

into specifically because of the report's inadequate information base and because the Forest Service knew its program was well balanced.

The Pound committee in its main report stresses the link between poor research and failure to have projects reviewed by outside peers. The Forest Service does not have a formal peer review system. Projects are reviewed for scientific merit (as well as relevance) at the station level and by the Washington staff of the Forest Service. There is no formal requirement for peer review at the station level, but because of the close relationship with universities—some 60 percent of Forest Service scientists are located on campus—station directors often ask academic colleagues to review projects. Arnold estimates that half of all Forest Service projects are reviewed by outsiders in this way.

The review at the Washington level is undertaken by a staff of 30 people who are not active scientists but are "among the leaders in their fields." Asked if there might be a danger of the staff failing to keep up with new developments, Youngs said that, although many of them have been "away from the bench for some years," they have all maintained close contact with their field of research. According to Arnold, the review staff are "not retirement posts" and there is a rapid turnover, the average tenure being about 3 years. A principal function of the Washington review staff is said to be that of ensuring quality control. Arnold estimates, however, that "maybe 10 percent" of the projects submitted are returned for modification, and none are rejected outright.

It is the belief in the Forest Service that, apart from the Waggoner and Metcalf studies, the Pound committee's report on USDA research does not refer to them. "We have a larger proportion of our scientists on campus than does the USDA as a whole. I assumed the Pound report didn't apply directly to us," Arnold says. A check with Pound would have told him that it applies to all USDA research, the Forest Service's included.

A search for an outside perspective on the Waggoner and Metcalf studies met with a mixed response. According to J. R. Parmeter, a plant pathologist at the University of California, Berkeley, the Forest Service in the California region has developed a superb program of research. "Within the last 6 years, they have been organizing

New Energy Message Downplays R & D

There were few surprises in President Nixon's second energy message delivered to Congress on 18 April. The emphasis, as expected, was on increasing the nation's domestic supply of energy, with special reliance to be placed on new coal and oil resources for the near future. The near future is defined as up to 1985; after that, nuclear reactors are expected to play an increasing role to the point where they will supply over half the nation's electricity needs by 2000.

Most newsworthy was the President's decision to end oil import quotas, regarded by many as long overdue. (The President ignored the recommendation of one of his commissions in 1970 to end the quotas.) Nixon also recommended that the cost of natural gas become gradually deregulated to the point where consumers will pay the real costs. Consumption of natural gas has been artificially stimulated by low price ceilings, and the government wants gas-using industries to switch to coal.

A big push toward development of new oil resources is also on for the near future. To stimulate oil production Nixon has recommended that annual acreage leases on the outer continental shelf be tripled by 1979 and that oil producers be given tax credits for exploration outlays. Since the government is anxious, for political and balance-of-payment reasons, to avoid relying on foreign oil, tariff-free oil imports will be phased out over a 7-year period.

In order to allow industries and utilities to keep on using coal, Nixon has asked states to postpone implementation of secondary air-quality standards. Primary quality standards must go into effect by 1975, but 22 states have set that date as the deadline for compliance to secondary standards as well. The administration feels that, if these standards are delayed, a couple of years of research on clean coal will make it possible for coal users to adhere to new standards without a sag in production.

Environmentalists are not pleased with the general tenor of the report, which, they say, emphasizes the need to step up the nation's energy production while paying only lip service to the need for energy conservation. Nixon said we must develop a "national energy conservation ethic" but recommended only voluntary efforts such as the labeling of electric products to indicate how much electricity they use. He did point out, though, that rising energy prices—which are expected to double by 1985—will provide the most effective deterrent to waste.

The research and development section of the report contained nothing new. Highest priority is the development of low-cost clean-burning coal, and great confidence is expressed in the boons expected from the liquid metal fast breeder reactor.

In Congress, the most outspoken critic of the President's energy policy is Senator Henry M. Jackson (D-Wash.), chairman of the Senate Interior Committee, who flatly called it "inadequate." Jackson has called for a \$20 billion research and development program that would make the country self-sufficient in energy by 1983. In addition to developing current sources, Jackson wants a much heavier commitment to future sources, such as nuclear fusion and solar energy. (The President's budget asks a total of \$772 million for energy research in fiscal 1974.)

In keeping with heightened concern about energy, the proposed Department of Natural Resources is now the proposed Department of Energy and Natural Resources, (DENR) and a new Office of Energy Conservation is being set up in the Department of Interior. A division of energy and science is also being created within the Office of Management and Budget. John Sawhill, a Baltimore financier, has been brought in to head the new office. He points out that his office is all part of Nixon's grand governmental reorganization scheme—its functions, which cut across all the energy-related agencies in government, would parallel the responsibilities of the would-be DENR and of natural resources supersecretary Earl Butz.—C.H.