or technically sound; nor is it established that the 'hard' path is as grim as he would have us believe. . . . ERDA sees no reason not to develop both sets of technologies and let them compete in the market place for specific applications."

Despite ERDA's criticisms of Lovins' proposal, the agency is at least going through the motions of considering the ideas in greater depth. It has announced a series of contracts with university and other research groups to look into the potential of soft technologies and distributed systems in greater detail, and Lovins has been retained as a consultant. Other evidence that Lovins is having at least a superficial impact is to be found in President Carter's energy message to Congress, which cited in support of the cogeneration of heat and electricity the "fact" that 29 percent of West Germany's power is produced by this method a number that appeared in Lovins' Foreign Affairs article. In fact, the correct figure is closer to half of that, as Lovins himself acknowledges in a later paper. Overall, however, the Carter energy proposals reveal no fundamental shift toward soft technologies.

Part of the attention accorded the soft technology thesis, despite the fact that it represents a radically different set of values and assumptions about the character of the energy problem, seems to be due to the force of Lovins' personality. He is young (29), obviously very bright and articulate, and comes over in public forums as a kind of wunderkind, impressing audiences with his command of a wealth of material. His confidence in his vision of the energy problem appears to

approach arrogance—in a private exchange of letters with Bethe, according to a friend and supporter of Lovins who has seen the correspondence, Lovins is "unfortunately very rude" in his response to Bethe's efforts to come to some meeting of minds on one of their points of disagreement.

Environmentalists have often been criticized as quick to oppose but slow to endorse a viable alternative, and Friends of the Earth, Lovins' group, has been among the most adamant in opposing all forms of nuclear power and expanded use of coal. Lovins thus faced some formidable difficulties in contriving a coherent energy future that does not rely on coal and nuclear-difficulties that, to judge from his critics, he did not entirely overcome. His case against centralized power generation and what he calls the "diseconomies" of large-scale energy systems appears to be on somewhat firmer ground.

Lovins points out, for example, that 70 percent of the cost of electricity—by far the most expensive form of energy—is attributable to the transmission and distribution system. He argues that not only are the economies of scale for large power plants illusory, but also their reliability is less and their environmental impact and transmission costs greater than those of smaller generating units located closer to the point of use. Smaller units would also lend themselves to mass production rather than the laborious, lengthy field assembly of large power stations. Although not everyone will agree with the social and political side effects that Lovins attributes to excessive

centralization of the energy supply system—such as fostering big government and an authoritarian, antidemocratic society—it seems likely that the national infatuation with "bigger is better" has indeed carried the trend toward ever larger energy systems to questionable extremes. Equally, the national emphasis on electrical energy rather than on fuels as the mainstay of the future is at least open to argument.

The cause for concern about the kind and the scale of energy systems is perhaps most clearly evident in the federal energy R & D effort. Despite growing domestic shortages of liquid and gaseous fuels, for example, more than 75 percent of the fiscal year 1978 research budget is devoted to new sources of electricity. What R & D effort there is on sources of fuels is largely devoted to coal-based synthetic fuels; investigation of biological sources of fuels is far more meagerly treated. Even within the solar energy R & D effort, the emphasis has been on large-scale, centralized systems for producing electricity, as Lovins points out.

For all its flaws, the Lovins critique is easily the most comprehensive and technically sophisticated attempt to put together an energy program compatible with environmental values. And the continuing reaction to it in Washington and elsewhere would seem to indicate that the intellectual vigor and political muscle of the environmental movement is far from spent, but rather is escalating from a purely defensive focus on particular sites and technologies to consideration of energy systems as a whole.

—Allen L. Hammond

## **Public Interest Lawyers: Carter Brings Them into the Establishment**

When the history of President Jimmy Carter's first 100 days is written, more than passing notice may be taken of the fact that, during this period, Carter appointed more than a score of people from the relatively new field of public interest law to subcabinet positions and important jobs at the White House and the Office of Management and Budget.

Altogether, 24 persons with back-

grounds in public interest law had, at last count, been chosen for high-level administrative or staff jobs—enough to indicate that, for all their past struggles with the powers-that-be on behalf of previously unrepresented interests and points of view, practitioners in this new field are themselves now becoming part of the political establishment (see box, page 962).

