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THE ENVIRONMENTAL COMPLEX: PART II

INTRODUCTION

The environmental movement today encompasses, as estimated in The Unfinished Agenda: The Citizen's Policy Guide to Environmental Issues (New York: Thomas Y. Crowell Co., 1977), some 3,000 organizations, of which several hundred are national or regional in scope. Twelve of the largest of these groups enjoy the support of more than 4,300,000 people and have combined annual budgets of more than $48,000,000; support for the larger organizations is derived in significant measure from grants made by government and by the nation's great tax-exempt charitable foundations, among them the Rockefeller Brothers Fund, the Andrew W. Mellon Foundation, and the Ford Foundation.

Groups which comprise the environmental complex range from organizations of highly specialized interests such as Zero Population Growth and the Nature Conservancy to others of far broader scope such as Friends of the Earth. Several engage in systematic litigation programs, prominent among them being the Environmental Defense Fund and the Natural Resources Defense Council; the latter is the nation's largest environmental law firm and enjoys, in addition to considerable financial resources (its annual budget has been estimated at some $1,900,000), ties to the administration of President Carter (NRDC attorney J. Gustave Speth has emerged as one of the more activist members of the Council on Environmental Quality). Indeed, there has been a noticeable tendency within the Carter Administration to draw upon the environmental complex for personnel in staffing key environmental policy positions. Appointees have included people prominently associated with such groups as NRDC, EDF, the League of Conservation Voters, the Wilderness Society, FOE, and the Sierra Club Legal Defense Fund, among others.

There are several studies available which will provide the reader with an overview of the environmental movement. The Unfinished Agenda, for example, includes an appendix (pp. 161-166) which is made up of brief sketches of the principal national membership, professional, and population organizations; and The Heritage Foundation Institution Analysis No. 4, "The Environmental Complex" (November 1977), provides a documented in-depth study of four organizations: the Natural Resources Defense Council, Friends of the Earth and FOE's affiliated Friends of the Earth Foundation, and the Conservation Foundation. The present summary is limited to certain key pronouncements on energy and environmental matters made in studies funded by the Ford Foundation and the Rockefeller Brothers Fund, along with positions advanced by Amory Lovins and Ralph Nader. These four items have been chosen because it is felt they are representative of strong strains in current environmentalist thinking.

AMORY LOVINS

Lovins, for example, more or less epitomizes the present anti-nuclear energy posture so widely found among members of the environmental complex. His article "Energy Strategy: The Road Not Taken?" in Foreign Affairs (October 1976) has enjoyed wide acceptance, both within the environmental movement and within the higher councils of the Carter Administration. The nub of Lovins's position is that there are two paths the United States can follow with regard to energy. The first is the "hard" path, which presupposes, in Lovins's view, reliance on rapid expansion of centralized high technologies, especially electric generation; the second is what he calls the "soft" path, which combines the prompt commitment to efficient energy use with rapid development of centralized renewable energy sources and special transitional fossil-fuel technologies. In other words, rather than rely upon electric power systems depending on fossil fuel and nuclear energy, the United States should, according to the Lovins thesis, rely upon non-nuclear power sources like solar and wind energy.

That Lovins has been able to achieve considerable impact is indicated by a reference in the November 14, 1977, issue of Newsweek, which states that Lovins "has become one of the Western world's most influential energy thinkers." The noted population biologist Paul Ehrlich, who, like Lovins, is prominently identified with activities of Friends of the Earth, has stated that the Lovins Foreign Affairs piece is "the most influential single work on energy policy written in the last five years." The Newsweek article speaks of a session on St. Simons Island during which Lovins "addressed a group of Federal energy planners" and states that a "few days earlier, he had been in Washington, conferring with top Administration officials -- including Jimmy Carter, who invited him to the White House for a chat." Actually, it must have been more than a mere "chat," because the article also states that

> * * * the day after he talked with Lovins, President Carter told an international energy conference that the world should consider alternatives to nuclear

> power. While it would take a capital investment of $200,000 to $300,000 to produce a nuclear-energy capacity equivalent to one barrel of oil, Carter noted, "Recent studies I have read show that we can gain the equivalent of a barrel of oil per day by conservation at very little or no cost." The author of those studies: Amory Lovins.

