Carter's Budget: Little Biomedical Growth; Energy Conservation Pushed

President Jimmy Carter sent his revisions of former President Ford's budget proposals for fiscal year 1978 to Congress on 22 February—right on time—and, as expected, the budget remains primarily the same (*Science*, 28 January). As Carter said in his official budget message, and Cabinet officers reiterated during budget briefings for the press, "The 1978 budget is essentially still President Ford's budget, with only such limited revisions as my Administration has had time to make. But these revisions do reflect our careful choices among many possible options. . . ."

With respect to scientific research and training, the Carter revisions may indeed point out some of the directions the new Administration intends to take. For biomedical research and the delivery of health care, it looks as though 1978 will be the year of the child, with new programs emphasizing "alternatives to abortion" and immunization of preschool-age children of poor families. As far as physician training goes, the Carter position appears to be remarkably close to the Republican position, with no great initiatives to support medical students.

On the other hand, the initiatives that Ford proposed for basic research supported by the National Science Foundation still stand in the Carter budget, as does the proposal to create a new, broadbased research grants program in the Department of Agriculture for the support of research in universities that do not now have strong agricultural science.

But in the health area, Carter, and Health, Education, and Welfare Secretary Joseph A. Califano, Jr., let some of their own preferences be known. Thus, there is an effort to support work on children and, as Califano said, "better babies." The only Carter change in the Ford budget for the National Institutes of Health (NIH) is a \$5 million increase for the National Institute of Child Health and Human Development (NICHD), to be spent on reproductive physiology and studies of normal prenatal development. At a press briefing Califano, who is clearly on the record as an opponent of abortion, said that there must be research so that, for example, a pregnant woman who knows she is carrying a

Down's syndrome (or Mongoloid) baby has an alternative to abortion. That, of course, means a cure for the disease, which is caused by the presence of an extra chromosome. Califano won't get it for \$5 million, but it shows the direction of his thinking. Another \$30 million in "alternatives to abortion" money has been added to the HEW budget for family planning programs and research on sex education, foster care, and adoption.

The other major pro-child proposal in the Carter budget is a request for \$345 million to pay for a program called Comprehensive Health Assessments and Primary Care for Children (CHAP), which means locating poor, young children, giving them a physical checkup, immunizations (free), and follow-up physicals and care "just like middle-class children get." CHAP is essentially an extension and expansion (by \$180 million) of an existing program that Califano says has been "ineffective."

As far as health manpower and support of medical education is concerned—another "highlight" of the HEW budget—Califano expressed the Administration's view when he said, "We don't need a lot more doctors and don't need to continue education funds." That does not mean that he is calling for an end of "capitation" funds to schools of medicine, osteopathy, and dentistry; but he would cut Ford's \$116 million proposal down a little to \$114 million and eliminate it altogether for those studying other health professions, such as veterinary medicine and pharmacy.

The Carter people have picked up the current view that the doctor problem in this country has to do with geographic and specialty maldistribution, rather than a doctor shortage, and in that area they propose spending more than Ford wanted to. Through special project grants for training, they would spend \$45 million (compared to Ford's \$9 million) on residency programs in "family medicine" and dentistry and also increase funding for residencies in "primary care" from \$6 million to \$15 million. In addition, there is a new emphasis on supporting training of so-called "physician extenders" or "assistants" who Califano thinks could bring "some health competition [for patients]" into a system controlled by M.D.'s.

Already there have been grumblings on Capitol Hill over these and other proposed changes in funding and administration of the monumental Health Professions Educational Assistance Act, which Congress passed last year after nearly 4 years of sometimes bitter negotiating (Science, 12 November 1976). For instance, at recent hearings of the Senate health subcommittee, chaired by Edward M. Kennedy (D-Mass.), Republicans and Democrats alike were saying in effect: After all we've been through to get this bill we don't need these people coming in and trying to change things now. Carter is bound to have some trouble on this one.

As the year goes on there are sure to be other Carter Administration moves for changes in the health and biomedical research budgets, but no one is guessing what form they will take. Administration officials, Califano reports, had enough trouble as it was coming up with the changes they did during their first month in office, at a time when some top spots, including the assistant secretary for health, remain unfilled. Just give them a little more time.

—BARBARA J. CULLITON

Breeder and Other Long-Term Energy Projects Cut Back

The Carter budget gives an increased emphasis to energy conservation and to development of new energy supplies for the near- to-middle term and less emphasis to longer term projects, such as the breeder reactor and fusion energy. Indeed, the Clinch River breeder demonstration project could well be canceled altogether, although no decision about this will be made pending a review of the entire Liquid Metal Fast Breeder Reactor (LMFBR) program which is to

be carried out over the next few months.

In a related development, the Carter Administration also has sent to Congress draft legislation for the establishment of a "Department of Energy." Under this legislation, three existing agencies—the Energy Research and Development Administration (ERDA), the Federal Energy Administration (FEA), and the Federal Power Commission—would be abolished, and their functions would be transferred to the new department, which

James R. Schlesinger, now the White House energy adviser, is expected to head. The department would also take over certain functions and responsibilities from a number of other agencies—most notably, perhaps, it would control some of the terms of oil and gas and coal leases on public lands and the rate of energy production from those leases. The Department of the Interior would remain responsible for the actual leasing itself.

