UCLA Reactor License Challenged in Hearings

The case against the nuclear research reactor at the University of California at Los Angeles (UCLA) is "absurd . . . ridiculous . . . totally unfair," says Bill Cormier, spokesman for the university. He also reports that the legal battle over the reactor's relicensing, now in its second year, has cost $75,000 and will cost $200,000 before it is done.

A political group called the Committee to Bridge the Gap (CBG) has intervened in license renewal proceedings before the Atomic Safety and Licensing Board of the Nuclear Regulatory Commission, aiming to discontinue use of the reactor. Among the many charges brought against UCLA are (i) that the routine gas emissions from the reactor's vent pose a radiation hazard for people nearby, (ii) that in some very special circumstances the reactor could go into a "power excursion" and blow apart, and (iii) that UCLA is violating the rules of its license by allowing the reactor to be used more for commercial than educational purposes. A member of the Gap group, Dan Hirsch, says the case is a precedent-setter as an effective challenge to a research license.

The legal sparring in recent weeks has centered on the commerce versus education issue, possibly because the university may be most vulnerable here. Certainly this has proved the most nettlesome issue. If the reactor were judged part of a commercial enterprise, the university would have to submit to stricter license requirements. Hirsch and the CBG, therefore, have been asking for a lot of detailed information about who uses the reactor, for what purposes, and for what fees.

"Frankly, we were really miffed," Cormier says of a ruling given by the licensing board in May. An administrative law judge hearing the case rebuked the university for not being cooperative in responding to the CBG's questions. Judge Elizabeth Bowers wrote on 29 May: "UCLA was ordered to respond to the CBG interrogatories with a complete disclosure of all relevant information." The university's response was "unacceptable and blatantly insulting from a great university to this board. Enough is enough. CBG's third motion to compel [information] is granted and responsive answers by UCLA must be made within 10 days from receipt of this order."

Cormier calls the judgment "sloppy" but says the university has given up the required data. UCLA also apologized to the board, even though Cormier thinks there was no reason to do so. The flap grew out of a gross misunderstanding, he claims. When UCLA was ordered to state the percentage of the reactor's operating time spent on commercial projects, the university simply dumped 30,000 pages of logs and a pile of financial data in CBG's lap. Cormier says that was the legally correct way to answer CBG's long list of questions. Hirsch saw it as an evasive tactic. The licensing board agreed, compelling the university to spend another 50 hours analyzing the data and spelling out the answers in a 15-page reply.

It is true, Cormier says, that 60 percent of the reactor's operating hours are logged to uses such as assaying ores or coloring diamonds to increase their value. Yet this does not make the reactor commercial. Most of this "extramural" work is done by one former UCLA student who pays the small fee of $65 an hour to use the reactor, Cormier says. This business provides only $10,000 to $18,000 in annual income, a fraction of the $200,000 needed each year to run the facility.

The health and safety charges, according to Cormier, are without substance. The concrete in the university's parking lot emits more radiation than the reactor, he claims. He also quotes a 1980 letter to Hirsch from Harold Denton, chief of reactor regulation at the NRC. Denton reported in this letter that there was no reason to shut down the UCLA reactor to protect public health, as the CBG had requested. The amount of radiation one might receive while standing next to the exhaust stack on the roof of the reactor building, Denton wrote, was within the tolerable limit. He saw no need to worry about people who were not on the roof. (On average, the stack emits 100 millirems of radiation annually. The NRC permits a radiation worker to be exposed to 5000 millirems each year.) Denton's review in 1980 did not address the possibility of a catastrophic explosion. But Cormier says the sequence of events necessary to produce such an event in a small reactor like this (an Argonaut) is so implausible as to make UCLA technicians "hysterical" when they hear it described.

Hirsch is not fazed by the critics. His group has asked UCLA to move the reactor vent stack, to build new waste storage tanks, to remove spare reactor fuel from the site, to increase security measures, and ensure that the public will not be injured by an explosion in the reactor. The licensing board is dealing with procedural matters at the moment; it will get into these substantial requests later in the summer.—***Eliot Marshall***

Dallas Peck to Head USGS

With a sense of relief, the U.S. Geological Survey (USGS) learned in June that its new director will come from within its own ranks. The White House has announced that the President will nominate the present chief geologist at the Survey, Dallas Peck, to replace the departing director, H. William Menard, a Carter appointee.

There has been some concern that the USGS, one of the oldest scientific institutions in the government, was coming under the sway of partisan politics because of its role as keeper of petroleum reserve estimates. The Carter Administration, it is said, removed Menard's predecessor because he put out some of the most optimistic estimates of oil reserves seen anywhere. His outlook seemed to clash with Carter's pitch for energy conservation.

Menard was not involved in this controversy and has generally steered clear of political trouble. Thus, when the Reagan Administration indicated that it would accept his resignation last January, people began to worry that the wheel had come full circle and a new round of politicization was in progress (*Science*, 13 February, p. 689). Now it seems that Menard was simply swept out in Reagan's general housecleaning.