Lovins has since expanded his Foreign Affairs article into a 231-page book, Soft Energy Paths: Toward A Durable Peace (Cambridge, Massachusetts: Ballinger Publishing Co., 1977). The volume is copyrighted by Friends of the Earth, Inc., and is one in a series of "Friends of the Earth Energy Papers," several others of which also are concerned with nuclear energy matters. Soft Energy Paths is organized in three parts. Part I is headed "Concepts," Part II is titled "Numbers," and Part III is headed "Toward a Durable Peace." The first part includes the book's first two chapters, the second of which is essentially a reworking of the October 1976 Foreign Affairs piece. Part II includes the third through eighth chapters and covers such subjects as "Methods of Exploring the Energy Future," "Energy Quality," "Scale," "Capital Costs of Hard Technologies," "Capital Costs of Transitional and Soft Technologies," and "Comparative Capital Costs and the Role of Electrification." Part III encompasses the ninth, tenth, and eleventh chapters and covers "Sociopolitics," "Values," and what Lovins calls "Rebottling the Nuclear Genie."

Lovins is concerned with the wider ramifications of energy issues, something indicated in his statement in the book's introduction that

> many who work both on energy policy and in other fields have come to believe that, in this time of change, energy -- pervasive, symbolic, strategically central to our way of life -- offers perhaps the best integrating principle for the wider shifts of policy and perception that we are groping toward. If we get our energy policy right, many other kinds of policy will tend to fall into place too.

The view of nuclear power held by Lovins is expressed in precise capsule form in the introduction; it is simply that "nuclear power is impracticably capital-intensive, unnecessary, and an encumbrance." This view leads Lovins to conclude that because fission technology is fraught with "technical, economic, and social problems" and because "technical efforts to palliate those problems are politically so dangerous, * * * we should abandon the technology" with what he calls "due deliberate speed."

It is central to Lovins's thinking that "we are more endangered by too much energy too soon than by too little too late" because "we understand too little the wise use of power," a view which he combines with a belief that energy, technology, and economic activity

> are means, not ends, and their quantity is not a measure of welfare; hence economic rationality is a narrow and often defective test of the wisdom of broad social choices, and economic costs and prices, which depend largely on philosophical conventions * * *, are neither revealed truth nor a meaningful test of rational or desirable behavior; * * * *

Another basic view expressed in the book is that, while there exists unlimited potential for social, cultural, and spiritual growth in society, "resource-crunching material growth is inherently limited" and must be "returned to sustainable levels" at which there will be "clearly positive" net marginal utility in economic activity. To Lovins, the problem with energy

> should be not how to expand supplies to meet the postulated extrapolative needs of a dynamic economy, but rather how to accomplish social goals elegantly with a minimum of energy and effort, meanwhile taking care to preserve a social fabric that not only tolerates but encourages diverse values and lifestyles; * * * *

Lovins believes that "the democratic process" provides the best mechanism for action by what he calls the "ordinary people." He also avers that "on the social and ethical issues central to such choices the opinion of any technical expert is entitled to no special weight." These choices necessarily involve passing judgment on various forms of energy technology, nuclear energy being seen as especially noxious; however, Lovins also states that

> many other energy technologies are exceedingly unattractive and should be developed and deployed sparingly or not at all (such as nuclear fusion, large coal-fired power stations and conversion plants, many current coal-mining technologies, urban-sited terminals for liquefied natural gas, much Arctic and offshore petroleum extraction, most "unconventional" hydrocarbons, and many "exotic" large-scale solar technologies such as solar satellites and monocultural biomass plantations); * * * *

Taking the international view, Lovins argues that "issues of material growth are inseparable from the more important issues of distributional equity" and that a higher rate of growth in "overdeveloped countries is inimical to development" in poorer countries. He also contends that "national interests lie less in traditional geopolitical balancing acts than in striving to attain a just and equitable, therefore peaceful, world order," and that this must be accomplished "even at the expense of temporary commercial advantage."

