better than Soviet Union

remain decisions taken in Moscow. The governments of the individual republics still have no say in the development of nuclear power within their territories, and so far only the Lithuanian Supreme Soviet has decided to defy Moscow and withdraw its financial support from nuclear energy.

There is no clear alternative to the Soviet Union's commitment to nuclear power. Large hydroelectric dams are increasingly seen as uneconomic and harmful to the environment, except perhaps single dams on mountainous rivers. But in the mountains of Soviet Central Asia, the local population is alarmed about the seismic hazards of large dams. Proposed solutions such as solar energy in Moldavia or wind farms in Byelorussia seem somewhat utopian.

In the coming year, Soviet energy planners will have to address the difficult problem of restoring confidence in the All-Union energy programme.

Confidence in the space programme also needs to be restored. Space 'achievements' are increasingly viewed by the Soviet public as wasteful attempts to gain international prestige. The partial failure of the Phobos mission did not help to arouse enthusiasm for a manned mission to Mars some time between 2010 and 2020, and a new society to stimulate interest in space among young people has so far failed to take off. The socialist allies feel excluded by the new Soviet commitment to 'international' projects involving France and neutral and nonaligned nations.

Perestroika has set a challenge to the socialist bloc. Reactions range from those of Hungary, where the breakaway Democratic Trade Union of Academic Workers is now a recognized part of the political scene, and Poland, where the Academy of Sciences has just rejected a government report on the environment, to Cuba, which opposes the whole idea of perestroika, and East Germany, which claims that reform is unnecessary. In between come Bulgaria, where lysenkoism has only just been finally dispatched with a massive change of personnel in the Academy of Sciences, and Czechoslovakia, where calls for restructuring remain largely on paper.

An encouraging development in 1988 was the holding of international conferences by two new non-governmental organizations based in the socialist bloc—the Hungarian-based International Association of Physics Students and the Bulgarian-based 'Ecoforum'. Both meetings attracted wide support from East and West and were hailed by Soviet 'establishment' participants as a manifestation of the recent trend in 'informal' initiatives.

Vera Rich

Guarded optimism greets increased funds in Britain

Londor

British science enters 1989 on an optimistic note, even though 1988 saw no improvement in university finances nor in those of the research councils. The raised spirits in the research community stem from the money for science won from the Treasury by the Department of Education and Science. An extra £95 million is being added to the budget of the research councils for the year 1989-90, an increase of 16 per cent on 1988-89. Specific programmes will absorb much of that money, but, with the remainder, the research councils will be able to support some more research and fund a few more alpha-rated projects. Exactly how the money is to be spent will be announced soon.

Although the award is not extravagant, it is a real increase in science spending and reflects a change in the government's attitude towards science. That change was marked by a speech made to the Royal Society in 1989 by the prime minister, Margaret Thatcher, in which she expressed a commitment to the public funding of basic science.

But research dubbed 'near-market' suffered at the hands of the government in 1988, and the effects of this hit the research councils hard. A review of the work carried out by the Agricultural and Food Research Council (AFRC) identified research valued at £33 million a year as near-market. If the cuts are implemented in 1989, the council estimates that 750 jobs could be at risk.

The Natural Environment Research Council (NERC) was another victim of government policy regarding near-market research. In 1988, the council was forced to cut its support for university research by £2.6 million and to cancel the grants round for October. It announced 130 redundancies to take effect before April 1989, some of which will be compulsory. The council hopes that the worst is now over and that 1989 will be more stable. But the council's new chairman will be fighting to retain not just financial support but the council's identity as the year is likely to bring a merger with the AFRC.

The question of the structure of the research councils resurfaced in 1988 and two committees will report early in 1989 on what form support of the biological sciences should take. The House of Lords committee reviewing support for the biological sciences recommended a merger between the NERC and the AFRC in its interim report in 1988, but in its full report may recommend further evolution towards formation of a council for all the biological sciences which would incoorporate some research of the Science

and Engineering Research Council as well as the Medical Research Council. A committee for the Advisory Board for the Research Councils will also give its view in the spring.

Biologists in the academic science community must be looking forward to 1989 with some trepidation. Following the reviews of the Earth sciences, chemistry and physics in universities, which were published in 1988, is the review of the biological sciences. A draft report is now ready; if, like the chemistry and physics reviews, it recommends a concentration of resources in departments of a minimum size, 1989 may witness the beginning of the end of the small science department.

Overseeing the restructuring will be the new Universities Funding Council (UFC), set up in 1988 to take over from the University Grants Committee. The new chairman of the council, Lord Chilver, is embroiled in controversy even before he takes up his post, declaring his view on access to higher education: courses should be available to those who value education highly enough to commit resources to it. His views will find favour in government, which made moves in this direction in 1988 with the publication of a policy document on student loans. Issues such as the repayment of loans and the involvement of commercial banks are still to be resolved, but the government aims to introduce the system in 1990. More protests from students — such as those resulting in clashes between students and police in the streets of London in 1988 — seem likely in 1989.

Dominating the work of the heads of universities in 1988 was the Education Reform Act. On the question of the abolition of tenure, the government emerged the victor — abolition will go ahead — but on the introduction of a system of 'contract funding', the universities' heads emerged victorious. They won a concession from the government that before any conditions are laid down on funds from the UFC, bodies representing the universities will be consulted. But the value of this victory was thrown into question when the Committee of Vice-Chancellors and Principals received from the Department of Education and Science a draft copy of the guidelines to govern the relationship between the government, the UFC and the universities, which described controls the government would have over universities' finances. While the government is encouraging universities to seek a broader base of funding, it seems determined to monitor those finances. Retaining their autonomy will still be high on the agenda of the universities in 1989.

Christine McGourty