In reading the report, the editorial writers for the *Journal* said, "we couldn't help but wonder what purpose is served by having 17 physicists with other full-time jobs trying to second-guess the Pentagon's multibillion dollar, 2000-person-strong SDI effort.... Are such reports undertaken out of curiosity about lasers and particle beams? Or are they perhaps undertaken to appease vocal political activists within the physics profession?"

Leading opinion magazines have been relatively reticent about the DEW study—neither *The New Republic* nor *The Nation* has seen fit as yet to comment on it, for example, and William Rusher, publisher of *The National Review*, commented not on the report or its authors but rather on the recep-

tion it could be expected to get.

Rusher's method was to declare The American Physical Society's DEW panel guilty by association with "political lefties like the notorious Union of Concerned Scientists" and Carl Sagan, who, Rusher said, has been warning Americans for years that "failure to follow his advice on various political subjects such as arms control might well result in what he lipsmackingly calls 'the extinction of the human race.'"

"As more and more scientific subjects... have begun to have political implications," Rusher wrote in a piece syndicated by Newspaper Enterprise Association, "a great many scientists who ought to know better have succumbed to the temptation to increase the pressure for certain political results by threatening dire scientific consequences if the body politic doesn't obey their instructions. As usually happens with people who cry 'Wolf' too often, they got a gratifying reaction the first few times, but in due course people have learned to ignore them."

Well before the release of the DEW study it seemed apparent that much of the press and public was loath to accept pessimistic evaluations of Star Wars from scientists, weapons experts and arms control specialists. It remains to be seen whether the DEW study will have a strong and lasting impact on general public opinion or whether, after one day's intense coverage and some instant analysis, it will be largely forgotten.

—WILLIAM SWEET

## Research reactor closed at Berkeley for mixed reasons

The University of California at Berkeley announced in January that it would close a 1-MW research reactor that had been a subject of some controversy for several years. The previous month, Berkeley physicist Charles L. Schwartz had charged that the reactor had been used for military research by private contractors such as Lockheed and Aerospace in violation of a university rule that no classified research be done on campus. Schwartz has said that the closing of the reactor could be "properly called a victory for antinuclear sentiment in the community and is of interest elsewhere."

University officials say that the decision to shut down the reactor was motivated primarily by low usage of the reactor for research and by the university's need to house the computer science unit of its electrical engineering department in a new building over the reactor. A secondary reason for closing and dismantling the reactor, university Vice Chancellor Roderic Park has conceded, was to "get rid of all the political hassling that goes along with it. If the faculty wanted to keep it, we would have kept it."

Thomas Pigford, chairman of the nuclear engineering department and director of the reactor, says that the department did not oppose the decision to shut down the reactor. In fact, he says, the department pointed out to the university administration about four years ago that use of the reactor by faculty and students for research was very small. That set a review process in motion, and in the end the department took the position that it would prefer to keep the reactor open but recognized that its low usage might not justify the space it occupied.

In Pigford's opinion, opposition from Schwartz, like-minded students and faculty, and the Berkeley city council figured "not at all" in the decision. The city council has opposed the reactor for over 10 years, Pigford says, and "we are all quite accustomed to that."

Decommissioning. Dismantling and removal of the 1-MW reactor is expected to cost about \$3 million. The university regents have pledged \$625 000 toward decommissioning costs, and the nuclear engineering department is seeking funds from other sources to cover the remainder of the costs.

To date, according to Pigford and sources at the Nuclear Regulatory Commission, five research reactors of 1 MW or greater power have been decommissioned. Each case is different, however, and so the estimated cost of dismantling the Berkeley reactor is quite approximate.

The NRC rule requiring conversion of university and industry research reactors to low-enriched uranium was not a factor in the decision to close the Berkeley reactor, which already ran on low-enriched uranium. When the NRC rule first was proposed nearly three years ago, some predicted that many other reactors would be closed as well (PHYSICS TODAY, December 1984, page 47).

The NRC rule went into effect last March, and so far NRC officials have detected no case in which a reactor was closed strictly because of the rule. According to Robert E. Carter, a project manager in the NRC licensing division, a handful have been closed, including small reactors at the University of California in Los Angeles and Santa Barbara and at Virginia Polytechnic Institute, but university administrators have said that this was only partly because of the conversion rule, and partly because of low usage and general lack of support for the reactors.

"It is not always clear to us what the reasons are," Carter says. "One day people say it's mainly one thing, one day another."

-WILLIAM SWEET

## **US and EC conclude fusion agreement**

US government and European Community officials signed an agreement between the US Department of Energy and Euratom on 15 December providing for cooperation in magnetic confinement fusion. US and European researchers have cooperated on specific topics in fusion for years, both informally and under the aegis of the International Energy Agency in Paris, but this is the first time the United States and the European Communities have concluded an umbrella agreement

providing general guidelines for cooperation in magnetic confinement fusion.

With exchanges in fusion growing quickly, the new agreement is significant because it provides a legal mechanism that covers any cooperative activity in fusion and a forum in which management issues can be aired regularly and resolved.

The agreement is virtually identical to the agreement the United States negotiated with Japan in 1979 and