Until 7 or 8 years ago, public interest law did not exist in any general sense, although a few specialized kinds of public interest practice such as civil rights and poverty law had developed much earlier. Today, there are reported to be more than 90 public interest law groups across the country, with about 600 lawyers-together with some scientists, who work with the lawyers in preparing lawsuits and petitions on technical issues—engaged in this field of practice full time. What distinguishes it most from ordinary legal practice is that it involves actions, such as suits or petitions aimed at pollution abatement or utility rate reform, in which the plaintiffs have no greater stake in the outcome than does a wide public.

The appointment of so many practi-

tioners of public interest law to important subcabinet and staffjobs can be expected to have an impact both on the government and on public interest law itself. First consider the effect on government.

By the appointment of public interest lawyers with established track records and unmistakable points of view as reform-oriented activists, the Administration can give and is giving further sign of its intention to bring about some definite changes or shifts in emphasis in government policy and perhaps shake up the bureaucracy at the same time. Such a sign can be seen in the forthcoming nomination of Richard A. Frank, the 40-year-old director of the Washington-based Center for Law and Social Policy, to head the National Oceanic and Atmospheric Administration (NOAA).

Created in 1970 as a part of the Depart-

ment of Commerce, NOAA has been known in the past as largely a scientific, technical, and service entity, although its responsibilities have broadened with the enactment of measures such as the Coastal Zone Management Act of 1972 and the Fisheries Management and Conservation Act of 1976. From the beginning, the agency has been headed by a distinguished meteorologist and research administrator, Robert M. White, who once headed the old U.S. Weather Bureau and Environmental Science Services Administration.

It will be a marked change, therefore, when White (who goes to the National Academy of Sciences in July as chairman of the Climate Research Board) turns over the job to Frank, a public interest lawyer who, to judge from his record, will emphasize NOAA's management and regulatory roles, as in fisheries and marine mammals conservation and—if Congress gives NOAA the authority—deep-sea mining regulation.

A Harvard Law School graduate and a former official in the Department of State's Office of the Legal Adviser, Frank joined the Center for Law and Social Policy in 1971 and launched the center's ambitious international project. This project has involved the bringing of numerous lawsuits and petitions on behalf of environmental groups and other "public interest" clients; these actions have dealt with a wide variety of national and international concerns, ranging from marine pollution to violations of human rights, but many have been directed at such objectives as the mandating of double bottoms for oil tankers, having baseline environmental studies precede exploitation of outer continental shelf oil and gas, and achieving effective national and international regulation of use of the resources of the deep seabed.

More broadly, Frank has been involved, as a public interest lawyer and a member of the Secretary of State's Advisory Committee on the Law of the Sea, in development of national and international policy for the oceans. Senator Ernest F. Hollings (D–S.C.), an important legislative progenitor of NOAA and a strong advocate of having the agency play a leading role in shaping a national oceans policy, welcomes his appointment as administrator and commends him as one with "fresh ideas and a grasp of what needs to be done."

The changes now in prospect at NOAA might, of course, occur just as well under an administrator chosen from a background other than public interest law. But the Frank appointment does signify that Secretary of Commerce Jua-

## **Public Interest Law Appointees**

Appointments of people with backgrounds in public interest law to subcabinet and other high-level jobs in the Administration have thus far been as follows (the list includes some appointments not yet formally announced):

• The White House. On the Domestic Council staff: Joseph Onek, specialist in health law and until recently director of the Center for Law and Social Policy, is the chief coordinator for health policy: Simon Lazarous, at one time general counsel of New York City's consumer affairs department (but more recently in private law practice in Washington), is assigned to government reorganization and regulatory agency matters; and Katherine Fletcher, formerly a staff scientist in Denver with the Environmental Defense Fund, works on environmental issues. Also, Frank Llovd, former director of the Citizens Communications Center, is a consultant in the Office of Telecommunications Policy; and Bruce Kirschenbaum, former Washington director of the National Legal Aid and Defender Association, is deputy director of the Office of Intergovernmental Relations.

One of the three new members of the Council on Environmental Quality, which is part of the Executive Office of the President, is **Gustave Speth**, formerly an attorney with the Natural Resources Defense Council (NRDC).

