

UK nuclear physicists fear SERC's cuts

- Nuclear-structure research threatened
- European collaborations in jeopardy

Daresbury, Cheshire

NUCLEAR structure research in Britain could be the latest victim of the struggle of the Science and Engineering Research Council (SERC) to cut £40 million from its planned spending in 1991–92, a crisis meeting of the British nuclear physics community heard last week.

Inflation means that SERC's share of this year's science budget (see page 359) will be worth less than in 1990–91 — whence SERC's strenuous effort to cut its research programme. But the more than 200 nuclear-structure physicists (some 80 per cent of the British community) gathered angrily at SERC's Daresbury Laboratory last week believe their field is being unfairly targeted for cuts by a small policy group, led by SERC chairman Sir Mark Richmond.

The five-member group, which includes no physicists, will put cost-cutting options to the full council on 6 February, when SERC must decide which parts of its research programme to cut if the Treasury fails to provide extra for next year.

Peter Twin, physics professor at the University of Liverpool and chairman of SERC's Nuclear Structure Committee, said last week that the policy group is likely to recommend a cut of nearly 10 per cent in the 1991–92 budget of SERC's Nuclear Physics Board, which channels funds to nuclear and high-energy physics.

Although similar cuts are expected across most of SERC, the problem for the Nuclear Physics Board is that almost two-thirds of its £90 million annual spending is the British subscription to CERN, the European high-energy physics laboratory at Geneva. The Foreign Office is said to have decreed that the CERN contribution cannot be renegotiated, for fear of souring Britain's relations with Europe.

Twin's fear is that the intended £8 million cut in Nuclear Physics Board spending will fall mainly on nuclear structure research. Of the board's unencumbered £30 million, almost £20 million supports particle physics, largely at CERN, where full support for British users is essential to justify continued membership. The "obvious" conclusion, said Twin, is that the cuts will be mostly targeted at the £10.1 million annual spending on nuclear-structure research, "completely demolishing our budget".

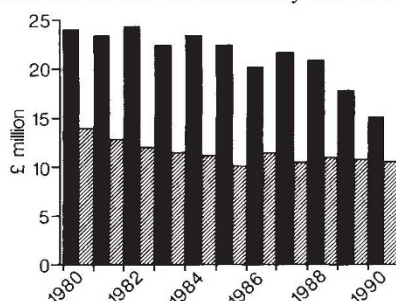
The first result of the threatened cut would be the closure of the tandem accelerator at the Daresbury Laboratory, opened in 1983, but still offering five or

more years useful service. Last week's gathering insisted that, without this machine, which revived British nuclear structure research after Britain missed out on a generation of accelerators in the 1970s, the future is bleak.

The nuclear-structure researchers' fears will be fuelled by a Nuclear Physics Board planning document, dated 25 January and obtained by *Nature*, which shows the £5 million annual running cost of the Daresbury tandem discontinued after 1991–92.

Nuclear-structure physicists are also outraged that the effective closure of a successful branch of British science could be contemplated on purely financial grounds, without scientific review. Last week they claimed a solid international reputation won in the 1980s for research in the structure of rare nuclei, despite declining support (see figure). Tony Hughes, responsible for SERC's own laboratories, said that other areas of spending are also seriously threatened, but conceded that the effective withdrawal of support from a particular field is unprecedented.

Future European projects are also at risk. SERC has agreed to collaborate with the French Centre National de la Recherche Scientifique (CNRS) in EURO-GAM, a £5-million project to build the world's most sensitive γ -ray detector array (*Nature* 344, 94; 1990). The plan is to build the device at Daresbury and to run



SERC's Nuclear Physics Board expenditure in the eighties on particle physics (solid bars) and nuclear structure (cross-hatched).

some initial experiments on the tandem accelerator before moving EURO-GAM to the CNRS Institute for Nuclear Research at Strasbourg.

Bernard Haas from Strasbourg said in Daresbury last week that the first phase of this project would continue, but the threatened budget cut would make the second Strasbourg phase "totally impossible". Europe would then lose its lead in the field to the United States, where a similar device is being planned, he said.

Haas also said that "the British would

SCIENTIFIC MISCONDUCT

Court ruling put to test

Washington

A Wisconsin scientist will be the first to test last month's court decision that the misconduct regulations of the National Institutes of Health (NIH) are illegal.

L. Cass Terry, a Medical College of Wisconsin neurologist being investigated by NIH for alleged scientific misconduct filed a lawsuit earlier this month, claiming that the inquiry (now in its fourth year) violates his right to fair treatment. Now, citing last month's decision in the case of James Abbs (see *Nature* 349, 95; 10 January 1991), Terry's lawyers plan to file a motion this week to have his investigation halted entirely.

The Abbs decision held that the NIH rules are invalid because they were not issued with an opportunity for public comment. NIH has not yet decided how to respond to the decision, and has neither appealed against it nor halted current investigations. But as similar law-suits based on the Abbs ruling emerge, it would seem that NIH cannot ignore the challenge.

Yet Suzanne Hadley, deputy director of the NIH Office of Scientific Integrity, says, "We do not intend to offer anybody any [special treatment] at this time". But because of the ruling, officials at NIH's parent agency, the Department of Health and Human Services, say they are preparing to recommend that NIH "do the right thing" and propose new regulations for public comment, a process that threatens to take years and further confuse the current state of misconduct affairs.

Christopher Anderson

lose their credibility in any other collaboration" if SERC reneges on the EURO-GAM agreement.

John Sharpey-Schafer, from the University of Liverpool, said that the CERN subscription must be separated from the rest of the Nuclear Physics Board's spending if British nuclear-structure research is not to be "killed" by the proposed cuts. Sharpey-Schafer aims to get questions asked in the House of Commons to highlight the physicists' case.

The one ray of hope last week was that, by devising a package of budget cuts threatening an entire field of research, SERC may be better placed to win extra support in next year's science budget. "If Richmond is playing a cunning game to get more money", said Sharpey-Schafer, "I want [him] to win".

But others fear the government would call SERC's bluff in such a case. John Lilley, who heads the nuclear structure group at Daresbury, stressed that physicists' jobs are on the line.

British nuclear structure researchers are being held at gunpoint and waiting for the trigger to be pulled, he said before the meeting.

Peter Aldhous