Peck, the director-to-be, has devoted his entire career to the government, having joined the Survey in

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1951 at the age of 22. He has been chief geologist since 1977. Peck received undergraduate and master's degrees in geology from the California Institute of Technology and a doctorate from Harvard. As a researcher he has studied the volcanic and granitic rocks of the West, and as a senior scientist he has served on many federal and international advisory boards, including the U.S.–U.S.S.R. Joint Commission on Scientific and Technical Cooperation.

Peck was recommended highly for the job by the National Academy of Sciences (NAS), according to a member of the panel which supplied a short list of candidates for the White House. This NAS geologist describes Peck as "a first class scientist" who fits the administrative requirements perfectly. Peck's main problem, he says, will be to find a way of getting along with his superiors in the Department of the Interior, who are making the agency an advocate of the rapid exploitation of resources on federal lands.—***Eliot Marshall***

Studies Support Bendectin Safety Claim

Recent studies of Bendectin, a controversial drug taken for morning sickness during pregnancy, support claims by its manufacturer that it does not lead to birth defects. Alarms about the drug were first raised several years ago, when researchers reported finding a weak association between Bendectin use and birth defects such as cleft palate and heart deformities, evidence generally thought to be highly speculative (*Science*, 31 October 1980, p. 518). But two studies published in the *Journal of the American Medical Association* (*JAMA*) found no such evidence and concluded that the drug poses little if any risk.

One study, conducted by Allen Mitchell at Harvard Medical School and others at Boston University's School of Public Health, concluded that "in utero exposure to Bendectin in early pregnancy does not materially increase the risk of oral clefts or selected cardiac defects." The authors reached their conclusion by comparing a group of 441 infants who had those malformations with 970 infants with other malformations. The rates of Bendectin use, as derived from interviews with the mothers some time later, were the same for each group.

The second study, conducted by Jose Cordero and others at the Centers for Disease Control in Atlanta, was similar in design, although it examined the possibility that Bendectin exposure might be linked to birth defects other than the oral clefts and heart defects. It did detect weak associations between exposure and infants with limb defects, a neural tube deformity, or the absence of an esophagus, all extremely rare. The number of infants affected is so small (14 out of 1231 examined in the sample), however, that "a causal relationship between Bendectin and the birth defects" could not be established, according to the authors. Given the widespread use of Bendectin, none of the defects would be as rare as they are if exposure is actually a cause.

A third study, conducted by Hershel Jick of the Boston Collaborative Drug Surveillance Program, will appear in *JAMA* soon. Jick says the results generally corroborate these two studies, although a weak association is detected between exposure to Bendectin and a birth defect of the intestinal tract. Again, the author discounts the significance of such a finding. "The studies present overwhelming evidence that this drug is not a measurable teratogen," Jick says, "although one still cannot rule out the slim chance."

All three studies were presented in preliminary form to an advisory panel of the Food and Drug Administration (FDA) that reviewed the safety of Bendectin last fall. The panel concluded that there is no demonstrated association between the drug and birth defects, although it urged that the Boston University and CDC studies be continued—and they are.

The Health Research Group, which has agitated for a withdrawal of Bendectin from the market, was frustrated at this turn of events and recently shifted its attention to the drug's effectiveness, rather than its safety. In a petition to the FDA, the lobby group pointed out that both of Bendectin's ingredients (the antihistamine doxylamine succinate and the vitamin pyridoxine hydrochloride) must contribute to its effectiveness for the drug to be on the market. The petition asks that Bendectin be banned on the grounds that studies by its manufacturer apparently show that the vitamin inhibits the antihistamine's antivomiting action. But the manufacturer, Richardson-Merrell Inc. argues that the petition overlooks the drug's effectiveness in combating nausea, as well as vomiting, a characteristic to which the vitamin does contribute.

—***R. Jeffrey Smith***

Air Pollution Rule Attacked

The Environmental Protection Agency's (EPA) method of setting air pollution standards came under attack at recent hearings of the Senate Environment and Public Works Committee. Several witnesses said that current language in the Clean Air Act requiring that standards be set to protect sensitive groups such as asthmatics "with an adequate margin of safety" (*Science*, 12 June, p. 1251) is deceptive and hypocritical.

George Eads, a member of President Carter's Council of Economic Advisers, said that although such language appears to place the agency in a narrow straitjacket, EPA can and does exercise much flexibility by carefully selecting which sensitive group it considers most important, by slipping compliance dates to reduce costs, or by making a private decision not to enforce compliance. "What then is gained by this elaborate charade?" he asked. "Congress is able to claim that it has forced business to protect the public health—which it of course has not. EPA is able to claim that costs have not entered into its decision—which is likewise untrue. And businessmen and other critics are able to claim that EPA is running amok—which also is false."

Eads suggested that Congress rewrite the language, substituting instead an explicit recognition that the pollution limits incorporate some notion of "acceptable risk" and economic cost. Similar thoughts were expressed by Frank Speizer of the Harvard School of Public Health and a spokesman for the Chemical Manufacturers Association. Other witnesses supported the language, however, and claimed that the flaws lie only in EPA's interpretation of it.

—***R. Jeffrey Smith***