- Office of Management and Budget. Harrison Wellford, the first executive director of Ralph Nader's Center for the Study of Responsive Law and chief legislative aid to the late Senator Philip Hart of Michigan, is the executive associate director of reorganization and management. Peter Petkas, another former Nader associate, is Wellford's deputy.
- Department of Justice. Four of Justice's 11 assistant attorney generals have come from public interest law. They are James W. Moorman, from the Sierra Club Legal Defense Fund, now responsible for the department's Lands and Natural Resources Division; Patricia Wald, from the Mental Health Law Project in Washington, responsible for the Office of Legislative Affairs; Barbara Babcock, from Stanford University Law School (she earlier ran the District of Columbia Public Defender Service), responsible for the Civil Division; and Drew Saunders Days III, from the National Association for the Advancement

- of Colored People's Legal Defense Fund, responsible for the Civil Rights Division. Also, **Ray Calamaro**, the deputy assistant attorney general for legislative affairs, was formerly with the American Civil Liberties Union.
- Health, Education, and Welfare. Peter H. Schuck, former Washington director for Consumers Union, holds the strategic post of principal deputy assistant secretary for planning and evaluation. Benjamin W. Heineman, Jr., one of several alumni of the Center for Law and Social Policy who have entered the government, and Rick Cotton, formerly a lawyer with NRDC in Palo Alto, California, are special assistants to Secretary Joseph A. Califano, Jr. David Tatel, former director of the Lawyer's Committee for Civil Rights, is director of HEW's Office of Civil Rights.
- Other agencies. Besides Richard A. Frank, the Center for Law and Social Policy attorney who will head the National Oceanic and Atmospheric Administration (see article), there have been these additional appointments. Joan Claybrook, formerly head of Ralph Nader's Congress Watch (a lobbying group), is now head of the Department of Transportation's Highway Traffic Safety Administration (HTSA); Joe Levin, former director of the Southern Poverty Law Center in Montgomery, Alabama, is the HTSA's chief counsel. John Leshy, a former NRDC attorney, is now at the Department of the Interior as associate solicitor for energy and natural resources. Eldon Greenberg, from the Center for Law and Social Policy, is deputy general counsel at the Agency for International Development. Frank Jones, a former director of the National Legal Aid and Defenders Association, is general counsel of the Community Services Administration, a surviving remnant of the now defunct antipoverty agency in the Executive Office of the President; and Albert H. Kramer, former director of the Citizens Communications Center, is to become chief of the Federal Trade Commission's Bureau of Consumer Protection.

962 SCIENCE, VOL. 196

nita Krebs and the White House have been able to look to a new pool of talent for someone with the kind of professional experience and point of view deemed especially well suited to the task at hand. Or, to put it another way, the Administration has not been limited to the talent pools previous administrations have most commonly resorted to, which is to say the big law firms and the large corporations.

Much the same point can be made with respect to the appointment of James W. Moorman as assistant attorney general in charge of the Department of Justice's Land and Natural Resources Division. Even as a President pledged to give high priority to environmental protection, Jimmy Carter could perhaps have gone in good conscience to a Wall Street law firm to fill this job. But he chose instead to go to the Sierra Club Legal Defense Fund, where Moorman had established himself as one of the nation's preeminent environmental lawyers. In fact, in appointing Moorman, the Administration chose one of the very first lawyers to engage full time in the practice of environmental law: in 1969, while on the staff of the Center for Law and Social Policy, Moorman represented the Environmental Defense Fund (EDF) and other groups in suits to ban DDT and to stop the trans-Alaska pipeline project.

Besides having a distinctive professional background and known point of view, the practitioners of public interest law who have been recruited for Administration jobs are, by and large, people with an excellent knowledge of the inner workings of government. Although the bringing of lawsuits is the most visible aspect of public interest practice, a great deal of attention also has been given to monitoring the agencies in their implementation of new laws. For instance, as a Natural Resources Defense Council (NRDC) attorney in Washington, Gustave Speth devoted much of his time to seeing that the Environmental Protection Agency met its obligations and deadlines under the Clean Water Act of 1972. So now Speth takes his new job as a member of the Council on Environmental Quality (CEQ), possessing rare knowledge and critical insight with respect to one of the nation's most ambitious and complex environmental programs.

