erly accounted for." Rather than patching up the present system, Proxmire would make most IR & D into specific contracts so they could be regular line items in the federal budget.

In reply, Pentagon officials admit there are abuses under the system but that there is no other way that the United States could have achieved its track record of arms development. Dale Church, the Deputy Under Secretary for Acquisition, puts it this way. "The Pentagon doesn't have all the good ideas locked up. It doesn't even recognize all the good ideas. What program managers may consider the dumbest ideas to come down the pike in a long time might turn out 2 years later to be the thing that saves their souls. We want to make sure there's enough money left around in the pot to keep the government managers from making decisions like that. The contractor should have an equal chance to decide what he thinks will be the real breakthrough areas and the real new technologies. Sometimes we need to give the contractor a free rein and let him go off and do his own thing.'

To this, Proxmire points to Air Force and DOD reports that show 65 percent of

all IR & D money is spent not on searching for "the real breakthroughs" but on relatively short-term projects aimed at bringing home the next contract. "The bulk of this money is something that could be clearly and easily identified as relating to a specific project in a contract, and should be fully disclosed to Congress. NSF has to do it and so does NIH. I really don't see this as being all that different."

The significance of this debate is not so much who is right and wrong but that it has been going on for nearly 20 years. and that the Pentagon has grown weary of it. The upshot seems clear. Contractors say they are going to get stingy with new ideas for weapons technology. The Pentagon holds its breath and hopes for the best rather than doing anything that might rub Congress the wrong way and renew the long-running dispute. But maybe an out-of-court settlement was all that the AT & T incident called for. After all, the chances of discovery on a government-wide level occurring in the near future seem slight, and successful penetration of the IR & D files even less likely. Perhaps the contractors are playing up the incident for their own purposes. At least one suggested change in the IR & D program would mean less paper work for the contractors, less accountability in what is already a freewheeling program. The benefits of this approach, however, do not seem to justify the risks. Contractors, too, are aware of the congressional debate over IR & D, and it would seem to be in their best interests not to jeopardize a billion-dollar-a-year pipeline for unrestricted research dollars.

If the contractors are genuinely apprehensive, there may well be a decline in the quality of the IR & D program in the months and years ahead. Would the Pentagon admit as much if this came to pass? For the moment Deardorff says there has not been any change in the number of advance agreements the Pentagon's IR & D office has been signing, but he says he is watching. "We wouldn't be able to make an evaluation right now,' he says, "because the technical reports have been in the contractor's mill for some time. Preparing some of these is a major undertaking, so if there is going to be an impact, I suspect that you won't notice it until late this year.'

-William J. Broad

Carter Creates State Radwaste Council

As chairman, Governor Riley of South Carolina could play critical role in search for a political accommodation on the siting of repositories

On 12 February President Carter sent to Congress his long-awaited statement on radioactive waste policy. He also announced his appointment of Governor Richard Riley of South Carolina to chair the State Planning Council on radwaste management, a new entity on which hopes for a politically acceptable nuclear waste program are partly riding.

According to the policy statement, which the President was to present at a White House meeting with Governor Riley and several members of Congress, the federal government's relationship with the states in the siting of high-level waste repositories will be governed by the "principle of consultation and concurrence." Under this principle, the prospective host state will have a "continuing role in decision-making with regard to the federal government's actions on the siting, design, and construction" of repositories.

"If in the final analysis a state said no, the federal government would still have the responsibility and could go ahead [and build the repository]," Stuart E. Eizenstat, the President's assistant for domestic policy, told *Science*. But situations of this kind can be avoided, he said, through the consultation and concurrence process. He said that the Administration does not think that states should be given a right of veto, as some members of Congress have proposed.

Carter urges states "to participate as partners in the program . . . not as adversaries," and to regard the safe disposal of radwastes as "a national, not just a federal, responsibility." More than a dozen states have enacted laws that either prohibit or make difficult the establishment of repositories, giving rise to concern that state opposition will continue to snowball and leave the waste program in a political no-man's-land.

The State Planning Council, which President Carter is creating by executive order, will have 18 members including eight governors, five other state and local officials, a representative from an Indian tribe, and the heads of the Environmental Protection Agency and the Departments of Energy, Transportation, and the Interior. The council is expected to play a key role in helping to work out the political accommodations between the feds and the state and local officials that can allow the radwaste program to go forward.

As council chairman, Governor Riley, a Democrat elected for the first time in 1978, could be one of the major actors in development of radwaste policy. He was Carter's campaign manager for South Carolina in 1976 and is highly regarded at the White House. Moreover, he is believed to be someone who will have high credibility with other state and local poli-

ticians. "He is not somebody who feels the states should roll over and play dead for the federal government," says Gus Speth, chairman of the Council on Environmental Quality. Speth noted that Riley blocked the shipment of low-level wastes from Three Mile Island to South Carolina and maintained that his state should not be the only one in the East to receive such wastes.