RALPH NADER

Ralph Nader's views have been expressed in an interview with Joe Klein in the November 20, 1975, issue of Rolling Stone called "Ralph Nader -- The Man in the Class Action Suit." In this revealing interview (in which, Klein states, Nader "surprised" him "by his willingness to speculate, theorize and even fantasize about his vision of utopia"), Nader devoted a fair amount of time to energy and energy-related matters. Predictably, Nader refers to the oil companies as "gluttonous gougers" and asserts that "It is time to start looking for some basic structural changes in the society /emphasis in original/." He speaks of the ideal economic system as one that is "broken down into as small parts as are economically possible" and "run by the constituency for whom they were supposed to operate." He differentiates his concept from standard Marxism or socialism on the grounds that socialism carries with it the built-in problem of too much bureaucracy: "if the government becomes a bureaucracy with its own momentum * * * society is basically trading one master for another."

Nader seems to have a strong anti-bigness and anti-technology bias. He speaks of "smaller-scale technology which is more responsive to self-control and local control" and claims that "bigness is a severe detriment because of bigness. You tend to get more stagnation, less competition, more bureaucracy; * * *." In Nader's view, "there's going to be a major revolt against technology" flowing from what he calls "the revolt against the SST." He seems to speak approvingly of Communist China's "coordinated determination of marshaling the massive numbers of people in a common cause" but also criticizes that country for its "authoritarian system" that "doesn't develop self-thinking, self-initiative, self-governing."

He cites statistics allegedly from the National Cancer Institute estimating that "80% of all cancers are environmentally caused" and states that "the estimate is 100,000 workers dying from work-related diseases each year," claiming that "that's just the tip of the iceberg in terms of discovering the whole range of the problem." Nader is especially concerned in this interview with alleged dangers from radioactive material like uranium, claiming that it "seems like an epidemic a month is discovered."

Referring directly to energy, Nader says that the experts are talking in terms of an "energy crisis" and an "energy shortage," to which he responds by saying that "this is all nonsense. Energy is where you want to find it." His solutions encompass use of such sources of fuel as trees, corn husks, grass, leaves, manure, plants, and solar and wind energy. His contention is that we are not getting these forms of energy because "energy corporations only like a certain kind of energy: the kind they can effectively control the supply and distribution of." In Nader's view, oil companies "love offshore oil" because they have no competition from independent producers, while certain interests "like nuclear power because it gives them a tremendous capital base on which to get more money from the consumer."

Nader's views on energy matters are expressed throughout the interview in terms of corporate avarice and lusting after monopoly power, along with, as indicated above, a view of nuclear power as inherently unsafe. His views on this issue are strongly reminiscent of those expressed by the leaders of such groups as Friends of the Earth, whose president, David Brower, advocates outright abandonment of nuclear power as a too-dangerous and, therefore, unacceptable risk from the perspective of mankind's ability to survive its effects.

The data in this 1975 interview assume much greater significance when one notes two other developments. The first is the formation by Nader of his so-called "Critical Mass" project, which aims specifically at the elimination of nuclear energy as a solution to the nation's current power difficulties. The second is what the November 14, 1977, issue of Business Week calls Nader's new policy of "no more Mr. Nice Guy" as a result of the failure of legislation to establish a federal consumer representation agency, a favorite Nader project. Business Week states that Nader's new policy will include "working actively -- and personally -- for defeat at the polls next year of a target group of 20 congressmen who opposed the consumer bill" and reveals that this "effort is modeled on Environmental Action's famed 'Dirty Dozen' campaigns."

FORD FOUNDATION: A TIME TO CHOOSE

The Ford Foundation project is of great significance. It was conducted by the Energy Policy Project, the creation of which was authorized by the trustees of the Ford Foundation in December, 1971, and the financial support for which amounted to some $4,000,000 "spent over a three-year period for a series of studies and reports by responsible authorities in a wide range of fields," according to the foreword to the Project's final report, A Time to Choose: America's Energy Future (Cambridge, Massachusetts: Ballinger Publishing Co., 1974). This project was carried out by a staff, a group of consultants, and an advisory board which included a number of prominent academic and other experts on energy matters, as well as representatives of several major corporations and members of the nation's more influential environmental organizations, and its major conclusions are shared in large measure by the makers of the nation's official energy policies today.

