ScienceScope

edited by JOCELYN KAISER



Out of fashion. Superphénix program will likely be shut down.

Superphénix Debate Heats Up Again

New French Prime Minister Lionel Jospin's first policy statement this week was expected to describe plans for closing down the troubled French Superphénix breeder reactor. Jospin's Socialist-led government includes members of the Green Party, among them Environment Minister Dominique Voynet, who before the election denounced the \$10.5 billion reactor near Lyons as a "stupid financial waste" and promised to shut it down.

The 1200-megawatt Superphénix, owned by Electricité de France with several European utilities as partners, was planned as the world's largest fast breeder reactor. But the project was dogged by technical problems, and in 1994 the government agreed to a plan to downgrade it for use as a research reactor for disposing of plutonium waste (*Science*, 15 October 1993, p. 327). After producing power only sporadically, France began converting the reactor for that purpose 6 months ago.

Any attempt to terminate the project will be met with tough resistance, says a policy official, who predicts "a hot debate" on what it would mean to France's long-term nuclear energy plans. He said France would have to reconsider its strategy for "the entire fuel cycle," including plans to dispose of long-lived actinides.

Already this week, demonstrators were protesting the potential loss of nuclear-related jobs. And some Superphénix defenders cite a disputed study by the last government which claimed that premature closure of the project could cost \$10.5 billion. "There is no figure ... which makes any sense at present," says Michael Schneider, Paris director of the nongovernment World Information Service on Energy. "But there's mutual interest among the partners in closing the plant down. In commercial terms it's been a disaster," he says.

U.K. Lottery Profits to Finance Space Center

Space science has hit the jackpot: Profits from the British lottery, thanks to a special grants committee, are going to help pay for construction of a National Space Science Center (NSSC) in Leicester, United Kingdom. The lottery-funded Millennium Commission announced early this week that it would spend 23 million pounds (\$37.6 million) on the NSSC, which will feature a planetarium, exhibits, and access to scientists working on satellites and other instruments.

In 1994, officials of the University of Leicester and the city had put in a bid to develop a space center, noting that few of the many projects funded by lottery profits involve science. "We struck a chord," says Leicester x-ray astrophysicist Alan Wells, NSSC director. Leicester now must finish raising matching funds, although Wells says his group is "quite a long way" toward that goal.

The center, slated to open in mid-2000 at a site near the city center, will include new labs for Leicester space scientists now stuck in cramped quarters. They will relocate with instruments they use to calibrate and test projects such as the Jet-X x-ray telescope, built to fly on a Russian satellite in 1999. NSSC will also attract an estimated 250,000 visitors per year. Even space scientists who remain on campus are in for a big change: Leicester's 120-person department is expected to swell by about 20% in the next 5 years, Wells says, thanks in part to a higher profile from the NSSC.

NSF Stakes a Position on Misconduct

Despite 14 months of microscopic review, a White House group has not been able to agree on a standard definition of "research misconduct." But the National Science Foundation's (NSF's) ethics enforcer, Inspector-General Linda Sundro, is making her views known. The IG's just-released semi-annual report to Congress devotes three pages to the topic, rejecting a narrow definition of misconduct now under consideration at the White House Office of Science and Technology Policy (OSTP).

Experts have never quite agreed on what misconduct in research is, although many agencies forbid it. NSF, for example, calls it "fabrication, falsification, plagiarism (FFP), or other serious deviation from accepted practices." The "serious deviation" clause is the "core" of the definition, says the NSF IG report, for it allows the agency to pursue misconduct that falls outside FFP while limiting enforcement to "serious" matters. But many scientists find the clause overly vague. And the White House interagency Committee on Fundamental Science (CFS) has proposed removing it, the IG report says.

While the proposal to narrow the definition has been discussed privately for months (Science, 24 January, p. 467), the IG report is the first public acknowledgement that NSF has staked out a position that is at odds with other agencies. Indeed, the view in the IG report may differ from that of the National Science Board, NSF's governing body. Last February, says NSB Chair Richard Zare of Stanford University, members concluded that while they preferred NSF's definition, they "could live with" a trimmed-down version, as long as NSF could continue to punish misdeeds that fall outside FFP.

An OSTP aide declined to comment on NSF's position, saying staffers are still "engaged in discussions" with agencies.

Grad Students Fear Loss of Tax Exemption

Graduate students are rallying in opposition to tax legislation moving swiftly through the House of Representatives. The mammoth bill would revoke the traditionally tax-free status of tuition waivers that universities award graduate students who teach or do research, taking a large bite out of their modest salaries. It would also eliminate tax-free tuition for family members of university employees.

The legislation, which cleared the House Ways and Means committee last week and is due on the floor next week, is intended to put all graduate students on equal footing. "A lot are there on their own dollar, while some are getting a free education," says a committee aide. "Is that fair?" The bill would phase out the tuition waivers over 5 years, starting in 1998 with a tax on 20% of the waived tuition. But critics protest that eliminating the tuition exemption could force some students out of graduate school. Kevin Boyer of the National Association of Graduate and Professional Students estimates that stipends could shrink by half when federal and state taxes and social security withholdings are combined. "The potential impact is enormous," says David Merkowitz of the American Council on Education.

The tuition waivers lost their tax exemption in 1988, when a section of the tax code expired. But it was restored after grad students raised a howl of protest. Boyer's group is urging students to notify their elected representatives of the new threat, and there is reason for hope. A Senate tax bill would preserve the exemption, and the White House has voiced strong opposition to other parts of the House bill.