

state & society

Nixon adds new advisory links for energy problems

President Nixon's recent energy message was primarily concerned with policies of oil importing and exploration, but there were some proposals in the message affecting energy R&D and the government agencies that administer it. A Special Energy Consultant to the President was appointed and two new groups, one in the White House and one in the Department of the Interior, were established to work on energy problems.

The message also included increased emphasis on international cooperation on energy-related R&D and put high priority on speeding up licensing procedures for nuclear power plants.

Charles DiBona has been named as the President's special energy consultant. DiBona was formerly the head of the Center for Naval Analysis.

In the Department of the Interior, Nixon directed the Secretary to strengthen the department's organization for energy activities. Thus far a new position of Assistant Secretary for Energy and Materials has been set up, as has an Office of Energy Conservation. The new office was established to coordinate federal energy-conservation programs that are now diffused throughout many departments and agencies. The office will also conduct research on issues related to energy conservation.

In a related action, Nixon directed the Department of Commerce, together with the Council on Environmental Quality and the Environmental Protection Agency, to develop a rating system for home appliances, automobiles and auto accessories that would classify these products in terms of age and provide information on their relative efficiency as compared with similar products. The use of this proposed labeling system would be voluntary.

At the time of the message, Congress was just beginning to get to work on the Administration's proposals for the FY 1974 budget. The president noted in his message that funding for energy R&D would continue to be monitored carefully and said, "When additional funds are found to be essential, I shall do everything I can to see that they are provided."

The FY 1974 budget does provide increases over the FY 1973 budget. Coal research funding is up about 27% to \$120 million. Fission and fusion R&D

are also up in the FY 1974 budget. There is a request for an increase of \$51 million up to \$320 million for the fast breeder reactor, an increase of 11% on a request for \$61.9 million for research related to the safety of the current generation of light-water reactors and a drop of \$7.5 million in a request for other civilian nuclear-power work. In fusion work the total budget request is up by 35% to \$88 million. This includes a 19% increase to \$47.3 million in magnetic-confinement work and a 59% increase to \$41.2 million in laser fusion work. The President also noted that there would be increased work with Soviet scientists on electricity production by magnetohydrodynamics.

There is a request for a threefold increase in solar energy R&D in the budget from \$4 million in FY 1973 to \$12 million in FY 1974. This program, which is administered by the National Science Foundation, emphasizes development of solar energy for heating and cooling

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STARR

APS to fund Congressional Fellows

The American Physical Society is accepting applications for a new Congressional Fellowship program. The APS Council has appropriated sufficient funds to support up to two physicists who will serve for a year in the offices of senators, representatives or as staff members of congressional committees beginning around this September. The purpose of the program is to provide scientifically knowledgeable staff members who will work as general assistants to members of Congress and it will benefit the scientific community by improving communication between scientists and Congress.

The program will operate in conjunction with a similar one recently established by the American Association for the Advancement of Science. AAAS will organize an orientation period in Washington and help to find suitable positions for the fellows of both groups. The Association will also undertake general supervision of the fellows when they are in Washington. Each society will handle the announcements of its own program as well as recruitment and selection of its fellows.

APS and AAAS will also cooperate in seeking further funding from foundations and private sources so that the program can be expanded to include more fellows in the future. When the Committee on Congressional Fellowships of the APS Forum on Physics and Society looked into the subject, they found that there was a real need in Congress for greater access to scientific and technological expertise. In the House of Representatives during the 92nd Congress, the Committee found, there were only two staff members, both physicists, who had PhD's and only one with a degree in biology. Congressman Mike McCormack, who, along with Rep. James Martin of North Carolina is one of the two scientists in Congress, said recently that the legislative branch would have use for 50 to 100 Congressional Science Fellows if they were available. And a poll taken in Congress by a class at Stanford led by Joel Primack of the APS Congressional Fellowship Committee and a colleague showed that of the senators and representatives who responded 68% felt that the Congress is not ade-

quately informed on technical issues involved in legislation and 88% felt that Congress is at a disadvantage compared to the Executive because of a lack of technical expertise. The two most popular choices for a solution to the problem were an agency like the new Office of Technology Assessment and internships like the APS Congressional Fellowships.

The APS committee found that the program would be beneficial to the scientific community in that eventually scientists around the country would be more effectively involved in the deliberations of Congress, and congressmen and congressional staffs would have a better understanding of the nature of science and the concerns of scientists.