It goes without saying that another effect upon government of President Carter's appointment of people from public interest law is that the agencies in which their influence is felt should become more amenable to meaningful public participation in the processes of decision-making. For after all, the primary pur-



Richard A. Frank, a public interest lawyer who is to head NOAA.

pose of public interest law has been to bring about effective representation of interests that have not previously been well heard.

But, if the Carter appointments of public interest lawyers can rightly be said to be having an impact upon government, so can it be said that they are having an effect upon public interest law.

Well-connected New York and Washington law firms have never been more than a skip and a jump from high appointive office in Washington, but it can now be seen that the public interest law centers in those cities and elsewhere are also a stepping-stone to government office. This can only add to the prestige of public interest practice and make groups such as EDF, NRDC, and the Center for Law and Social Policy all the more attractive to the ablest law school graduates. It may also make it easier for such groups to raise more money from foundations and wealthy individuals who stick to the mainstream.

Another effect of the Carter appointments is that it will give the public interest law groups easier access to top decision-makers. Charles R. Halpern, director of the Council for Public Interest Law (a promotional and study group) and formerly an attorney with the Center for Law and Social Policy, says, "During the Nixon years, half our time was spent just trying to get through the door." Now public interest lawyers may be able to benefit from something closely akin to the old-boy network within the government that has always served the interests of lawyers representing corporate interests.

For instance, let's suppose that a law-

yer assigned to the Center for Law and Social Policy's health law project has a new complaint about how the Medicaid program is being administered or how Hill-Burton Act funds are allocated for construction of medical clinics in poverty areas. He might pick up the phone and call Ben Heineman or Rick Cotton, two public interest lawyers now serving as special assistants to Joseph Califano, Secretary of Health, Education, and Welfare. Or he might call Peter Schuck, the former Consumers Union attorney now serving as HEW's principal deputy assistant secretary for planning and evaluation. And if none of them could help him, he might ring up the White House and ask for the Domestic Council's staff coordinator for health policy, Joe Onek, who only recently left the Center for Law and Social Policy.

Another benefit which some public interest practitioners see in having some of the senior attorneys in the field tapped for Administration jobs is that their groups are afforded a means of self-renewal. Younger lawyers, still full of the "sue the bastards" spirit, can assume larger responsibilities. This of course cuts two ways, and people such as Halpern are concerned lest the loss of senior people be a setback to groups such as the Center for Law and Social Policy, which has just lost three of its senior people.

One can only guess whether the individuals who have gone or are going into the government will really increase their effectiveness in serving the public interest. "The government is a huge entity and it can easily deplete the ranks of experienced people in the public interest law movement," observes Terry Lash, a staff scientist with NRDC at Palo Alto who looks upon the Carter appointments as neither an assured nor an unmixed blessing. "And it is certainly conceivable," he adds, "that their energies may be absorbed internally and that they will have much less impact than they would outside the government."

Whatever the ultimate consequences of the appointments, the public interest law movement now seems to have "arrived"-at least in terms of White House recognition—as an accepted part of the American political and judicial system. The new appointees are rolling in perquisites and, by their past standards, in money; while few of them earned more than \$25,000 a year in their old jobs (some made only half of that), most are now earning nearer \$50,000, and sometimes more. "Frankly, I don't know what to do with money," Gus Speth the former NRDC attorney now at CEQ, recently told the Washington Star. "It's an

embarrassment and you can quote me on that."

In sum, by drawing on public interest law as an important new pool of talent, the Carter Administration may have gone a long way toward making this movement very much a part of the establishment. Some of the old-line members of the bar who still look askance at this new breed of practitioners may now begin to rethink their prejudices. (Most of the American bar seems already to look upon the emergence of public interest law as desirable and long overdue.) At

the same time, the appointment of a sizable and still growing number of these practitioners to important Administration jobs may lead to or be closely bound up with some significant changes in the content and emphasis of government policy.—LUTHER J. CARTER

## Ocean Mining: Former Negotiator Now Lobbies for Kennecott

In New York this month, the Carter Administration is making its official debut at the 7-week 120-nation law of the sea conference, where efforts to draw up a new, comprehensive treaty for the oceans have bogged down on the issue of deep ocean mining.

