Energy Crisis in the Campaign

Carter and Reagan are avoiding the most important economic issue: what to do about oil imports

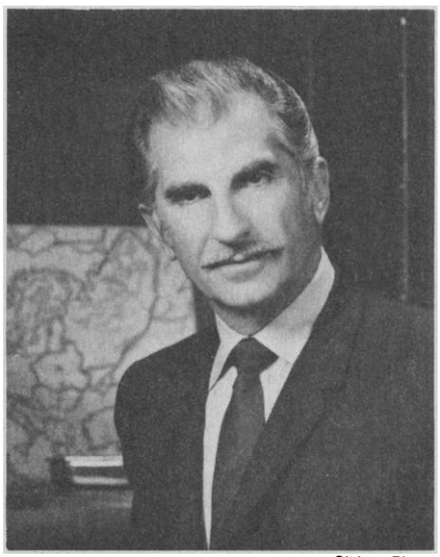
The conduct of energy policy might seem second only to military defense in importance for the nation. Yet this year's election campaign has elicited hardly any debate among the major candidates on what should be done to reduce America's dependence on imported oil.

Ronald Reagan and President Carter have talked about their differences on energy, but only in the broadest terms. A presidential election offers a unique opportunity for leaders to criticize and define public policy. But so far neither of the leading candidates has taken advantage of it to clarify his position.

Carter, who has been preoccupied with energy since his campaign in 1976, has not been compelled to make a concrete defense of his record in office. And Reagan has been content to go after the Administration with the bluntest of anti-government critiques.

Reagan voiced his differences with current policy at a rally in Cleveland on 10 September. The talk he gave there is called "the energy speech" at Reagan headquarters and is apparently the definitive statement. "America does not have an energy policy now," Reagan charged. The "Carter plan" is to "lock up resources, hold down production, and stifle fuel use with unnecessary regulations," and then to "threaten Americans with the specter of gasoline rationing . . . until they slash their energy consumption." The nation is in danger, he said, because it is hooked on imported oil. This dependence limits the nation's freedom in international affairs and strangles the economy. "Government regulations and production barriers are the two chief causes of the energy crisis we are in," Reagan said.

Among the policies Reagan attacked were the windfall profits tax on crude oil (which will be used to help finance the development of synthetic fuels and solar energy), the government's cautious approach to leasing public lands for drilling and mining, the price controls on natural gas (he would like to remove them before they expire for most categories of gas in 1987), and the failure to accelerate the licensing of new nuclear plants. Without saying how he would do it, Reagan concluded that "We will get America producing again. . . . If I am elected, we will do everything in our power to produce the energy we need to free ourselves of OPEC."



Gittings Photo

Michel Halbouty

Independent oilman from Houston coordinates Reagan's energy policy.

Reagan's staff is no more eager than the candidate to discuss specifics. At headquarters, the "issues" writer on energy does not take inquiries; he refers them to a spokesman, who then defers to the energy speech. Reagan has two important advisory panels on energy, but their members cannot speak with authority for the former governor. One, composed of academics and industry specialists, is headed by the independent Houston oilman, Michel Halbouty. The other, a congressional group, is headed by Rep. David Stockman (R-Mich.), a free-market economist.

Halbouty spoke with *Science* in September, the day before the 15-member panel of experts was to meet for the first time. The basic policy, he said "is to try to produce as much as we can from all energy sources." Conservation will be important, he added, but not the first priority as it is for the Carter Administration. "We're going to stress production, production, production—more, more, more production." Reagan will do whatever is necessary, Halbouty said, to get the government out of the industry's way. Would he get rid of the Department of Energy? Halbouty said, "If it's necessary to abolish the Department of Energy, that's going to be our first recommendation." Would Reagan tax foreign oil to discourage its use? Would he change the Clean Air Act? Halbouty: "Our group is not going to make its report until after the election. I don't want to discuss that. It would be preempting the group."

Additional clues can be found in the Republican party platform, but they may reflect nothing other than the various authors' predilections. Stockman chaired the group that wrote the energy section of the platform. That document, eight times longer than the section on the environment, proposes some major policy changes to fire up the energy industry. In brief, the party would eliminate the windfall profits tax as it applies to small and unconventional oil wells, remove price controls on oil and gas, lift market restrictions on the use of natural gas, revise the Clean Air Act in order to encourage coal burning, relax coal mining regulations, shorten and simplify the licensing procedure for nuclear reactors, implement a program of away-from-reactor storage for spent nuclear fuel no later than 1984, speed up the pace of leasing public lands, avoid directing people or companies to conserve energy, and cease to give out subsidies for synthetic fuel production.

