

now being put into effect because it would have left the Division of Reactor Development and Technology intact.

As for the Joint Committee, it met in closed session with Dr Ray last week to talk over the plan, and although no formal vote was taken, a majority of those present favoured the reshuffle. A few were not happy about it, however, and one of their chief concerns was that it may precipitate the resignation of Mr Shaw. A forceful administrator, Shaw is in charge of the development of the liquid metal fast breeder reactor, on which the Administration has pinned its hopes for the next generation of reactors, and some committee members were anxious that his possible resignation may hamper development of the breeder. Sources in the AEC and in Congress confirmed last week that Shaw is upset by the reorganization and at least toying with the idea of quitting.

What made the commissioners change their minds during the past year? A number of factors played a part, but the most influential was probably the public hearings last year on the emergency core cooling device (ECCS) which is supposed to flood the reactor core with water to prevent a melt down if the main cooling water were lost through a sudden pipe rupture. The hearings, which took place over more than a hundred days and which produced some 20,000 pages of oral testimony, were held because of doubts about the ECCS after test failures in 1971.

The public hearings brought to the surface a number of disturbing allegations that the results of safety research which casts doubt on the safety of reactors have been suppressed by AEC officials. It also became evident during the hearings that a number of scientists working for the AEC believe that the commission's standards are not strict enough. Whatever the merit of such allegations, the AEC moved a little towards the position of its critics last October when L. Manning Muntzing, the Director of Regulation, announced stricter operating criteria which may reduce the power output of some reactors, until doubts about their safety are cleared up.

Another factor in the commissioners' change of mind is that the Joint Committee will soon be holding its own hearings on nuclear safety. The hearings have been promised for the past six months, but the committee has been waiting for a comprehensive report on the matter from the AEC. The report is now reported to be in the final stages of revision, and should be delivered soon. Those hearings are likely to capture considerable public attention, and by moving now to head off charges of conflict of interest in safety research, the AEC may take some of the wind out of its critics' sails.

ENVIRONMENT

Voice in the Wilderness

by our Washington Correspondent

RUSSELL Train, Chairman of the Council on Environmental Quality, earlier this month lashed out at some segments of the oil industry and others who have made "the environment the whipping boy for our energy problems". Speaking at the American Power Conference in Chicago, Train criticized automobile and oil companies which recently conducted a massive advertising campaign charging that devices to control exhaust emissions from automobiles will increase fuel consumption. Such advertisements, Train pointed out, ignore the fact that comparable fuel losses come from the use of automatic transmissions and air conditioners, and that a vehicle weighing 5,000 pounds consumes twice as much fuel as one weighing 2,500 pounds—ten times the fuel loss from emissions controls. "Half truths are not going to help meet our energy needs," he said.

Train also sought to dismantle another common myth—that environmentalists have been responsible for delaying nuclear power plants. He said that of 75 plants now in various stages of construction, only about nine have been delayed by environmental challenges.

Moreover, in January of this year, he said, the Atomic Energy Commission had under review the operating licences for 35 nuclear power plants, and "with the possible exception of one or two units, the commission anticipates no delays solely on the basis of environmental considerations in the issuance of operating licences for these reactors". And environmentalists can hardly be blamed—as they often are—for the lack of refining capacity in the oil industry, Train suggested, because until the second half of last year, refineries in the United States were working at less than 85 per cent of their total capacity.

Train's remarks stand out like a sore thumb against statements of several other members of the Administration. Recently, for example, Earl Butz, Secretary of Agriculture, suggested that environmentalists should be the first to have their power shut off when energy supplies run low.

SEISMOLOGY

From NOAA to USGS

by our Washington Correspondent

THE Office of Management and Budget has finally given its approval for some of the seismology programmes and facilities of the National Oceanic and

Atmospheric Administration (NOAA) to be transferred to the US Geological Survey. The move will probably take place in two phases, the first of which has been agreed and will take place on May 27, while the second is still under negotiation between officials of NOAA, OMB and the National Science Foundation. NOAA was forced to abandon much of its earthquake research because of cutbacks in its funds as part of President Nixon's drive to hold down federal expenditure (see *Nature*, 241, 362; 1973).

The facilities involved in next week's transfer are those engaged in engineering seismology, earthquake prediction and earthquake hazards assessment, chief of which is the Earthquake Mechanisms Laboratory (EML) in San Francisco.

A spokesman for the laboratory said last week that the laboratory staff expects to carry on operations relatively unaffected by the transfer, and few harsh words have so far been spoken about the moves.

Phase two of the possible transfer has not, however, been agreed to by OMB, and it may raise some more opposition.

If it goes ahead, NOAA would lose responsibility for the World Wide Standard Seismograph Network (WWSSN), the National Earthquake Information Center in Boulder, Colorado, and all the other seismic observatories except those which are needed for the tsunami warning system. At present, NOAA has sufficient funds in its 1974 budget to fund the facilities involved in phase two of the transfer plan.

One concern is that seismic data should still be readily available to geophysicists under any system that is worked out.

Already tentative plans call for the National Earthquake Information Center to continue to provide raw data on the preliminary location of epicentres of seismic events, while NOAA's Environmental Data Centers (which it will retain) will continue to provide more complete data. In other words, if the full plan goes ahead, the same facilities will continue to provide geophysical data as at present, but one will be under control of the USGS, while the other will remain with the National Oceanic and Atmospheric Administration.

One advantage of the scheme will be that planning and administration of the federal government's earthquake research will be under a single roof. In the past there has been considerable criticism of duplication of efforts and lack of cooperation between NOAA and USGS, and such problems should no longer arise once the new scheme is in operation.