Carter pledges support for research

Washington

Reversing its policies of only a few months ago, the Carter administration has pledged that, if the President is re-elected in November, it will provide sufficient extra funds for basic research to guarantee a real growth of three per cent in both 1981 and 1982.

This would be achieved by requesting from Congress an additional \$600 million over the budget request already submitted for the fiscal year 1981 and which it had previously been proposed to request for 1982. The net result, according to Dr Frank Press, director of the Office of Science and Technology Policy (OSTP), will be to generate a real growth in basic research of about 11 per cent between 1978 and 1982.

The proposal to increase support for scientific research came as part of a general package of measures proposed by President Carter last Thursday, designed to revitalize the US economy through stimulating private and public investment.

Eschewing the major cuts in private taxation that have already been proposed by Republican presidential candidate Ronald Reagan, President Carter is proposing a more specifically geared programme that would reduce the tax burden on certain parts of industry and provide selective support for others.

In a speech outlining his general proposals, President Carter said that it was important to promote technological advance through support for research since it provided a large proportion of productivity growth and also "can create literally millions of jobs in the years ahead."

According to Dr Press, the precise distribution of the extra funds — about \$225 million of which are expected to go for the extra support of basic research in the fiscal year 1981, which begins in October — will be discussed with leaders of the university and business research communities.

However the initiatives will include:

- Increased support for areas of "targeted" basic research with broad potential applications. Examples provided by Dr Press included the contributions of genetic research to agriculture, and the basic research necessary to support the next generation of microcomputers.
- Increased support for university-based and other "generic technology centres", proposed in last year's domestic policy review of industrial innovation, and already under active consideration in Congress.
- Greater collaboration between government and industry in promoting the long-term growth of particular industries. The model of the Co-operative Automotive Research Project, looking at basic problems in long-term automobile

engineering, may be applied to other areas. Possible similar projects under consideration include cooperation with the steel industry on developing new techniques for producing highly specialized forms of steel, and with the mineral extraction industry.

● An additional \$50 million will be provided to upgrade research and teaching equipment in universities. A recent report produced by the American Association of Universities showed that in the university sector, the average age of equipment was about twice that in the industrial sector. The new money, some of which was proposed in the President's original

January request as part of the National Science Foundation budget but cut out in the March review, will support what Dr Press calls a "long overdue" renovation of research facilities.

Research and development investment in the private sector will also benefit from the new tax incentives which President Carter said that he proposes to introduce next year. In particular, this speeds up and simplifies the depreciation allowance on investment for research and development equipment, part of a general effort to persuade industry to invest more of what it earns in new technology.

"We are really trying to do two things

Congress falls in line on 1981 funds

Washington

With an election coming up, and few pretending that a balanced budget remains either a feasible or a desirable goal, Congress has taken several actions in the past few weeks indicating a general acceptance of the strategy of the Carter administration in support of research.

Indeed in many cases congressional actions on the research budgets of federal agencies have restored funding to the level of the original budget request put forward by President Carter in January, before being cut back in the budget review in March. Recent actions include: **Physics:** Following an unsuccessful attempt by the House of Representatives appropriations committee to cut out any increase in support of basic energy sciences in the Department of Energy — which includes high energy and nuclear physics — the equivalent Senate subcommittee has proposed various increases.

In high energy physics, for example, where the administration had requested in March a total of \$354 million for operating, equipment and construction costs, the House committee had recommended cutting this to \$327 million. The full House, however, subsequently amended this to \$343 million; and the Senate subcommittee last week agreed to propose \$359 million, the original request in January.

A similar pattern of changes is seen for nuclear physics, where the administration had requested \$111 million, the House agreed to \$106 million, and the Senate subcommittee is proposing \$113 million.

Physicists are optimistic that the Senate's actions will avoid extra delays in the construction of Fermilab's energy-doubler, and any severe cut in operating expenditure next year, both of which had been widely feared. "No one thought we could come close to these figures," said one university lobbyist last week.

Biomedical research: Although its

largesse has not been as great as in previous years, the House of Representatives voted last week to raise the administration's proposed 1.7 per cent increase for basic research in the National Institutes of Health to 5.5 per cent, reaching a total of \$3,616 million.

The House accepted the administration's argument that a central feature of NIH support should be maintaining the level of competitive research grants at about 5,000 awards a year. However it disagreed that training grants should be cut back in favour of research support, and much of the money added to the NIH budget will go towards postgraduate support.

National Science Foundation: The House voted last month to provide the NSF with the full \$1,074 million that had been requested by the administration, although subsequently agreeing to a 2 per cent cut across the board for all the agencies listed in the composite appropriations bill which includes the NSF.

The Senate appropriations subcommittee has also accepted the administration's request recommending a budget of \$1,079 million. In addition to shuffling \$5 million from basic research to science education (for which the House has allocated an extra \$10 million), the Senate subcommittee is proposing to add an extra \$5 million to cover the increased fuel cost being experienced by the NSF's Antarctic research programme.

Department of Defense: So far, the House of Representatives has accepted most of the 20 per cent increase in defence support for basic research requested by the administration. However the equivalent Senate committee is still to act; and there are rumours that cuts of the order of \$30 to \$50 million — which would reduce the growth rate to the expected rate of inflation — are being considered.

David Dickson