

wards, who is leaving DOE to head the Medical University of South Carolina.

The 45-page report, sharply critical of current NRC practices, is full of suggestions for administrative and legal reform. Noting that plant construction time lengthened by 70 percent between 1974 and 1980, the paper places much of the blame on "increased NRC review time." The 20 percent inflation rate for capital costs, the paper says, is "due in part to a regulatory emphasis on the analytical understanding of low probability events in an unduly legalistic licensing forum." Because of this, builders have dealt with safety concerns in ways that make sense in a legal, but not always in an engineering, context.

The DOE paper gives an example: in order to survive "low probability earthquakes," nuclear plant piping must now meet very fine tolerances, the kind one might expect to find in a machine shop but not in a large heating plant. Plumbing a nuclear plant has become more costly than it need be, DOE argues, and this has increased expenses.

In summary, the DOE report finds regulators to be "unpredictable," which is to say that DOE believes they have not established a consistent safety policy. They have shifted ground from year to year, making the rules complex, even chaotic. To improve the situation, the DOE recommends the following changes.

- The NRC should define what it considers to be an acceptable level of risk and should not require any plant operating within this acceptable range to install new safety devices by "backfitting." All backfitting requirements should be approved by a central committee.

- Public hearings on applications for a nuclear plant license should be more tightly constrained to avoid procedural delay. The NRC should take several steps to weed out irrelevant petitions, such as those involving "previously resolved issues." Cross-examination of witnesses should occur only when material facts are contested.

- Applicants should be allowed to get a construction and operating license in one step, not made to go through two independent hearings as at present.

- Rather than ask the independent

Advisory Committee on Reactor Safeguards (ACRS) to look at all license applications, the government should let the ACRS review only those it deems most important.

- The NRC should review and give 10-year clearances for nuclear plant construction in certain areas so that future builders will have quick access to sites.

- The NRC should clear certain generic reactor designs in advance so that builders will be able to buy approved plans off the shelf.

The nuclear industry welcomes these proposals. The antinuclear critics are not particularly aroused, for they do not think Congress is ready to approve broad licensing changes. "It's another get-well card for the industry," says Robert Pollard of the Union of Concerned Scientists. Noting that domestic nuclear plant orders stopped in 1979, he says, "This may make the industry feel better, but it won't cure its illness."

—ELIOT MARSHALL

President Vetoes EPA R & D Bill

Just before the election, President Reagan took the extraordinary step of vetoing a bill that authorizes funds for research and development by the Environmental Protection Agency (EPA) in the current fiscal year. In his announcement, the President cited—of all things—a point of scientific principle. He noted that a heretofore obscure provision of the bill required representation from "states, industry, labor, academia, consumers, and the general public" on EPA's Science Advisory Board, a group that settles scientific disputes and helps to set research priorities.

The requirement is repugnant, he said, to the tradition of disinterested scientific advice. "To undermine this tradition by requiring that scientists . . . wear the label of 'industry' or 'labor' or 'consumer' is a modern-day version of Lysenkoism to which I must strongly object."

Reagan's careful attention to a detail that other Presidents would surely have ignored is said to be the handiwork of John Hernandez, the deputy

administrator of EPA. In an unusual eleventh-hour effort, Hernandez successfully persuaded both the Office of Management and Budget and the Office of Science and Technology Policy that the issue was of sufficient importance for Reagan to risk a further blackening of his image on the environment from skeptics who would disbelieve his motive.

Representative James Scheuer (D-N.Y.), for example, claimed that the stated reason for the veto was a cover for Reagan's opposition to provisions in the bill that required research on such problems as indoor air pollution and the health effects of energy production. Scheuer, who chairs a House subcommittee on the environment, is responsible for the language that Reagan found offensive.

Scheuer's complaints were undercut, however, when the leaders of two scientific organizations rose to the President's defense. Frank Press, president of the National Academy of Sciences, and William Carey, executive director of the AAAS, both wrote to presidential science adviser George Keyworth after the President's decision to state that they too objected to the advisory board requirement. Press said that "such a provision could mean that political ideologies and institutional affiliations replace professional and technical competence in the selection of the Board's membership." Carey said it was "inimical" to advisory board duties.

Scheuer's argument was also undercut by the fact that EPA's research and development funds are ultimately determined by an appropriations bill, which the President has already approved. That bill contains some extra money for acid rain and indoor air pollution, although not as much as Scheuer wanted. It also gives the agency the option of spending less than Scheuer sought for water quality and hazardous air pollutant research.

Reagan's veto message acknowledged his opposition to several provisions in the authorization bill, but it emphasized the science board requirement. Strangely, no one in the Administration took the trouble to voice a strong objection to the requirement until after the bill was passed, according to congressional staff aides. EPA and OMB officials said it was merely an oversight.

—R. JEFFREY SMITH