APS has also called attention to the fact that this program signals that the society approves and seeks to promote public policy activities among its membership by providing recognition and reward for them. W. W. Havens, APS Executive Secretary, noted that "by establishing a Congressional Science Fellowship the American Physical Society gives its blessings to this type of activity and encourages physicists to become engaged in public-service science. In this type of activity," Havens said, "the APS is supporting the long-range goal of legitimizing for physicists activities other than traditional teaching and research in universities and industry."

According to APS a prospective fellow should show exceptional competence in some area of physics, have a broad background in science and technology, be aware of many matters in nonscientific areas and be articulate, literate and able to work efficiently with many types of people. The applicant should exhibit a willingness to learn in nonscientific areas and have a strong interest in applying his knowledge toward the solution of social problems. Applications from all age groups and levels of experience are invited.

Those interested in becoming APS Congressional Fellows should submit a resume, references and a statement indicating why their backgrounds and interests qualify them for the position.

Publications that support the application are also welcome. The applications will be screened by a committee appointed by APS president Joseph Mayer. These should be sent to W. W. Havens, Jr, Executive Secretary, American Physical Society, 335 E. 45th St., New York, N.Y. 10017. For an application to be considered for the 1973 Fellowship Program, material should be received at APS as soon as possible.

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of buildings, producing and converting organic materials to fuels and generation of electricity.

In addition to the funding for research on methods to develop cleaner fuels from coal, the FY 1974 budget includes a request for a 24% increase to \$47 million for other environmental control research including the construction of the TVA SO_x removal plant and R&D aimed at minimizing the thermal effects of power plants.

Geothermal energy has a requested funding level of \$4.1 million, up from \$3.4 million in FY 1974.

Nixon also stressed the importance of private backing of energy research and development and cited in particular the newly formed Electric Power Research Institute. EPRI was formed to administer the electric power industry's R&D program, and it is attempting to increase the funding for cooperative electric industry research from \$75.1 million in 1973 to \$118.9 million in 1974. Chauncey Starr, formerly the dean of the UCLA School of Engineering and Applied Sciences, is the president of the new institute.

Starr said that the EPRI program will have an in-house staff of between 100 and 200 and its research will be carried out "where it can be best performed," including universities, government laboratories, or with manufacturers, under close management by EPRI.

Another semi-public group, the Ford Foundation, has had an Energy Policy Project, headed by S. David Freeman,

since the middle of last year. The Ford research effort, with about \$2 million, has awarded a number of grants in a wide variety of fields.

The National Science Foundation has established a task force on energy that will study plans for energy-related research and development, and will assist in the development within NSF of some of the science advisory capabilities that became its responsibility with the demise of the Office of Science and Technology.

The overall objective of the NSF Task Force, which is headed by Paul F. Donovan, director of the Division of Advanced Technology Applications in the Research Applied to National Needs program, is to provide a detailed proposal for the development of a comprehensive national program for the conduct of energy-related R&D, including emphasis on the long-term federal role in furthering and coordinating energy R&D, and on overall environmental, conservation, and policy issues. NSF's total request for energy R&D in the FY 1974 budget is \$21.5 million.

The American Physical Society is investigating the feasibility of setting up a summer study of energy problems by physicists. The APS has set up a committee to examine the direction such a study might take and has appropriated \$5000 to fund a preliminary study.

—SMH

Bachelor's survey shows movement out of physics

Physics graduates indicated three notable changes in their postbaccalaureate plans in a recent survey conducted by Susanne Ellis of the American Institute of Physics manpower division. There has been a decrease in both the fraction of graduates employed by industry in physics-related jobs and in the fraction of new graduates who are interested in employment but cannot find job offers. The percentage of new physics bachelors entering medical school has continued to increase—even beyond last year's figure, which itself marked a dramatic rise from previous

Lay-offs at AEC-supported labs

PHYSICS TODAY recently conducted a survey of AEC-supported laboratories to find out the total reduction in jobs resulting from cuts in the FY 1974 budget (PHYSICS TODAY, April, page 82). We also asked for the number of physicists who were either being laid off or were retiring voluntarily; the resulting information is summarized in the table. Numbers of physicists are estimates in some cases. Five of the reported layoffs at Lawrence Berkeley come as a result of curtailment in hiring of postdoctoral term employees and summer staff; the total reduction affects about 10% of the staff. Argonne has 4300 people on the payroll before the cuts.

—SMH

Laboratory	Total reduction	Physicist reduction
Argonne	250	1
Brookhaven	200	2
Lawrence Berkeley	200	10
Lawrence Livermore	251	28
Los Alamos	167	16
Oak Ridge	400	4
Sandia		
Albuquerque	637	17
Livermore	91	2
SLAC	72	1