Energy R&D Funding Shift Urged

If ever a committee of the National Research Council began its work in the midst of an overheated climate, it was the one impaneled last summer to study the implications of national energy policy on . . . climate. NRC committees are famous for their ability to sidestep controversy, and this one tried mightily to prove itself no exception. Rather than risk its reputation in the highly charged scientific debate over whether the greenhouse threat is real, the committee has come up with a report (*Confronting Climate Change: Strategies for Energy Research and Development*) that, it claims, makes sense whether you believe global warming is actually taking place or not. But if you accept the committee's collective wisdom, you are forced to conclude that the nation has been ill-served by the energy R&D priorities of the Reagan Administration—priorities largely maintained by the current Bush Administration. And that is stirring a controversy of a different kind.

Chaired by David L. Morrison of the IIT Research Institute in Chicago, the panel's basic recommendation can be summed up in two words: more money. It notes that existing Department of Energy programs for research and development in civilian energy have seen more than half their constant-dollar budget disappear since 1979. These Reagan era cuts fell most heavily on renewable energy sources that can be tapped with existing technology, such as wind, solar, and geothermal power—research funding for which has fallen by 89% over 11 years. The big winners in the budget sweepstakes were DOE's magnetic fusion program, which suffered a constant-dollar cut of only 7%, and basic energy research, which increased by a comparatively huge 47%.

To redress this imbalance, the report recommends that DOE reallocate some $300 million—or nearly 20% of its civilian R&D budget—from magnetic fusion and fossil fuel programs to research on conservation and renewable energy sources such as photovoltaics, biomass and biofuel systems, advanced storage batteries, and new insulating materials. The intent would be not only to shift energy production away from fuels that emit "greenhouse gases," but also to improve U.S. energy security by reducing the nation's dependence on imported oil.

In the event that policy-makers agree to take steps to head off global warming, the panel says a series of more sweeping changes are needed. This "insurance strategy" would include, among other things, development of advanced nuclear reactors, stimulated production of promising photovoltaic technologies, and research into ways to capture carbon dioxide from combustion processes and store it in abandoned gas wells. While the panel didn't make a precise estimate of what the insurance strategy would cost, it guessed that perhaps $100 million to $500 million a year would be needed for up to 10 years. The committee is quick to point out that new research money will not be sufficient on its own; significant changes in energy production will probably require federal market intervention in the form of tax credits or disincentives.

Needless to say, these recommendations have ruffled a few feathers. Complaining about the proposed cuts in the fossil fuel and fusion programs, Secretary of Energy James D. Watkins said in a statement that "[a]lthough we agree with the priorities highlighted by this study, we believe that these priorities should not be met at the expense of other programs promising substantial long-term environmental and energy security benefits." Thus did the NRC committee avoid one area of controversy only to trigger a new one.

■ **DAVID P. HAMILTON**

NIH Director: Sixth Time Lucky?

All things come to him (or in this case, perhaps, her) who waits. *Science* has learned that cardiologist Bernadine P. Healy, 46, is about to be offered the post which has been rejected—formally or informally—by at least seven leading men of American medicine.

After resolutely working his way through a list of potential candidates for the directorship of the National Institutes of Health that was drawn up by a special search committee, Health and Human Services Secretary Louis Sullivan may at long last have reached someone who will take the job.

Bernadine Healy

Healy, who could not be reached for comment, is said to be likely to accept. Her "papers" are now under review in the White House. Because she is currently vice-chairman of the White House Science Council and a former deputy director of the Office of Science and Technology Policy, there is every reason to think she could be cleared quickly. Currently she is chairman of the Cleveland Clinic Foundation's research institute.

Why is the job so hard to fill? One reason is Sullivan's reported refusal to allow the NIH chief rather than his boss, the assistant secretary of health, to make certain routine administrative decisions such as authority to appoint advisory committees (*Science*, 4 May, p. 547). The Watergate era ethics in government act is another.

The list of turn-downs goes like this:

Anthony Fauci, AIDS chief and director of the National Institute of Allergy and Infectious Diseases, rejected the directorship three times because of a determination to stay active in his lab.

Washington University chancellor William Danforth, Republican and heir to the Ralston Purina fortune, also was asked three times, each time coming closer to saying "Yes." But there was no getting around ethics laws that would have forced Danforth to give up leadership of his family's private foundation. A life-long philanthropist, Danforth chose St. Louis over NIH.

Financial limitations posed by the ethics act also contributed to "No" decisions by Sheldon M. Wolff, chairman of medicine at Tufts University; Dominic P. Purpura, dean of the Albert Einstein College of Medicine; and David R. Challoner, vice president for health affairs at the University of Florida in Gainesville. Because of the ethics act, honoraria—common in academic medicine for lectures and the like—would have to be foregone, as would service on foundation or corporate boards. In some cases, pension investments would be compromised. A lot has been made of the comparatively low salary the NIH director gets—$100,000 would be a real pay cut for most medical chiefs—but candidates have told *Science* that salary alone was not the issue; rather, it is the total package of financial sacrifices that make the job unacceptable for many.

In addition to those who formally said "No," others said they were not available. Institute of Medicine president Samuel O. Thier and Yale medical dean Leon E. Rosenberg, each high on the search committee's list, decided to stay where they are. At least a dozen others said "No" to the committee's inquiries before an official list was drawn up (*Science*, 30 June 1989, p. 244).

If Healy says "Yes," it will end a search that began 15 months ago.

■ **BARBARA J. CULLITON**