The study reflects the view that there is, in fact, an "energy crisis" which will last for a considerable period, that conservation measures are as important as is supply, and that "We do need 'an integrated national policy' /emphasis in original/." Its perspective is accurately reflected in the following passage:

> It is this Project's conclusion that the size and shape of most energy problems are determined in large part by how fast energy consumption grows. Some problems, of course, such as high prices and their impact on the poor, must be faced whatever the policy adopted on conservation. But slower growth makes many energy-related problems less formidable.

> It is, of course, a mistake to regard energy conservation as an end in itself; that puts the cart before the horse. Conservation is worthwhile as a means to alleviate shortages, preserve the environment, stretch out the supply of finite resources and protect the independence of U.S. foreign policy.
>
> By the same token, energy growth is valuable only because it brings us more useful goods and services, warms our houses, and makes possible our vacation trips. More mundanely, energy gets us to work and keeps the office machinery and industrial plant going. If we could continue to enjoy these things in much the same way, with slower energy growth through greater efficiency, that achievement is worth considerable effort and perhaps some small sacrifice.

In analyzing what it sees as the nation's energy choices, the Project study constructs "three different versions of possible energy futures for the United States through the year 2000." These "three alternate futures, or scenarios, are based upon differing assumptions about growth in energy use" and are allegedly "consistent with what we know about physical resources and economic effects." The study avers that each provides "for energy growth over today's levels" and "that all are based on full employment and steady growth in gross national product and personal incomes." The three alternatives are styled the "Historical Growth," "Technical Fix," and "Zero Energy Growth" scenarios.

The Historical Growth scenario assumes a growth in energy use in the United States at an annual rate of approximately 3.4 percent, "the average rate of the years from 1950 to 1970." Instead of an attempt to alter the nation's "habitual patterns of energy use," there would be a national effort at enlarging the supply of energy to keep pace with rising demand, energy use by the year 2000 being projected at some "187 quadrillion Btu's annually." Though the study states there is reason to doubt that "historical growth trends will persist," it nevertheless contends that "there are two persuasive reasons for exploring" this scenario, the first being that "it is the one assumed by many government and industry leaders" as the basis for important planning, and the second being that the possible consequences of a continuation of present historical growth must be examined because "if the future is like the past, new uses of energy may appear that cannot be foreseen."

The Technical Fix scenario projects an economic growth rate "very slightly slower so that by 2000 the real GNP is nearly 4 percent less" than the first scenario's. It "reflects a conscious national effort to use energy more efficiently through engineering know-how -- that is, by putting to use the practical, economical, energy-saving technology that is either available now or soon will be." The Project concludes that if these techniques were to be applied consistently, "an energy growth rate of 1.9 percent annually would be adequate to satisfy our national needs."

It is argued that this scenario would use some 124 quadrillion Btu's per annum in the year 2000, "a saving four-fifths as large as our current total consumption." It is further argued that the effect on the way our citizens live and work would be "quite moderate," the net effect being that this scenario "is leaner and trimmer, but basically on the same track" as the first.

Zero Energy Growth, it is claimed, "would not require austerity, nor would it preclude economic growth." The study contends that real GNP would be about the same as in the Technical Fix scheme and that "it actually provides more jobs." Both include the same energy-saving devices, but this scenario also places "extra emphasis on efficiency." The principal difference lies in "a small but distinct redirection of economic growth, away from energy-intensive industries toward economic activities that require less energy." This shift would be encouraged by an energy excise tax, which would make energy more expensive. The "ZEG future" would emphasize the offering of services over the production of "things" with the result that there would be "better bus systems, more parks, better health care." Approximately 2 percent of GNP would be diverted through higher energy taxes to these public purposes. It is assumed that this scenario involves "a modest rise in total energy use by 2000 but a declining rate of growth which slows to zero before 1990." The nation's total use of energy "would reach a level of 100 quadrillion Btu's a year, and remain on that lofty plateau."

The study appears to lean toward the Zero Energy Growth perspective which, it is argued, would "ease global climatic problems" by curtailing the growth of United States fossil fuel use, as well as minimizing nuclear risks "by curtailing growth of nuclear power." It is also contended that the slower growth in fossil fuel use would make it easier to control air pollution and that "a substantial share of energy requirements in the next century" could be taken over by supposedly cleaner, "renewable sources" like organic wastes and solar energy. Also, "No major regions of the country that are presently undeveloped would be devoted to energy production," and much of the nation's "urban waste and water pollution problems would be ameliorated."