But, while President Carter's new special representative to the conference, Elliot L. Richardson, attempts a fresh start, he will be shadowed by a holdover from the previous two administrations, Leigh S. Ratiner, the powerful former U.S. negotiator for Committee One—the section of the conference that deals with ocean mining-who has since become a congressional lobbyist for Kennecott Copper Corp. Kennecott has been the most active of the big U.S. mining companies in the sea law conference, and has never made any bones about its interest in investing possibly \$700 million in scooping the potato-sized nodules, rich in cobalt, nickel, copper, and manganese, from the deep ocean floor. Ratiner will be able to attend the New York meeting in a semiofficial capacity, since he has just been added to the 100-member public advisory committee which advises the U.S. delegation.

When he worked for the government, Ratiner was a respected but controversial figure. In the sea law negotiations and with members of Congress, he was sometimes credited with having more influence than some of Richardson's predecessors. Now, a number of people on Capitol Hill, in other mining companies, on the public advisory board, and even in the State Department, have expressed concern that Ratiner's switch from government negotiator to industry lobbyist could pose a problem for Richardson in New York, as well as in the Congress, which is considering

legislation that could affect the conference outcome. They fear that the opportunity is there for him to exploit his information and special contacts gained as a negotiator for Kennecott's gain.

Apparently, Ratiner's activities since leaving government are not a violation of the criminal conflict of interest laws. But such activities, while not uncommon among ex-government officials, fall in a gray area of professional ethics that congressional reformers feel should be restricted. Even the Carter Administration, in its recent statements on government ethics, cited the need for curbs on the "revolving door practice that has too often permitted former officials to exploit their government contacts for private gain."

Ratiner denies negotiating possible employment with Kennecott prior to his leaving government. Such a prior deal, under government rules, would have had to be reported to his superiors and checked with an ethics counselor. Ratiner says he resigned his job-he was Ocean Mining Administrator in the Department of the Interior as well as chief negotiator for Committee One-on 24 January. He did this, he says, partly because he was about to be fired as part of the incoming Interior Secretary's housecleaning, and partly because he had an offer from the Washington law firm of Dickstein, Shapiro, and Morin, which he had decided to accept. On 24 January, he says, he telephoned Marne Dubs, Kennecott's long-term representative on ocean mining matters, who said "Kennecott can use your services." Ratiner started work at the law firm the next day, and soon brought Kennecott in as a client. He says the firm has registered with Congress as a lobbyist for Kennecott. Dubs, Ratiner's principal contact at Kennecott, confirmed this account. David Shapiro, of Ratiner's law firm, stated that Ratiner's activities for Kennecott do not violate Section 207 of Title 18 of the U.S. Code which requires a grace period of 1 year before an ex-official can appear before certain federal bodies on the same "particular matter" in which he "participated personally and substantially" while a government employee.

Shapiro also denies that Ratiner is violating the Caesar's wife canon of the American Bar Association's code of ethics, barring the appearance of impropriety, and whose disciplinary rule reads: "A lawyer shall not accept private employment in a matter in which he had substantial responsibility while he was a public employee." Shapiro says, "We checked it out from stem to stern and found nothing improper."

But others are not so sure. For example, Fred Grabowsky, bar counsel of the District of Columbia bar disciplinary division, while declining to comment on Ratiner's case, stated, "If what he is involved with is the same matter that he had substantial responsibility concerning as a government employee, it would have the appearance of impropriety."

Since becoming a Kennecott lobbyist Ratiner has been testifying before Congress, offering background briefings to Congress and to the State Department, and has tried to attend an international deep-sea mining negotiation in Genevaactivities that were part of his job when he was in government. In a lengthy interview, Ratiner discussed these activities, maintaining throughout that there was nothing improper in his situation. "I have been honest and loyal and smart,' he said at one point. "I have a good reputation. . . . I have gone out of my way to make sure there is no confusion about who I work for."

Indeed, most of the people interviewed—even those critical of Ratiner's tactics—confirmed that during his service at numerous government agencies he had a reputation for hard work, command of the complexities of his subject, and loyalty to whichever agency he was working for at the time.