Compared to the budget submitted by President Ford, Jimmy Carter's revised budget more than doubles the amount of money that would be made available to ERDA for energy conservation, raising it from about \$158 million to \$318 million. Of this new money, \$40 million would go toward implementation of the Electric and Hybrid Vehicle Demonstration Act. Conservation funds for the FEA also would be increased, chiefly through the addition of some \$54 million for grants to the states.

R & D funds for fossil fuel technologies would be increased by \$41.6 million, with the new total coming to nearly \$640 million. The total for funds earmarked for solar energy would remain at \$305 million but, within that amount, \$55 million would be shifted from a 10-megawatt solar electric station (a project now cut back to only \$10 mil-

lion to allow a longer period of development) to other activities, principally the demonstration of solar heating and cooling for buildings.

Although a substantial fusion energy research effort would continue, the program budget would be reduced from about \$371 million—the purpose being to stretch out long-term development in favor of "nearer-term efforts to establish scientific feasibility."

The breeder reactor program would be cut by almost \$200 million, or from \$855 million to \$656 million—a sum not much greater than the budget proposed for fossil fuel energy. About \$88 million of the cut would come from the Clinch River demonstration project, which, if completed, would not now go on line before sometime in 1984.

In a statement released along with the revised budget, ERDA observed that the cut in the breeder project reflects President Carter's energy priorities, which "stress conservation and nearer-term supply technologies." It then added:

... Serious questions have been raised about the LMFBR technology and the structure of the current LMFBR program. The energy potential of this option must be weighed against the safety questions associated with the LMFBR and the dangers of nuclear proliferation from plutonium reprocessing needed by LMFBR's. The delays in the [Clinch River]

project and its currently projected costs (\$1.9 billion of which \$154 million already has been spent) make it necessary that a reexamination of the project be undertaken before any final decision is made to proceed with construction. At the same time, we will examine the make-up and direction of the overall LMFBR program with or without this big project. The potential application in the U.S. and the role in the U.S. breeder program of foreign breeder technologies will also be reviewed.

Robert D. Thorne, ERDA's acting assistant administrator for nuclear energy, will head the LMFBR review committee. According to Thorne, this group will be drawn from the technical community, the utility industry, and the public interest groups. In the preparation of the report, he says, individual views or dissents will be filed on those issues where no agreement can be reached. And, indeed, given the disparate membership contemplated (those thus far selected include Carl Walske of the Atomic Industrial Forum and Thomas B. Cochran of the Natural Resources Defense Council), the points of consensus may be few.

The outcome of the breeder study may be strongly influenced by a parallel study the Carter Administration is making of fuel reprocessing and plutonium recycling—an essential precondition for the Clinch River breeder. The results of the latter study will be known within a month or so.—LUTHER J. CARTER

Science in Europe/Nuclear Wastes Stymie West Germans

West Germany's ambitious nuclear plans have come to a temporary halt over the awkward issue of what to do with radioactive waste. In the middle of February a court in the state of Schleswig-Holstein ruled that construction of a nuclear plant in the state, Brokdorf B, could not go ahead until there was a clear national policy for waste disposal.

The court decision was the climax of a rising tide of antinuclear sentiment in West Germany, a country which plans to have a total of 35,000 megawatts of nuclear capacity installed by 1985, five times greater than the present nuclear capacity. The antinuclear movement ranges all the way from moderate and respectable environmentalists to militant groups prepared to invade and occupy nuclear sites in order to prevent work taking place. It was after angry struggles between police and demonstrators last year that the court action in Schleswig-Holstein began.

After the court ruling, the federal government decided to bow to the inevitable and not press forward with the nuclear program until the waste question has been solved. West German Chancellor Helmut Schmidt and representatives of the ten states and of West Berlin appointed a committee to investigate the question and to find a site where waste could be stored at least temporarily until a decision about its disposal can be made.

One of the committee's tasks is likely to be to lean as

heavily as it can on the Prime Minister of Lower Saxony, Ernst Albrecht. The thick salt beds of Lower Saxony have been chosen by experts as the only geologic strata in West Germany which can be used in disposing of long-lived wastes from reprocessing plants. But since nobody actually welcomes a nuclear mausoleum in their back garden, and Albrecht is a rising politician with a constituency to consider, a fair amount of arm-twisting is in prospect. At the time of this writing Albrecht said he expected to be able to name a site within a few weeks.

The site, when it is chosen, will be used for both a waste management facility and a reprocessing plant, since the intention is to build both at the same place. The various antinuclear groups have correctly identified this dual facility as the key to the whole West German nuclear program and have concentrated effort in attempting to disrupt the choice of site. At three potential sites in Lower Saxony antinuclear groups have been camped out, waiting for the drilling rigs to arrive to begin exploratory drilling into the salt formations. They are, it is claimed, in contact by radio with one another so they can make haste to whichever site is chosen for the first hole. In Bonn it is claimed that the groups are politically inspired by the far left and are willing to use violence.

Meanwhile the West German government is fighting hard

962 SCIENCE, VOL. 195