

international news

US plans for solar energy

by Colin Norman, Washington

THE US Congress is now putting the finishing touches to a bill which will greatly expand research and development activities aimed at converting solar energy to practical use. Among the provisions contained in the legislation are the establishment of a Solar Energy Research Institute, coordination of solar energy programmes which are now spread over several agencies of the federal government, and the promise of as much as \$1,000 million over the next five years for research and development.

Both the Senate and the House of Representatives have now passed slightly differing versions of the bill, and a House-Senate conference committee was appointed last week to work out a compromise. According to congressional staff members, there should be little trouble reaching agreement, and Congress should be able to send a bill to President Ford to sign before the session ends.

The bill reflects the feeling on Capitol Hill that solar energy has been given too low a priority in the Administration's energy planning, and that present efforts in harnessing sunlight for practical purposes have been too fragmented. It also reflects the fact that a vote for solar energy goes down well back home in election year.

The House and Senate versions of the bill are in complete accord on two major points. First, they would both establish a Solar Energy Coordination and Management Project, consisting of top officials of five governmental agencies and one Presidential appointee, to oversee the federal government's solar energy activities. Such a body "represents a recognition that changes need to be made in the way in which priorities for energy research and development are set and the way in which the Federal Government organises itself to carry them out", according to one of the bill's chief sponsors, Representative Mike McCormack of Washington State. At present, the National Science Foundation has been assigned the leading role in solar energy research and development, but at least a half a dozen agencies have a finger in the pie.

The second chief point of agreement is the need to establish a special Solar

Energy Research Institute. Modelled on one of the laboratories of NASA or the Atomic Energy Commission, the institute would be established at either a new or an existing energy laboratory of the federal government. No determination has yet been made on where the laboratory should be established, but Congressional jockeying can be expected from politicians who would like to have it in their home state.

Both bills also define solar energy to include not only direct conversion of sunlight to electrical power and heating, but also ocean thermal power conversion and windpower.

The chief difference in the bills is the amount of money which they recommend should be spent. A preamble to the Senate version states that solar energy research should be funded to the tune of \$1,000 million over the next five years, and it also provides \$100 million for the remaining half of the 1975 fiscal year. The House version, on the other hand, would provide only \$2 million this year to draw up a research and development, and whatever is necessary in following years. McCormack said during hearings on the Senate bill, however, that the \$200 million a year estimate is probably "in the right ballpark". Whatever the conference committee finally decides, a large increase from the present level of \$50 million a year can be anticipated. □

Research in France: austerity budget

from the Staff of *La Recherche*

WHEN President Pompidou arrived at the Elysee in 1969, he set out to reorganise the structures of scientific policy. The creation of a Ministry of Industrial and Scientific Development in 1969 actually marked a kind of break with the Gaullist period of scientific policy, even though research, for two years, had no longer been given the priority that it had after 1958. This Ministry, which inherited projects from the former Ministry of Industry and those of the former Ministry of Research also had to oversee the Délégation Générale à la recherche scientifique et technique (DGRST) which is (or should be) in charge of the coordination of science policy.

It is this hybrid and rather awkwardly functioning ministerial structure that M. Giscard d'Estaing inherited last May. When the new government was set up, Prime Minister J. Chirac decided not

to modify the structures of scientific policy fundamentally and entrusted the responsibility of a Ministry of Industry and Research (whose projects are almost identical to those of the ex-Ministry of Industrial and Scientific Development) to M. d'Onano. The first problem which confronted the new minister was the preparation of the budget for 1975. Since it was imperative to fight inflation, drastic cuts in public spending for the following year had to be imposed and thus scientific research will have an austerity budget in 1975. After the Prime Minister's bargaining session, the increase in total funds for research and development included in the 'Enveloppe Recherche' (which comprises the largest part of civil research except for telecommunications and major civil aeronautical programmes) will be about 13% in 1975. This budget raise in funds is approximately as large as that planned for all state expenses, but it may be insufficient to compensate for inflation which is currently increasing at an annual rate of about 15%.

Of course, this budgetary growth conceals serious disparities. First of all, one must realise that basic research will be treated to a relatively lesser degree in 1975 than in 1974 since the increase of programme authorisations for the CNRS will be about 7% next year and this agency will be granted very few newly created budgetary positions for researchers: about 100. Only medical research will continue to have relative priority since funds earmarked for INSERM (Institut National de la Santé et de la Recherche Médicale) for equipping its laboratories will be increased by 28% next year. On the other hand the big projects (the so-called 'grands programmes') which have been the object of much controversy for several years in France will undergo an austerity squeeze to a varying extent. Thus, although the budget increase for the CEA (Atomic Energy) is about 16%, that for CNES (Space Research) investments is practically nothing, as are the funds for the 'Plan Calcul', that is computers.

At any rate, in the fields of space and computer science, budgetary decisions are perhaps only temporary. The choices made reflect a certain agreement to make research in the field of energy a high priority item (funds will be increased by 27%). As far as aid allotted to industrial research is concerned, the 1975 budget will mark a