at prices that would put them at no disadvantage. The logic of the case swaved a number of members away from the opposition, notably Representative Craig Hosmer (R-Calif.), who helped lead the fight against Hanford last year. (At that time, he contended that the project was wasteful in any terms, because "If we are at war, Hanford will be one of the prime enemy targets and the \$58 million investment will stand a great chance of being blown to atoms. If we are at peace, it will undoubtedly be because agreements have been made between the United States and the Soviet Union . . . and therefore we will not be producing plutonium at Hanford; and therefore there will be no steam to run this plant; and therefore the \$58 million could not be recovered." This time, Hosmer felt that the new financial arrangements took care of his earlier concerns.)

The debate on the revised proposal quickly made clear, however, that no conceivable arrangement for drawing power out of the Hanford reactor would be to the liking of the coal industry and the representatives who reflected its concerns in the House. The 30-member Pennsylvania delegation, for example, forgot party differences to produce 27 votes against the proposals, two uncast ballots, and only one in favor. Helping lead the Pennsylvanians on the issue was John H. Dent, a Democrat, who candidly stated that "We who want to see our coal and railroad industries revived are not so naive as to believe that Hanford power would not eventually move into markets now served by solid fuel. Thus Hanford would not only deprive coal miners in the State of Washington from the jobs they need; it would also come east and snatch employment opportunities from states east of the Mississippi River."

The opposition also turned to national security as a basis for argument, offering the theory that if the AEC has to pay attention to power production, its attention will be diverted from plutonium production for weapons. When Representative Chet Holifield (D-Calif.), chairman of the Joint Committee on Atomic Energy, countered that "practically every reactor in the Soviet Union is a dual purpose reactor," John R. Pillion, a New York Republican, replied: "As a matter of fact, when we are dealing with defense capabilities, I do not propose to follow the recommendations of Khrushchev."

The final vote, 232–163, killed the 27 JULY 1962

project by specifically barring the AEC from entering into "any arrangement" for the production of electric power from the new reactor. The Senate may attempt to revive the issue, but any effort at this time is generally considered futile. The House opposition is in a hardened and uncompromising state and, as far as that chamber is concerned, Hanford is not even remotely negotiable.

The House's rejection of the Hanford project illuminates some fundamental features of the political state in which the nation now finds itself. This is largely a state of domestic stalemate in which social and economic innovation under government auspices automatically encounters intense congressional opposition. The framework left by the New Deal has now become a well-accepted part of the American scene, but efforts to go beyond that framework have almost invariably foundered in Congress. This was the case with Kennedy's proposal for a department of urban affairs, the school construction and teachers' salary bills of last year, and the recent defeat of medical care for the aged financed through social security.

Inside the mass of opposition to the Hanford project there was unquestionably a nugget of rational economic argument. No matter what the proponents claimed for Hanford, the project would not do any good for the small and slowly developing coal industry in the Northwest. On the other hand, 800,000 kilowatts in that booming region would scarcely constitute the death blow that was predicted by the area's coal producers; nor would it have had any effect on Pennsylvania coal, which, because of shipping costs, has no market in the Northwest. Pillion, in summoning his conservative colleagues to arms, characterized the project as "the greatest giveaway of this century," but it is doubtful that he took himself seriously and almost certain that no one else did.

The opposition to Hanford, nevertheless, had no difficulty in drawing bipartisan support from every section of the country, with the understandable exception of Washington, Oregon, and Idaho. The delegations from these states, totaling seven Republicans and six Democrats, went down the line for Hanford. The project also had the endorsement of Mark Hatfield, the Republican governor of Oregon, but the Republicans in the House voted 132–29 against it, while 100 Democrats, 62 of them from the South, were also in the opposition.

Diverse motivations existed in the opposition, but among the dominant strains was conservative aversion to what after all amounted to further government involvement in the power business. The involvement was surely of the most distant nature that legal skill could devise; furthermore, there is no rebuttal to the argument that the steam is going to be there whether or not it produces electricity, but once AEC-produced steam starts turning out electricity-regardless of the financial arrangements-the precedent is established for the AEC to serve as a largescale source of energy. The precedent could conceivably have no progeny, but once established, it would put the government into an area from which it is now excluded. The present political makeup of the House has no appetite for such precedents.

-D. S. Greenberg

NIH Administration: Congress Told It Will Tighten Up

Surgeon General Luther L. Terry has assured Congress that new steps are being studied to tighten supervision over the National Institutes of Health extramural programs.

The steps under consideration were reported last week to Representative L. H. Fountain (D-N.C.), whose Intergovernmental Relations Subcommittee last month accused NIH of "loose administrative practices." NIH in hearings held by Fountain argued that medical research cannot be run like a profitmaking business, and that its best hope for getting good value for its money lay in picking good men and good projects and leaving them pretty much alone. Fountain and his colleagues showed no interest in this concept of how to account for the government's money, and demanded that NIH revise its administrative procedures. The committee would be hard put to compel this directly, but NIH, with its long history of warm congressional relations, is not looking to incur the displeasure of influential members of Congress.

