US research costs

White House to back down?

Washington

A STUDY by the White House Science Council calling for substantially increased federal support for university-based research met a favourable reception both in the White House and on Capitol Hill last week, amid signs that the administration may be moving towards modifying highly unpopular proposed changes to indirect cost reimbursement.

Allan Bromley, vice-chairman of the science council study, met officials of the Office of Management and Budget (OMB) and said later that he was "optimistic" that new proposals on indirect costs would be forthcoming. But there was still no word from the administration on how exactly it proposed to defuse the row over OMB's proposal to fix administrative cost reimbursement for university research at 26 per cent of direct costs in the current year (the national average), with reductions in years to come. Revised proposals are expected within the next few weeks, in time for implementation at the beginning of July.

The science council study, chaired by

David Packard, is unambiguous about the need for an increase in support for university research without taking money from research elsewhere (see below). It was given an enthusiastic welcome by members of the House of Representatives' Science Policy Task Force last week, and President Reagan was said to be writing to David Packard accepting its principal recommendations.

The study proposed adopting a uniform percentage for indirect cost reimbursement as one of several measures designed in aggregate to benefit the universities. Packard has previously spoken out publicly against the OMB decision earlier this year to adopt the recommendation on indirect cost reimbursement while ignoring recommendations to reduce amortization periods for facilities and equipment. Bromley also pointedly told the task force last week that OMB's proposal was "not at all our recommendation" and that it could lead to "substantial hardship" for universities.

John McTague, acting science adviser to the President, made clear his personal

support for the panel's report last week, telling a press conference that he would expect an increase in federal support for university research of a few tens of per cent in the President's proposed budget for 1988. And McTague reminded reporters that President Reagan, presenting awards during National Science Week last week, had said "...we understand the need to increase our investment in basic research".

McTague himself will not, however, be in the administration to see the completed 1988 budget: he is to leave the White House shortly to become chief of research at the Ford Motor Company. **Tim Beardsley**

Strident report

Washington

THE White House panel's report, released in draft form on 17 January but published formally last week, is strident in tone.

Universities now represent only \$8,000 million of the \$100,000 million in total national research and development, and the proportion is declining. After noting that "in any ranking of priorities for allocating R & D support... universities must come first", it declares that the federal government must make substantially greater investments in universities than it has in recent years. It also proposes a major new initiative to establish university interdisciplinary research centres.

Federal policies must, the panel says, recognize the cost of university research facilities. It proposes that the amortization period of buildings should be reduced from 50 to 20 years, while that for equipment should be reduced from 15 to 5 years. Recognizing widely felt alarm about the poor state of university buildings, it proposes a special facilities fund to be administered by the National Science Foundation, to disburse a total of \$10,000 million over 10 years. All proposals to the fund would be peer-reviewed and made on a 50-50 matching basis with non-federal funds. Tax incentives for industrial sponsorship of university research are also proposed.

The study panel also makes the now-infamous recommendation that reimbursements for administrative costs should be fixed at a uniform percentage, rather than being allowed to vary from one institution to another. This is the only recommendation that has been acted upon so far. It also proposes that grant durations should be increased to three or even five years, and makes other recommendations aimed at reducing administrative burdens on universities and, especially, researchers. New "portable" scholarships for the most talented 1 per cent of undergraduates and national merit-based multi-year graduate fellowships are also urged.

Tim Beardsley

US space

NRC board urges no skimping

Washington

THE Space Science Board of the National Research Council (NRC) has entered the debate over the future of the US space programme, calling for a "balanced fleet of launch vehicles", and urging a clarification of the goals of the manned and unmanned elements of the national effort.

In a statement released yesterday, the space science board concludes that by failing to identify accurately the resources needed by the manned and unmanned space programme, both have suffered. Thomas Donahue, chairman of the board and principal author of the report, says the country must decide how committed it is to a pioneering space programme. Donahue argues that if sufficient funds are not provided to carry out such a programme with "style and precision", then it should be abandoned. The space programme being a highly visible effort, failures brought on by inadequate funding or poor management are all the more glaring and devastating.

The space science board has been critical in the past of the decision to abandon the procurement of expendable launch vehicles before the shuttle became a proven, reliable system. The decisions not to pursue new unmanned launch systems and to commit the shuttle to carrying major scientific missions made space science unduly dependent on manned space-

flight. Had the shuttle lived up to its expectations, space science would not have suffered too badly, according to Donahue. But the Challenger accident underscores the fact that there has been no unmanned launch vehicle for major scientific missions for almost a decade, a "devastating" situation for space science.

There are seven scientific missions that were supposed to be launched in the next two years. Of these, only the Hubble Space Telescope and the Gamma-ray Observatory specifically require the lift capacity of the shuttle. The Galileo mission to Jupiter would have required the shuttle with its original trajectory, but may be able to achieve its objectives using a fuel-saving trajectory and a combination of the Titan 34D-7 rocket and Centaur G-prime upper stage, both soon to be available. While the shuttle provides a powerful launch vehicle and the possibility of in-orbit repairs, Donahue questions the wisdom of having a manned spacecraft carry a fully fuelled satellite booster rocket.

The space science board produced its statement following meetings last month and this. Board members felt that the Challenger accident made it imperative for NRC to make suggestions on the course of the space programme. According to Donahue, the board's statement went through the NRC report review process in "world record time". **Joseph Palca**