US national laboratories

Labs to be shielded from governmental whims

Washington

ACCUSING the Department of Energy (DoE) of mismanaging its national laboratories appears to have become the latest blood sport in the United States. A group of private sector consultants told President Reagan last month that the 12 laboratories are an impressive national asset, but one that is hamstrung by too many layers of DoE officialdom and muddled about its role. A review last September by DoE's own Energy Research Advisory Board (ERAB) reached similar conclusions. Now the White House Science Council is about to enter the fray.

The flurry of reports may be bad news for DoE but good news for the laboratories. Both the private sector report (part of the Grace Commission survey of government cost efficiency) and the ERAB report praised the laboratory directors for capable management. They want the directors to be given more control over their own budgets and DoE to relax its detailed supervision and reporting requirements. Both reports recommend cushioning the laboratories from capricious fluctuations in government funding by setting budgets two or three years at a time.

All these recommendations, if implemented, would be a tonic for the laboratory directors. Dr Herman Postma, director of Oak Ridge, told the Grace panel that the number of progress reports the laboratory has to file with its federal masters had doubled over the decade to reach an annual level of 700. Annual fluctuations in congressional funding are an even more serious problem: the Grace investigators reported that in some areas, such as fossil fuels, funding had zigzagged between increases of 67 per cent and reductions of 51 per cent. The result had been a spate of half-completed projects and wasted money.

Less welcome to the directors is the insistence of both reports that DoE should devise a sharper definition of the kind of research the laboratories should do. The Grace report complains that in many cases the laboratories hang on to research projects long after they could have been handed over to industrial sponsors or to universities. It says research on geothermal energy, batteries and turbines can be handled well enough in the private sector. In energy research, the laboratories should look only at areas with big energy potential, such as fossil fuels and nuclear energy — not hydropower, geothermal energy, solar or wind energy.

The White House Science Council report, which is to be published, belatedly, at the end of the month, is certain to

reiterate the call for clearer mission guidelines. One of the main jobs assigned to it by presidential science adviser George Keyworth last June was to reapportion research responsibilities between the federal laboratories, universities and industry. Unlike the Grace and ERAB reports, the White House panel has reviewed the whole gamut of federal laboratories and may therefore recommend some radical change, such as removing the national laboratories from DoE and placing them under a new cabinet department.

But members of the Grace and ERAB groups, who briefed the White House panel, regard that prospect as unlikely. A safer bet is that the report will ask the national laboratories to focus on their traditional strengths in nuclear physics, nuclear medicine, breeder technology and some aspects of the life sciences, while passing on as much research as possible to the private sector and universities.

US nuclear power plants

Emergency planning inadequate

Washington

Two nuclear power plants already operating in the state of New York are to be closed down by the Nuclear Regulatory Commission (NRC) next month because emergency evacuation plans for the local area are considered inadequate. The operators of the plants — both at Indian Point, some 30 miles north of New York City — have until the end of May to improve their plans or persuade the commission to change its mind.

The NRC decision, the first time it has threatened to close working plants because of worries about local evacuation, followed a report by the Federal Emergency Management Agency on a practice drill in March. The agency said two problems — the refusal of nearby Rockland County to join the planning and doubt about the availability of Westchester County bus drivers in an emergency — meant emergency planning was inadequate. About 290,000 people live within 10 miles of the reactors.

Rockland County's refusal to cooperate appears to be financially motivated. Mr John Ahearne, an NRC commissioner, said the county was not served by the plants and received no tax income from them. The cost of participating in emergency planning would exceed the amount provided for that purpose by the state. The participation of Westchester bus drivers in an emergency was doubtful because the county had been

unable to devise an acceptable contract. What impact will the succession of reports have on the national laboratories? Not a great deal, according to several directors. The consensus among those who have surveyed their work is that, despite organizational wrinkles, the laboratories are working efficiently and producing good research. Meanwhile DoE has already begun to look for a sharper definition of the kinds of research that should properly be done by the laboratories and those that properly belong elsewhere.

In February, a report by ERAB split energy technology research into three categories: research in which the federal government should have a primary role, research in which the federal role complemented that of the universities and industry and research in which the federal role ought to be minimal. The only areas selected for the first category turned out to be magnetic fusion, reactors, advanced concepts in geothermal energy, nuclear waste, uranium enrichment and the assessment of uranium resources.

Few of the dozen laboratories will find this division of research roles hard to accept. According to Dr Postma, the problem facing the laboratories is not of defining missions but of achieving some financial stability.

Peter David

unable to devise an acceptable contract.

Spokesmen for the joint operators of the two plants, Consolidated Edison and the New York Power Authority, expressed confidence that any deficiencies could be remedied in time to avert a shutdown. They said that nuclear plants had operated safely at Indian Point for 20 years, and claimed the cost of a shutdown would be enormous.

NRC requirements for evacuation planning were stiffened after the accident at Three Mile Island in 1979 and have not yet been formally met at many plants. At Indian Point, considered by some scientists to pose the most complex evacuation problems in the United States, deadlines for meeting the requirements have been missed on two occasions, and the site has become a test of NRC's seriousness about emergency planning. Mr Ahearne said many people wanted to see whether NRC would stand by its regulations. If it did not, national planning for radiological emergencies would "rapidly deteriorate".

At Indian Point, NRC appears to believe that a satisfactory evacuation plan is feasible given cooperation between the plant operators and the local governments. Mr Ahearne said the operators appear to have devoted too little effort to developing plans with their local government neighbours — perhaps because of a belief that NRC would not close the plant simply because of the absence of a workable plan.

Peter David