The steps under study include placing greater responsibility on grantee institutions for administrative supervision of extramural research. "The nature and extent of the responsibility remanded to the institution remain to be worked out," the PHS reported. It added that "It might be advisable, for example, to give such institutions authority to approve all travel under grants, or to permit them to make unrestricted shifts of funds among budget categories. . . ."

Also under consideration are recommendations that would tighten up control over funds for equipment and travel. One of these recommendations would require specific NIH approval for foreign travel; another would establish a ceiling of \$2500 for the purchase of equipment without specific approval. Terry stressed that NIH plans to study these proposals further before it comes up with any firm decisions.

Fountain, who has chatised NIH

for what he considers indifference to earlier recommendations of his committee, said he would wait and see what developed, but he did not seem very optimistic. "I believe I speak for our entire Committee," he wrote to Terry, "when I express the hope that this will not become just another case of announced intentions without effective implementation."

Meanwhile, Senator William Proxmire (D-Wis.) failed to get the Senate to cut the NIH appropriation back to what the administration requested. Proxmire, however, got 32 electionyear votes for his proposal, a fact which NIH has duly noted.—D.S.G.

Wiesner Confirmed To Head New Science Office

The Senate last week unanimously approved the nomination of Jerome B. Wiesner as director of the newly established Office of Science and Technology. Wiesner's nomination occasioned his first formal appearance before a Congressional committee since he joined the administration as Kennedy's special assistant for science and technology. He retains that post while serving as director of the new office and will also continue as chairman of the President's Science Advisory Committee (PSAC), an 18-member group of nongovernmental consultants drawn from science, industry, and education. He will also continue as chairman of the Federal Council on Science and Technology, which is the intragovernmental counterpart of the PSAC. In relations between science and government, Wiesner probably occupies the most influential position in the country. Following are excerpts from his testimony before the Senate Labor and Public Welfare Committee. (A limited number of complete transcripts may be obtained without charge from the committee at Room 4230, New Senate Office Building, Washington, D.C.)

Geographic Allocation of Federal Research and Development Activities

I and my advisers . . . have become firmly convinced that the growth of technical industry in an area requires the existence of adequate academic facilities. It is very difficult to maintain or build technical competence in an area that does not have a good scientific educational base. And so, while I think the federal government can do its part in attempting to diffuse the development and research resources, I think the local communities have a very important responsibility to create the proper kind of scientific and academic environment. . .

The Federal government can help by its granting procedure. However, we have to be very careful in the use of this technique. I think it would be a serious mistake for the federal institutions that make grants for research and development to weight too heavily considerations other than technical competence. I think that we might want to provide additional funds, supplementary funds, for area development, but I think that if a large proportion of the resources that the nation is going to spend on research and development and engineering were allocated on a basis other than the qualification of the institutions and the industries to do the best possible job, we would risk having a serious deterioration in our work.

So what I would suggest is that in the field of research and the field of scientific education, we consider the special provision of additional resources for these development problems, rather than try to change the basis on which research activities are allotted.

There are some areas of the country that used to be outstanding, for example, in the Midwest, where I came from. I think there has been a scientific decline there during the past decade or two because of too large a concentration on the consumer goods industry. I know, for example, of a Midwest college that produced 150 Ph.D.'s during the last decade in a specialized field and only one of them remained in the Midwest, probably because there were few research opportunities in the area as challenging as those on the west and east coasts.... I think it is a problem that the Federal government should help to correct. I am confident that we will try. However, it does require very active support and participation of local groups....

Availability of Scientific and Engineering Manpower

There is no simple answer to the question because we are trying to predict the future. Also, the problems are not the same in all fields. . . . A related question is whether we are using our manpower effectively. Sixty to seventy percent of the technical people in this country work for the government directly or indirectly. And the efficiency and the effectiveness with which we use these people makes a very great difference.

At the moment, our general feeling is that there is no shortage of scientific manpower, or at least no large and general shortage. There is, however, a very great shortage of the more highly trained people, people with advanced degrees. Therefore, we believe that the nation must make a major effort to increase the percentage of students who study for advanced degrees. We also see serious problems, though, in maintaining growth in technical fields, for we must almost double the number of working scientists and engineers in the next decade if we want to continue our past rate of growth. . . . I believe that the federal government will have to help in a large way, particularly in increasing the quality, that is, in increasing the number of college trained people with advanced degrees. But I would not want to make specific recommendations on this, because we are still in the middle of our studies.

Increasing the Attraction of Careers in Science

 \dots I think that most American scientists would feel that it should not take special bribes to get people into the field, but I do think that there are many things that we can do. . . .

... one of the most serious problems that the nation faces is in our ability to attract scientists and engineers into government. I spend a considerable amount of time trying to persuade people to come into government employment. We have, probably, half a dozen high-level technical positions in