> "We're going to stress production, production, production—more, more, more production," said Reagan adviser Michel Halbouty.

The last item on the list is already

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causing problems for Reagan. The fuss suggests that Reagan's energy principles would quickly run afoul of some nasty complications. Even his own party is in knots on synfuels.

Stockman, a true believer in the importance of maintaining a free marketplace, sought to curb his colleagues' enthusiasm for subsidies. The synfuels corporation, after all, is the creature of a Democratic Congress and a classic big government solution to an economic problem. Stockman thinks that removing federal price controls and letting profits soar should be incentive enough to get fuel industries producing. The government should not hand out subsidies as well. Although this may be sound economics, it is not good politics.

Many businesses are happy to accept federal aid and guidance. Some eagerly await the support promised for synfuels, and they have been in touch with friends in the Capitol to see that their hopes are not dashed. Last month three Republican Senators, Pete Domenici of New Mexico, Henry Bellmon of Oklahoma, and James McClure of Idaho, wrote to Reagan urging him not to oppose the synfuels program during the campaign. They praised the subsidy scheme, pressing the candidate to make a large exception to the free-market economics that supposedly would be the bedrock of a Reagan Administration. Reagan has not answered the letter. Neither has he settled on a final policy for the synfuels corporation.

The free-market politicians are having trouble winning support from their Republican colleagues. It will be more difficult still, if Reagan wins the election, to win support in Congress for a radical reduction in federal energy authority. The character of Congress (mostly Democratic and fond of subsidies) is unlikely to change. Its interest in federal energy programs, especially those that award grants and subsidies, is not likely to fade. And, having struggled mightily for 4 years with three versions of a Carter energy policy, Congress probably would not be eager to set out on a fresh crusade under Reagan's leadership.

No doubt a Reagan Administration would attempt to reduce federal involvement in the pricing and distribution of energy. It would try to lower taxes for industry and trim back the scope of laws that protect the quality of the air, water, and wilderness. But it would have to deal with a possible hostile Congress with a will of its own on energy matters. For this reason, Reagan might be able to accomplish a shift of emphasis, but not a radical overhaul of the system.

Senator Bennett Johnston (D-La.), who knows the oil business, says that it does not matter which candidate wins the election; federal energy policy will not be affected much. He speaks as one with the power to make the prophecy come true.

Johnston, who comes from an important oil-producing state and frequently speaks for the interests of the energy

Anderson Pushes Conservation

On the matter of energy, John Anderson is without question the most conservation-minded of the three presidential candidates. Ever fond of studies, Anderson has taken in particular to the Harvard Business School study, *Energy Future*, authored by Daniel Yergin and Robert Stobaugh, in which it is estimated that Americans could reduce energy use by 30 to 40 percent without making significant sacrifices.

The centerpiece of the Anderson energy plank is his call for a 50 cent per gallon gasoline tax. Anderson claims the tax would result in long-term savings of 1 million barrels of oil a day. The estimated $50 billion annual proceeds would be used to offset increases in the Social Security tax. He has also called for extending the fuel economy timetable to achieve a 40 mile per gallon standard by 1990.

Anderson puts considerable emphasis on the need for effecting a permanent change in transportation patterns, which would mean encouraging carpooling, community transportation, and bus and light rail systems. To ensure a stable source of support, he wants to establish a $4 billion federal trust fund for mass transit.

Anderson also places high priority on various economic incentives and technical assistance programs to encourage energy efficiency in new building construction and retrofitting of existing structures.

In most other respects Anderson's energy strategy does not deviate much from that being pursued by the Carter Administration. He wants to reduce reliance on foreign oil by enhanced oil recovery and completion of the strategic petroleum reserve. He supports ongoing decontrol of oil and gas prices. He also recommends a new mechanism within the International Energy Agency to encourage development of energy supplies in non-OPEC Third World countries.

In the near term, Anderson goes along with stimulating coal production, hastening conversion of oil-fired power plants to coal, and improving rail and port facilities for coal transport.

No particular enthusiasm is manifested for the Administration's synthetic fuels program. Anderson wants to find out if economic and environmental costs warrant a major push before going beyond present commitments.

Formerly a big nuclear power enthusiast, Anderson has now retrenched considerably since the accident at Three Mile Island. He now wants a moratorium on new plant construction pending better answers to the problems of reactor safety and nuclear waste disposal. He has also pulled back from his early support of the demonstration breeder reactor.

Anderson shares Carter's goal of meeting 20 percent of the country's energy needs with renewable sources by 2000. To this end, he wants the Department of Energy more involved in photovoltaic research and in demonstration of small-scale, decentralized energy systems.