A Time to Choose includes specific findings in several general areas: "Social equity," "Energy, employment, and economic growth," "U.S. energy policy in the world context," "Environment," "Private enterprise and the public interest," "Utilities," "Federal resources," and "Research and development." These findings reflect a common predilection in favor of government action. The study recommends, for example, that "the social equity implications of high energy prices should be resolved by a national commitment to income redistribution measures, such as a guaranteed minimum income or a negative income tax." Examples of possible government "contingency planning" cited include energy stamps and "special grants or fuel allocations to low income persons who demonstrate potential hardship as a result of shortages or price increases for energy."

Hardly surprisingly, the study's recommendations are heavily weighted toward energy conservation, claiming that "energy conservation in the most energy intensive manufacturing industries will have little, if any, adverse effect on employment." It is also said that "tax incentives may be used to encourage investments that increase energy use efficiency." In the nuclear energy area, the study is cautious, apparently because of a recognition that, as the study says, nuclear energy "is free of air pollution, generally requires less land in providing energy and, in the long run, allows us to avoid some of the global climatic problems that may be associated with the burning of fossil fuels." Thus, the study recommends "a much slower rate /of growth/ for nuclear power" which, it is argued, "is adequate to meet energy needs, if the conservation oriented policy we recommend is implemented." It also recommends strongly that "the present open-ended government funding commitment to the LMFBR demonstration project be terminated immediately."

It is felt that government research and development should stress "Energy conservation, diversity of energy supplies, environmental protection, and health and safety" as its redirected, "goal oriented" program. The study concludes that the energy industry possesses the sort of power that "is manifested in...energy policies that are highly favorable to the industry" and recommends that the "oil industry's disproportionate political strength" be trimmed "through strong campaign finance reform measures." The aim is to strengthen competition and to "create an environment in which the industry is more responsive to public concerns." Should it be necessary, government would exercise greater "social control" by "taking a more active role in the organization of energy supply. The federal chartering of companies appears to us to be a promising technique for doing so." (This last item is interesting in that it is strikingly similar to one of the proposals advanced by Nader in the Rolling Stone interview.)

With regard to utilities, the study recommends "a new method of pricing electricity that encourages conservation by charging more for electricity consumption at the time of heaviest use, so as to reflect actual costs and encourage thrift." It finds that there should be regional utility commissions to "assure that utility expansion plans were integrated into regional grids so as to meet regional needs with maximum efficiency in the investment of capital and the use of land." The following paragraph is particularly illuminating:

> Reforms in the structure of the industry to separate the generation and transmission of electricity from local distribution are desirable. This would facilitate the formation of regional companies, with public participation in their management, to achieve the economies in capital and land use that are possible in an integrated regional approach to power system expansions.

ROCKEFELLER BROTHERS FUND: THE UNFINISHED AGENDA

The Unfinished Agenda goes farther in some respects in its recommendations than does A Time to Choose. It is a volume of particular interest partly because of this and partly because it represents a joint effort undertaken by representatives of many of the nation's most influential and powerful environmental organizations. Funded by the Rockefeller Brothers Fund, this project (the Environmental Agenda Project) was carried out by the Environmental Agenda Task Force, the members of which included representatives of the following organizations: Rockefeller Brothers Fund, Natural Resources Defense Council, Friends of the Earth, The Wilderness Society, Zero Population Growth, National Wildlife Federation, Massachusetts Audubon Society, The Nature Conservancy, Environmental Defense Fund, Izaak Walton League of America, National Parks and Conservation Association, National Audubon Society, and Sierra Club. Representatives of a wide range of other environmental organizations and government agencies also participated, including people from the Energy Research and Development Administration, Environmental Action, the Union of Concerned Scientists, and the Conservation Foundation, among many others. Copies of draft materials were submitted to several people, including Ralph Nader, Barry Commoner, and others associated with, for example, the Environmental Protection Agency, Council on Environmental Quality, League of Conservation Voters, Environmental Policy Center, and New School for Social Research.

