NEW WORLD

Double Trouble for the AEC

by our Washington Correspondent

THE Court of Appeals last week set the Atomic Energy Commission back on its heels by ordering it to produce an analysis of the environmental effects of the entire fast breeder reactor programme. It was a landmark decision in many respects, for it gives opponents of the breeder a powerful tool for opening up public debate about alternative methods of producing energy in the 1990s, and it also has important implications for other high technology ventures such as the AEC's Plowshare Programme. But that was only the first of the commission's headaches last week, for the court decision was followed swiftly by the resignation of Mr Milton Shaw, who for the past nine years has been head of the AEC's reactor development programme and one of the most powerful officials in the agency. The two events were not entirely unconnected, and it remains to be seen which will turn out to be the more important.

The court decision was the final move in a case filed against the AEC last year by the Scientists' Institute for Public Information (SIPI), a group of scientists headed by Barry Commoner and Margaret Mead. At issue is the development and possible proliferation of the liquid metal fast breeder reactor (LMFBR), the Administration's chief technological fix for the energy crisis and a prime target for criticism from environmentalist organizations.

The AEC, in conjunction with the Tennessee Valley Authority and private industry, is building a prototype LMFBR at Oak Ridge in Tennessee at a cost of some \$2,000 million. The goal is to have a successful demonstration of the reactor by 1980 and to prove that it will be commercially attractive. After that demonstration, private industry will take over the reins and the AEC is projecting that by the year 2000 LMFBRs will be producing as much electricity as all the present power stations put together.

SIPI's law suit revolved around the question of whether the commission is obliged by law — specifically, the National Environmental Policy Act (NEPA)—to produce an environmental impact statement only for the pilot LMFBR, or for the commercial development that may follow. The AEC has already produced an impact statement for the pilot plant, but maintained that it would have to gaze into the crystal ball to produce an analysis of the

environmental implications of the entire programme. Such an analysis, it said, "would be meaningless in terms of content".

In November last year, a lower court judge agreed with the AEC and threw the suit out, but SIPI went to the Court of Appeals where it won its case last week. The appeals court opinion, written by Judge J. Skelley Wright (who also wrote the opinion in the so-called Calvert Cliffs case which forced the AEC to consider environmental factors

during the licensing of nuclear reactors), accused the commission of taking "an unnecessarily crabbed approach to NEPA". His opinion also throws up some interesting points about the development of projects involving advanced technology.

Judge Wright argues that if the AEC waits until the breeder reactor is on the verge of commercial application before it files a statement on the environmental impact of the project, so much money would be invested in the technology that

HUMAN EXPERIMENTATION

NEW Policies Criticized

by our Washington Correspondent

THE federal government's policies for protecting the rights of those who take part in medical experiments came under fire last week in a report made public by the Department of Health, Education and Welfare (HEW). Prepared by a special ad-hoc committee set up to investigate the notorious Tuskegee Syphilis Study—a study of the effects of untreated syphilis among poor black men in Alabama—the report terms the policies vague and overly general, and suggests sweeping reforms in the system of regulating human experimentation.

Even within HEW, the committee notes that there is no uniform policy for the protection of research subjects, and points out that there is also no uniformity among other agencies of the federal government which support human experimentation. "The lack of uniformity", the committee states, "creates confusion and denies some subjects the protection they deserve".

At present, HEW relies heavily on review committees in universities and other research institutions for preserving the rights of research subjects, and the department recently issued a set of guidelines for the review committees to follow. Reliance on the committees "was an important advance", the report suggests, but the system suffers from basic defects which seriously undermine its effectiveness. In particular, the HEW guidelines are vague, have little to say about research involving children, prisoners and other groups where special considerations apply, and there are no effective procedures for enforcing them.

Accordingly, the committee suggests that Congress should establish a permanent body independent of any exist-

ing federal agency, with authority to regulate at least all federally supported research involving human subjects. The idea is that it would consist of a board, composed of people from diverse scientific disciplines and representatives from other professions, which would formulate research policies in much greater detail than is now the case, and draw up procedures to make sure that the policies are implemented by institutional review committees. The board, which the report suggests could be called the National Human Investigation Board (NHIB), would also establish appeals procedures for adjudicating disagreements between investigators and institutional review committees.

In research institutions themselves, the committee suggests that an Institutional Human Investigation Committee (IHIC) should be established as a direct link between the institution and the NHIB, and that it should have two distinct subcommittees: a protocol review group concerned with prior review of research protocols, and a subject advisory group to aid subjects with any problems concerned with their participation in the research. In particular, the subject advisory group should be concerned with procedures for making sure that a subject's consent to take part in a study is freely given after full information about the research has been provided to him.

Senator Edward Kennedy recently held a set of hearings with his Senate Health Subcommittee on the problems involved in human experimentation, during which a number of particularly glaring examples of dubious ethical practices were brought to light. He can be expected to introduce legislation soon to strengthen regulations designed to protect the rights of human subjects.

(Final Report of the Tuskegee Syphilis Study Ad-hoc Advisory Committee, available from the Center for Disease Control, Atlanta, Georgia.)