The President's policy statement contains no surprises because it follows

As recommended by the IRG majority, the President has canceled the WIPP project, but investigation of the Carlsbad site will continue with a view to including it in the bank of sites from which the first repository will be chosen. (Repositories, once established, will be for final disposal of wastes from the weapons program and commercial power reactors.) The White House will try to persuade Congress, and the House and Senate armed services committees in partic-

sources being made available, in money and talent, are adequate."

Pending the opening of the first repository, spent fuel will be kept in pools at the reactor sites and—if Congress acts favorably on an earlier Administration proposal—at an away-from-reactor interim storage facility that would be run by the government at an as yet unselected location.

How the President's policy will be received by Congress is unclear. Some key committee and subcommittee chairmen, such as Representative Morris Udall (D-Ariz.) and Senator Gary Hart (D-Colo.), have put forward proposals that are felt to be compatible or reconcilable with the President's. There are, however, some major divergences, as in the case of Senator Hart's proposal to phase out nuclear power over a 10-year period if an acceptable plan for permanent waste isolation is not in hand by 1985.

The President touches on this question of whether the future of nuclear power should be tied to a showing that safe radwaste disposal is technically and politically feasible. But he does it only indirectly, by saying: "The Nuclear Regulatory Commission now has under way an important proceeding to provide the nation with its judgment on whether or not it has confidence that radioactive wastes produced by nuclear power reactors can and will be disposed of safely. I urge that the [NRC] do so in a thorough and timely manner and that it provide a full opportunity for public, technical and government agency participation."

Some proposals now afoot in Congress are clearly not reconcilable with the President's. A striking case in point is the radwaste bill reported recently by the Senate Committee on Energy and Natural Resources. This measure, sponsored by Senator Bennett Johnston (D-La.), would provide for spent fuel to be stored indefinitely in retrievable surface or near-surface storage that would require constant human monitoring and surveillance. It runs directly counter to the President's view that radwaste disposal "should not be deferred to future generations and should not depend on the longterm stability of social institutions."

The President's policy is supported by big bucks. The fiscal 1981 budgets for military and commercial radwaste management total nearly \$700 million, or almost \$100 million more than is budgeted for all other civilian programs associated with nuclear fission. It is up by about \$150 million or so over the radwaste budget for fiscal 1980 and is vastly greater than the radwaste budgets of several years ago.—LUTHER J. CARTER

"It is better to do the job right than to do it fast," says President Carter.

closely the previously announced recommendations of the Interagency Review Group on radwaste management. The policy will be one of technical conservatism, and the first repository site is not expected to be chosen before 1985. The hope is that, by that time, four or five sites in a variety of geologic media will have been evaluated and found potentially suitable. Site selection is to be governed by the National Environmental Policy Act, which means there will be full public disclosure of conditions at the site and a discussion of alternatives.

The opening of the first repository, which would be subject to licensing by the Nuclear Regulatory Commission, is not expected before the mid-1990's, although establishment of an intermediate scale facility might come sooner.

"It is better to do the job right than to do it fast," says the President's prepared statement.

The Department of Energy (DOE), taking a stand contrary to that taken by the Interagency Review Group (IRG) and ultimately by the President, has wanted the Administration to proceed with construction of the Waste Isolation Pilot Plant (WIPP) in a bedded salt formation near Carlsbad, New Mexico. As contemplated by DOE as recently as a year ago, WIPP would have been an NRC-licensed facility for disposal of intermediate-level transuranic (TRU) waste from the nuclear weapons program and up to 1000 assemblies of spent fuel from commercial reactors. The DOE continued to support WIPP even after Congress saw fit last year to provide only for a military TRU waste facility that would be subject to neither NRC licensing nor state approval.

ular, to go along with this presidential decision.

Under Secretary John Deutch, DOE's representative on the IRG, has been concerned that cancellation of WIPP might be seen by the public as further evidence that radioactive waste management is a losing enterprise. In the main, Deutch and DOE have favored a technically conservative approach to repository siting, but, again, have failed to persuade the IRG majority or President Carter to go along with its desire to speed up the selection of the first repository site by about 3 years by making the choice from among two or three sites instead of four or five.

Environmental groups are expected to be pleased by the policy. Speth says that "at every option point, the decision that the President made was pro-protection of public health and safety."

The nuclear industry also may conclude that the policy is acceptable overall. Carl Goldstein, a spokesman for the Atomic Industrial Forum, is upbeat in his comments on the policy, the details of which leaked out in late January.

"It appears that we will be able to support this policy," Goldstein told Science. "What we've been looking for is a sense of direction and a sense of dedication to solving the problem. Both of these are evident in the [President's statement]." He said the industry would have put repository development on a faster track, mainly for the sake of quickly demonstrating that the radwaste problem is solvable. "But we don't argue with the President's schedule, because, technically and physically, we will have the facilities when we need them if the schedule is maintained. We think the re-