

NSF moves

Knapp replaced by Bloch

Washington

DR Edward Knapp, director of the National Science Foundation (NSF) for the past two years, will leave his post at the end of this year to return to Los Alamos. This was announced earlier this week by NSF, which said that Knapp will be succeeded by Erich Bloch, now an IBM vice-president, who has spent all his working life with the company.

Knapp's departure is unexpected. During his spell in Washington, he has secured for NSF some of the most substantial budget increases since the foundation's inception. Over the past two years, the budget has grown by more than 35 per cent while NSF's traditional involvement with science education, virtually eliminated during the early years of the Reagan Administration, has been partially restored.

Knapp has been an energetic and stout defender of the NSF's role in the support of

basic science but also a loyal member of the administration. One striking feature of his tenure of his office is that the posts of deputy director and of the three statutory assistant directors at NSF, vacant when he was appointed, have remained unfilled.

Bloch is by background an electrical engineer who, unlike his predecessors, has no doctorate. At IBM, he was responsible for the development of the micro-processors for the IBM 360 series of computers. Since 1968, he has held a number of senior management positions with the company and is at present in charge of technical personnel development.

Bloch was born in Germany in 1925, and became a US citizen in 1959. He is a member of the National Academy of Engineering. The director of NSF is appointed by the US President for a six-year term, which appointment is subject to confirmation by the Senate.

Stephen Budiansky

British nuclear power**BNF bites contamination bullet**

BRITISH Nuclear Fuels PLC has announced that it is planning a £100 million study to find ways of reducing radioactive discharges into the Irish Sea to a level as near zero as possible. The decision was announced last week by Mr Con Allday, the company's chairman, who stressed that the new policy was in direct response to public concern about radioactive discharges from its reprocessing plant at Sellafield (formerly Windscale).

Declaring that the company must respond to "fears which are genuinely held, however ill-founded", Mr Allday said BNF would "not attempt to fight a rearguard action on behalf of rationality". The company would recognize the strength of public opinion and would take steps to reduce discharges to "very much lower levels than hitherto planned".

The company has been through a disastrous few months for public relations. Last November, a television documentary drew attention to a locally increased incidence of leukaemia in children near the reprocessing plant at Sellafield and raised the possibility of a link with the plant, which emits Europe's largest routine discharge of radioactivity into the environment. The documentary spurred an urgent inquiry, now in progress, by a team headed by Sir Douglas Black, a former president of the Royal College of Physicians, and formerly Chief Medical Adviser to the Department of Health.

Days later an unplanned discharge of radioactively contaminated chemical solvent led to public warnings from the government to avoid the use of beaches in the area, a warning recently withdrawn.

The company's conduct was later criticized in swingeing terms by the Department of the Environment. More recently, transport unions have threatened to block the delivery of spent fuel to the plant unless the levels of discharge are reduced.

Discharges of both beta-gamma emitters and alpha-emitting actinides from the plant are down to a tenth of the peak levels of the early 1970s. Sir Denys Wilkinson, until recently chairman of the government's Radioactive Waste Management Advisory Committee, said last week at a lecture organized by the Science Policy Research Unit of the University of Sussex that radiation dose to critical groups resulting from the Sellafield operations was "higher than one would like it to be". The original fluorescein experiments on which the discharge policy was based were planned and executed in 4 months, Sir Denys recalled. There had been no full evaluation of the consequences of the discharges, and unforeseen developments such as the lowering of plutonium safety limits and the "uncooperative attitude" of the Irish Sea in returning radioisotopes to land instead of dispersing them into the ocean had reduced margins of confidence. In addition, discharges were unnecessarily high in terms of what is easily achievable. Discharges from the French reprocessing plant at Marcoule, for example, were substantially than that at Sellafield. Sir Denys was nevertheless convinced that nobody had suffered any significant extra hazard as a result of British waste disposal practices, and he expressed doubts as to whether Sellafield could achieve the low emissions reached at Marcoule.

IOS closes lab

THE UK Natural Environment Research Council (NERC) has decided that there is a *prima facie* case for closing the Taunton site of the Institute of Oceanographic Sciences (IOS), which carries out research in sedimentation and applied wave mechanics. The council's governing body was due this week to consider the implications of transferring the work to other NERC sites.

Staff at Taunton are unimpressed with the way NERC has handled the matter. The director of IOS, Dr Anthony Loughton, was said to have promised speedy decisions on the future of the site almost a year ago. Dr Loughton declined last week to make any comment about the proposed closure.

Staff at Taunton do not see where they can go. NERC's budgetary problems mean it cannot put up any new buildings, and there is not thought to be room for existing Taunton staff at the IOS site at Bidston on Merseyside. Most would prefer instead to move to the site of the Institute for Marine Environmental Research at Plymouth.

The accommodation problems will probably be solved by the resignation of many of the staff. Scientific manpower at Taunton is already much less than it was in the past; the decreased emphasis on wave power as a likely future renewable energy source may be part of the explanation. Finance from the Department of Energy has been repeatedly delayed, causing difficulties for those planning research. But, in theory at least, research should not be cut back as a consequence of the move now planned.

Tim Beardsley

The £100 million study now proposed by BNF is above and beyond current action to reduce discharges costing an estimated £150 million. An ion-exchange plant now nearing completion will cut down discharges of radiocaesium, and a separate salt evaporation plant will substantially cut actinide discharges. Further reductions may be brought about by improvements to the reprocessing plant itself.

The recent events at Sellafield have postponed any possibility of a public offering of shares in BNF, which are at present all held by the government. There have also been extensive changes made at senior management level.

The company is still awaiting the decision of the Director of Public Prosecutions on whether criminal proceedings should be started against BNF over November's debacle. Possible infringements of operating licences were afterwards reported by the Nuclear Installations Inspectorate.

Tim Beardsley

Correction

THE limit for nitrogen oxides in ambient air proposed in the EEC directive (*Nature* 308, 309; 1984) should have read 200 gm^{-3} not 200 mg m^{-3} . □