

may be considered virtually fail-safe because of its heat dissipating features. It also provides for continuous refueling, avoiding costly shutdowns. And finally, the small size of these new reactors could make them more attractive to companies needing a source of process heat. While there are only a handful of sites that could use the amount of heat put out by a large HTGR, Johnston estimates that in theory there ought to be enough demand for the heat output of the small plant to sell 400 copies.

The backers of the HTGR have another trump card they may be able to play. It is the perceived need for a new military reactor. An independent panel of experts told DOE secretary Hodel late in 1982 that if it is necessary to erect a new reactor to produce weapons material, the cheapest and quickest option would be to expand the existing heavy-water facilities at Savannah River, S.C. However, about eight months later, Hodel announced that he thought Idaho would be a good location for the new defense reactor. Senator McClure helped plant this independent view at DOE. Along with it goes the option of using the HTGR as a military reactor.

The HTGR comes into the picture indirectly. Because it would be an entirely new technology for the U.S. defense program, no existing federal center has an obvious claim on it. And since the gas-cooled reactor does not require water, it certainly would not have to be located near a river, as existing military reactors are. In this way, it is a technology that opens up geographical horizons, a quality Idahoans admire.

Furthermore, Agnew has been promoting his company's technology as a self-financing system. It is capable of simultaneously producing tritium for the weapons program and electricity for sale to utilities. Thus, Agnew claims, the government could not only finance its new investment using a gas reactor but make a profit. The House Armed Services Committee has not bought this concept, or even the argument that a new defense reactor is needed. Seymour Shwiler, who recently left the staff of the procurement subcommittee, says: "My objection was that this could commit the government to \$8 to \$18 billion for a system that may not be necessary. This is a big dollar item. A whole new nuclear park." DOE has been asked to reanalyze the entire matter.

In considering commercial plants, it is clear that the HTGR has been a less than competitive technology in a decreasingly competitive industry. Perhaps then the new HTGR's should be placed in a cate-

gory labeled "post-commercial." It would include ideas that have been through the developmental stage, been sold commercially, and are now back in the shop for an overhaul. In a sense, light water reactors fall in this category, too.

However excellent the new HTGR's may be, Congress may want to take care in designing an R&D program for "inher-

ently safe" reactors to avoid clinging too closely to the past. It might be wise to define the terms of entry to this program broadly and set the criteria for large-scale funding quite narrowly. It would be useful to learn how well the modular HTGR competes with other advanced, ultrasafe designs, including new versions of the light water reactor.

—ELIOT MARSHALL

Mosher Case Enters Final Phase

Stanford University president Donald Kennedy has posed more questions to Stephen W. Mosher, a graduate student who was expelled last year from the anthropology department for allegedly engaging in "seriously unethical conduct" while conducting research in China.

In a letter to Mosher dated 1 May, Kennedy asked for detailed answers to several questions raised during the department's original investigation. Details of the letter were disclosed in part by a university press release and an article in the campus newspaper, which was given a copy of the letter. Mosher characterizes Kennedy's actions as a "delaying tactic" and has threatened legal action if he is not reinstated.

Stanford has repeatedly refused to state the exact reasons for Mosher's dismissal, arguing that disclosure might endanger Chinese villagers. Mosher contends that the university bowed to political pressure from the Chinese and American sinologists after he published an article in Taiwan about birth control practices in China and included photographs of Chinese women undergoing abortions (*Science*, 22 July, p. 348 and 13 May 1983, p. 692).

Kennedy's review of the matter represents the final stage in a lengthy appeals process begun by Mosher last May. Although Kennedy states in the letter that "On the basis of the existing record, I would find that the proper facts and considerations were taken into account and do support the [department's] decision," he said he is seeking clarification of some details. If Mosher's answers "add significantly to the evidence," Kennedy said he would consider referring the matter back to the department for limited reconsideration.

The letter also states that Kennedy has received a letter from a "Ms. Vaquer," that apparently provides some fresh information. In an interview, Mosher said that Vaquer several months ago testified on his behalf and that her letter will cast serious doubt on allegations made by Maggie So, Mosher's former wife and a former friend of Vaquer. The department's decision to dismiss Mosher rested heavily on allegations made by So. Mosher declined, however, to elaborate further about Vaquer or even disclose her full name.

Kennedy's letter also lists nine specific questions that were originally posed to Mosher by the department but not publicly disclosed until now. Kennedy said that "you have not in fact responded to those statements except with a blanket denial of all adverse statements; I wish to give you the opportunity to supplement the record . . ." Several of the questions relate to Mosher's use of grant money, according to Stanford sources.

Mosher, who now lives in Fresno, California, said that he has already answered these questions in detail, and added "I think I accounted satisfactorily for the small amount of grant money that I got."

Mosher says he is "appalled" that Stanford, in releasing a copy of the letter to the campus newspaper, divulged the name of the Chinese village where he had conducted his research. He contends that Stanford breached its own ground rules. The university now refuses to release further copies of the letter.

The central question still remains publicly unanswered. On what grounds did the department expel Mosher? Neither Stanford or Mosher are willing to say, so the case remains baffling to outsiders.—MARJORIE SUN