So far, Anderson has indicated that he believes energy development can proceed without compromising any of the nation's environmental regulations. His program is basically one of economic incentives, relying on decontrol of prices, changes in utility rate structures, low-cost loans, and tax manipulation to lower consumption and direct capital into energy-efficient enterprises.

Among those whose ideas have helped shape Anderson's energy strategy are Roger Sant of Carnegie-Mellon University, the Department of Energy's conservation chief under Gerald Ford, and Carroll Wilson, a world coal expert at the Massachusetts Institute of Technology.

—CONSTANCE HOLDEN

producers, chairs the Senate's subcommittee on federal energy regulation. He told a group of reporters on 16 September that the major difference he sees between President Carter and Ronald Reagan is in their choice of rhetoric. Reagan says what the energy producers like to hear, and Carter blasts Big Oil. But, Johnston said, the record shows that the Carter Administration has helped, or allowed others to help, the industry free itself of controls imposed by previous administrations.

Johnston continued: "When I go down in my state, I see virtually none of the independent oil producers for Carter. Here is Carter, who has put in the Natural Gas Policy Act [ending two decades of federal price controls] and deregulated crude oil; we've gotten higher drilling rig counts, more dollars being spent, more activity, more profits being made by oil people than ever before. But do they like Carter? Oh no, they hate him because of his rhetoric." Johnston's conclusion: Although a Reagan Administration might use more pleasing language, it wouldn't be able to do much more for the industry than is being done already.

—ELIOT MARSHALL

Debate over Waste Imperils 3-Mile Cleanup

Lack of disposal facilities for radioactive material could make the decontamination effort impossible

The cleanup on Three Mile Island represents a challenge unlike any the nuclear industry and its governmental patrons and overseers have ever faced before. If all goes well, decontaminating the unit 2 reactor, the containment building, and other facilities will continue over 5 years and will require more than 2000 workers, immense amounts of material, and, at a minimum, the expenditure of a half billion dollars (even if the damaged reactor is not returned to service).

But if things go badly, schedules will be disrupted, costs will escalate, and the job will not get done. It now appears that the cleanup is in trouble. It is threatened by political hang-ups in radioactive waste disposal, hang-ups which could severely embarrass both the nuclear industry and its patron, the Department of Energy (DOE).

Although the unit 2 reactor was brought to a "cold shutdown" within days after the accident occurred on 28 March 1979, no one will feel easy about the situation on Three Mile Island until the damaged core has been removed. "I think we've clearly got the situation in hand, but the probability of deterioration is not zero," says Robert C. Arnold, the General Public Utilities (GPU) official in charge of the cleanup. "We need to get on with the cleanup so that we can do more than just baby-sit the core."

The cleanup is a task of extraordinary proportions. During the accident more than 300,000 gallons of water contaminated with fission products overflowed into the auxiliary and fuel handling buildings from the primary coolant system, and nearly 700,000 gallons of coolant water with a half million curies of radioactivity poured into the containment building sump. Also, some 43,000 curies of krypton-85, a long-lived gaseous fission product, escaped from the reactor vessel and dispersed within the containment building. The contamination of this building was pervasive: the sump, the walls, the ceiling, and all equipment are still dangerously radioactive, even if in most cases the radioactivity is only on the surface and is removable. Moreover, the core suffered severe damage, and, although temperatures inside the core never reached levels high enough to melt the fuel itself, much of the fuel cladding is believed to have melted.

Every step in the cleanup must be taken in a highly sensitive political and regulatory environment. Yet major steps have been taken. A "demineralizer," or ion exchange filtration unit, was installed last year with the Nuclear Regulatory Commission's permission in order that the fission products could be removed from the water spilled in the auxiliary and fuel handling buildings. And in June, the NRC, after prolonged controversy, allowed GPU to vent the krypton gas. Also, twice now engineers have made brief, cautious entries into the containment building as part of the effort to size up the job that lies ahead.

Now, eager to get on to the next stage of the cleanup, GPU is going ahead with construction of a second demineralizer system for treating the sump water in the containment building so that workers can safely enter the containment building in force. The utility has been warned by the NRC that use of this $10-million unit is still subject to its review and approval.

Meanwhile, Arnold faces some major management headaches. Some 2500 workers will be needed when the cleanup reaches its peak, with workers continuously being rotated as they reach their maximum permissible exposure to radiation. Payroll costs for the cleanup will

Luther J. Carter Photo

Cleaning up Three Mile Island

Shipping cask for hauling Three Mile Island radioactive waste. In background are vaults for wastes that require heavy shielding.

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