratory, a seminar room and the Math-Science Library.

Hirsch also said the reactor stack is 17 feet too short and that an accelerator nozzle from atop the stack has been removed. That, coupled with a decreased air flow through the stack, is preventing emissions from shooting high enough into the air to avoid the ventilation duct, he said.

Additionally, the reactor area, now accessible to the public, should be restricted, Hirsch said.

The report represented a four-month study of the reactor, he said, and an

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UCLA nuclear reactor

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other report detailing other safety hazards will be released later by the group.

Bridge the Gap has asked the NRC to shut down the reactor pending resolution of the safety questions raised by the group, and has asked that public hearings be ordered on the relicensing of the reactor. The license expires in March 1980. The group has also asked to be formally named an intervenor in the relicencing issue.

The reactor, used for training and research, went into operation in 1960 and reached its maximum power of 100 kilowatts in 1963.

A UCLA statement said the reactor is monitored continuously by its staff and campus safety officials, and is inspected routinely three times a year by the NRC.

Additionally, UCLA said measurements of the amount of argon sucked in by the air intake duct on the roof of the Math and Sciences Building — located about 30 feet from the reactor stack — are one-eighth of the maximum concentration to which the general public legally may be exposed.

According to the report, once the emissions are in the air conditioning system, the concentrations are further diluted to the point they are undetectable by available monitoring equipment.

Jim Hanchett of the NRC said argon was "fairly innocuous. It doesn't concentrate in the body. You breathe it in and breathe it out. It is not particularly hazardous.

"It also has a half-life of 1.8 hours, so it is gone pretty quickly," he said.

Hanchett said when the question of the safety of the air duct was posed in 1975, UCLA was required to undertake a two-year program to measure the direct radiation emitted from the stack. That study indicated radiation levels right outside the air duct were well below permissible levels.

But, according to Hirsch, it is a question of severity.

"I see no reason for a reactor on a campus of 30,000 persons, and no one seems to know just what the level of radiation around there is," he said.

He said Bridge the Gap would contemplate "some kind of legal action" if the university and the NRC do not respond to the group's concerns.

Additionally, the Bridge the Gap report states that nearly every time the NRC expressed concern about the university violating a regulation or not complying with the reactor's technical specifications, the NRC eventually changed the regulations or specifications rather than enforcing them.

Besides raising the stack and capping it with a nozzle, Hirsch suggested the air duct be cemented over and rooftop access be denied to the public.

EVENING OUTLOOK

A-4—Thurs., Oct. 4, 1979

Editorial

Campus reactor: No room for error

The ghost of Three Mile Island is looming over the campus.

Following a four-month study, a local group composed of students, alumni and Westwood residents charged that people in two South Campus buildings are being exposed to potentially lethal doses of radiation. The group says the radioactive material, argon gas, is being emitted by the small nuclear reactor in Boelter Hall and is being blown into the Math-Sciences Building next door.

Campus officials deny the charges and dispute the estimates of radiation levels given by the local group, which calls itself the Committee to Bridge the Gap.

Bridge the Gap says the amount of argon gas escaping the reactor is 50 times that usually allowed by the federal Nuclear Regulatory Commission. But officials here say both UCLA and NRC measurements indicate no health risks to anyone. They also promise to shut down the reactor if any danger becomes apparent.

There is an obvious stalemate on the issue, and neither side presents a convincing argument. But because the NRC has already forced changes in the 20-year-old nuclear plant's design because of its argon emissions, the new charges should spur immediate action.

The reactor, which is shut down nightly, should remain inactive until the NRC can re-measure the amount of radioactive material released into South Campus air. There should also be public hearings on the issue so members of the campus community can express their opinions about the value of an on-campus research reactor and hear arguments from both sides in an objective setting.

the wake of the Three Mile Island accident, the full effects of which will remain unknown for decades. Charges that a campus which hosts tens of thousands of people each day is being polluted by an undue amount of radiation deserve investigation. This is especially true when qualified critics are raising serious questions about the legitimacy of radiation levels declared safe by the NRC.

The Boston-based Committee of Concerned Scientists and officials of the federal Environmental Protection Agency have pointed out that any amount of radioactivity raises risks of cancer and that the "safe" NRC levels are merely "gue timates." Further, most experts agree that the effects of radiation are cumulative, which means even small doses of radioactivity over a long period of time can be as destructive as a single large dose.

If the reactor can reasonably be declared safe after an NRC study, it should be put back to work. The value of research into peaceful uses of nuclear energy is obvious, but this must be balanced with consideration of the potential threat to the local area.

An operator of the campus reactor said he believes Three Mile Island was a "learning experience" for the nuclear industry. We hope UCLA will not provide the next lesson.

ucla daily bruin

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