million this year. If Congress agrees, the entire program would be killed in 1991. Any move in that direction is sure to be contested by legislators from Hawaii, where DOE's research effort has been centered. San Martin, however, defends the Administration's decision to ax the program, saying that it was not that the technologies lack merit, but because the department had to choose where to use its limited resources.

Although ocean thermal is the only major program targeted for elimination, cutbacks have been proposed across much of the DOE's renewable energy program. And that won't be the end of the programmatic trauma: more economies are expected next year when the new assistant secretary for conservation and renewable energy, J. Michael Davis, unveils the 1992 budget. He is the first high-level program manager to come to the job with an extensive background in renewable and solar energy—he served as a program leader at DOE in the late 1970s, a manager at SERI, and head of a solar equipment company in Denver.

Based on this expertise, Davis is already planning a major restructuring of his entire conservation and renewable energy division to focus R&D programs on industrial, transportation, utility, and building applications. Davis seems to be making a favorable impression on industry and DOE researchers by asking Congress for permission to use \$6.5 million in leftover 1989 funds to expand research this year instead of returning the funds to the federal treasury. The money would go for photovoltaics, solar thermal concentrator technology, and the construction of the SERI research facility.

"The good news is that we have somebody who knows the research," says Sklar. "The question is can he take a program that has been in disrepair for the last 8 years and make something intelligent out of it."

MARK CRAWFORD

Who Should Study Radiation Effects?

Credibility is the gold standard of public life: when you have it, you can do no wrong, and when you lack it, you can do nothing right. This explains why the Department of Energy has been trying desperately in recent months to regain public confidence in its methods of evaluating health risks at weapons plants and the other nuclear sites it operates. So far it has not had great success, and it may now be about to give up. It is considering turning over most of its \$29 million in long-term radiation exposure research to another department.

DOE has been battered by unfavorable news reports since the mid-1980s, when investigators began to unveil its once secret past and discovered one mistake after another in the handling of radioactive materials. It has also been attacked for suppressing data on workers' exposure to radiation.

Last year, searching for a way back into the public's good graces, DOE Secretary James Watkins appointed a special com-

mittee to advise him on how to improve the agency's conduct of epidemiological studies—in particular, how to make them credible. The problem, as the advisory panel recognized, is that regardless of whether DOE stifles good epidemiology, it has a stake in the results and may not be the best research sponsor.

This quandary came to the fore in

1977 in the celebrated case of epidemiologist Thomas Mancuso of the University of Pittsburgh. The health researcher got into a quarrel with DOE's predecessor, the Atomic Energy Commission, over rights to data he had collected while working under an AEC contract. When Mancuso claimed to have found excess cancers among workers at the Hanford nuclear site, he was denied access to the records. Even as recently as this year, a researcher complained that DOE officials made it clear that they did not want contract research to come up with "unfavorable" results. Greg Wilkinson, an epidemiologist formerly at the Los Alamos National Laboratory and now at the University of Texas, testified that he had been chided by superiors for producing a study that found excess cancers among DOE workers. A Los Alamos spokesperson responded afterward that the study had not been suppressed, pointing out that it appeared in a scientific journal. Although this report was published, Wilkinson said he felt uncomfortable about the pressure and eventually left Los Alamos.

Watkins's new advisory group, chaired by Kristine Gebbie,

secretary of health for the state of Washington, quickly got to the heart of this business and produced a draft report early this year. In a manner untypical of most Washington committees, it has already voted to turn the results over to Watkins next week and close down 2 months ahead of schedule.

The panel's legacy, according to executive director Steven F. Boedigheimer, will be unanimous agreement on a major point: that much of DOE's health effects research should be conducted not by DOE but by some other federal agency, probably the Department of Health and Human Services. This is the primary change sought by many critics who contacted the panel. However, they generally wanted a more sweeping overhaul.

For example, Jack Geiger of Physicians for Social Responsibility argued that *all* health-related duties should be entrusted to an independent agency, because "it is. . intolerable that the fox could have the exclusive right [or even the primary responsibil-

> ity] for reporting on morbidity and mortality in the chicken coop."

Boedigheimer says that "we did not take the broad-brush approach" of these DOE critics, but identified "two distinct functions" in epidemiology and assigned one to DOE and the other to HHS. The one that should go to HHS, the panel believes, is "long-term analytical" re-

search, involving mainly retrospective studies of large populations. Meanwhile, the job that should remain at DOE, according to the committee, is the day-to-day monitoring of workers' health and radiation exposure. Panel members believe this makes sense not only for practical reasons, but also because they think employers have a responsibility to step into the workplace and actively protect the health of employees.

The draft report of 3 March makes other pointed comments: DOE "manages its epidemiologic activities in an uncoordinated and inconsistent manner," its agenda is not planned, and data collection is not standardized.

■ DOE should create a new assistant secretary for occupational and environmental health who, among other duties, should "investigate urgent and immediate problems surfaced by the surveillance system or by managers, workers, or community concerns."

DOE and HHS should set up a joint committee to raise the quality of epidemiologic research.

ELIOT MARSHALL

DOE "manages its epidemiologic activities in an uncoordinated and inconsistent manner"