The Unfinished Agenda is a quite comprehensive study which ranges from population control and growth to food and agriculture, natural resources, water and air pollution, toxic substances and the hazards therefrom, and energy matters. There are sections devoted to land-use regulation and the "life-support system," as well as to the presumed hazards flowing from recombinant DNA research. A special chapter on "Society and Decison-Making" examines national planning, the control of technology, the organizing of federal agencies, the role of industry in decision-making, and issues of public education on matters covered in the report. This summary will concentrate primarily on the study's findings and recommendations as they relate to energy and the nation's utilities.

While asserting that it "is essential to devise and build a new type of energy economy far less dependent on dwindling supplies of gas and oil," the Task Force concludes that we should "recognize that nuclear fission is rapidly dying as an energy option because of its high capital, environmental, social, and energy costs." Further, "Subsidies to nuclear energy industries must be withdrawn and existing facilities phased out in orderly fashion." Specifically, the study contends at a later point that "a plan is needed for the orderly phasing-out over about ten years of existing facilities and the repeal of the Price-Anderson Act, which arbitrarily limits liability for reactor accidents." This program contemplates halting exports of nuclear "technology and knowledge (except for safety's sake) and

of nuclear fuel, for which soft-energy systems would be substituted." (This last datum is interesting in view of the preface to the study, which states that "Amory B. Lovins, Friends of the Earth," was among the people who "participated in the project.") In addition, the "phase-out process would clearly terminate the fast-breeder program and all other steps toward a plutonium economy" as well as "all nuclear construction and commitments...."

With regard to electric power, the Task Force report statesthat in order to avoid "the formidable economic and political costs of further electrification," there must be "every effort to supply energy only in the quality needed for the task in hand." There are further recommendations for an inventory of "energy end-uses by quality needs, geographical clustering, and unit scale" and for the development of "appropriately smaller-scale energy generation systems" as the nation moves "rapidly from...depletable energy capital to renewable energy income."

The report advocates that high priority be given to "Intelligent coal technologies, both for direct combustion and for the local extraction of premium fluid fuels from coal." Other high priorities advocated include "Solar space-conditioning," a "dispersed fuel-alcohol industry," "Integration of solid-waste management with energy and materials-recycling systems," "Rejuvenation of urban mass transit and intercity railways," and "An overhaul of energy-intensive agriculture practices." To implement such measures, it is recommended that there be "substantive" public participation, "a progressively increasing gasoline tax, the proceeds of which should be used to begin reducing the ill effects of automobiles," mandatory fuel-economy standards for automobiles and "other vehicles, including aircraft," and several other similar measures, including an overhaul of utility price structures and enforcement of "antitrust and securities laws, so that alternative energy sources are not deprived of the benefits of competition and entrepreneurial vigor."

Perusal of this volume indicates that the perspective of the Environmental Agenda Task Force is essentially that of the earlier group which, with funding from the Ford Foundation, produced A Time to Choose. There are similar emphases on energy conservation and the desirability of action by government to compel certain changes in national energy policy viewed by the Task Force as desirable. In this respect, it is of special interest to note that the introduction to The Unfinished Agenda states that "environmentalists recommend that" the CEQ, with the support of the National Science Foundation,

> undertake to monitor and analyze the explicit and implicit environmental message contained in both the programming and commercials on U.S. television. The analysis should document clearly what is being said about environmental issues, resource consumption,

pollution and lifestyles, and the implications for society if the viewing audience follows the example set by the role models on television.

At a later point, in the section on "Society and Decision-Making," it is stated that this should be accomplished by the EPA with NSF support, but the substance of the recommendation is precisely the same otherwise.

Central to the Task Force's basic viewpoint is the statement that the "United States /should/ adopt as a long-range goal the achievement of a 'Conserver Society,' in which materials are used to maximum advantage with minimum resource depletion." This goal would require extensive resource depletion." This goal would require extensive resource conservation, recycling, and similar practices, all of which are prominent in environmentalist thinking, and assumes, as the study explicitly states, development of "a long-range planning capability" along with "new controls over the application of existing technologies" and consideration of "the full sociological implications of nascent technologies."

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