

Energy Policy: Independence by 1985 May Be Unreachable Without Btu Tax

Some progress was made in 1975 by the Ford Administration and Congress in their groping, conflict-ridden quest for a comprehensive national energy policy, and a bit more headway is expected this year as Congress resumes consideration of the energy bills that were left pending in December. But in light of the continuing decline in domestic oil production and the difficulties currently facing development of nuclear power and of coal and outer continental shelf oil resources, there is now no assurance—perhaps not even a likely prospect—that the Administration's goal of "energy independence" by 1985 will be attained.

For oil imports to be reduced to a level low enough to eliminate the possibility of an effective Arab oil embargo, overall energy demand probably will have to be reduced well below the levels now projected for the mid-1980's. This may require much

higher energy prices. Yet in last year's debate over national energy policy, the controversial question of what role the price of energy should be made to play in adjusting demand to domestic energy supplies was never squarely addressed.

Indeed, although one of the numerous energy measures proposed by the Administration called for immediate decontrol of oil prices, Congress would not go along. And even had immediate decontrol been approved, it would have produced only a modest conservation effect as the price of all domestically produced oil rose to the world market price set by the Organization of Petroleum Exporting Countries (OPEC). The decontrol issue was finally compromised, with Congress agreeing to a phasing out of controls over a period of 40 months.

Some energy analysts within the government are now saying privately that, if ener-

gy independence is to be achieved over the next 10 years, a high tax on all non-renewable forms of energy will have to be imposed. This would be a "Btu tax," applied at the point of extraction (wellhead or mine mouth) on oil, natural gas, coal, and uranium. Those who believe that such a tax will ultimately have to be adopted regard it as much preferable to a tax on oil alone. A tax on oil would tend to shift demand to other nonrenewable fuels and to intensify such problems and conflicts as those related to strip mining, air pollution, uranium shortages, and the siting of nuclear facilities.

To bring about the big reduction in demand necessary to compensate for any major shortfalls in development of domestic energy sources, the Btu tax might have to be very stiff indeed—high enough perhaps to double the price of gasoline and home heating oil. Such a tax could be coupled with a program of annual rebates intended to redistribute the money collected and thus alleviate the economic and social hardships caused by the painfully high energy prices.

No government official is openly advocating a Btu tax. At the moment, the idea of forcing reductions in energy demand by dramatic price hikes is highly controversial, and it seems that most politicians are quick to denounce it. In 1974, John C. Sawhill was fired as head of the Federal Energy Administration (FEA) after he said publicly that one of the energy policy options under consideration by the Administration was a 20- to 30-cents-per-gallon tax on gasoline. And, last year, the House of Representatives overwhelmingly rejected a "standby" gasoline tax of 20 cents a gallon.

Lifting oil price controls has been controversial enough, not to mention imposing special new energy taxes. A good many members of Congress, particularly among the Democrats, have regarded such controls as a way to keep the OPEC cartel from dictating what the American consumer pays for petroleum products and as a necessary restraint on oil company profits. But to many Republican members, and quite a few Democrats as well, price controls—particularly now that there is no embargo or other emergency—are an affront to the free enterprise philosophy.

Beyond this, controls have been attacked on the grounds that they have taken on an increasingly patchwork and arbitrary character. Also, it has been frequently charged that they discourage production of new oil by holding down the price of petroleum products, and, of course, that they encourage consumption and hence oil imports.

To support the argument that higher

The Case for Conservation

"More than one-half the current U.S. energy budget is waste," according to Denis Hayes, a senior researcher with the Washington-based Worldwatch Institute, in an analytical paper* prepared with the support of the Federal Energy Administration. Hayes, formerly head of the Illinois State Energy Office and a leader of the Earth Day movement in 1970, contends that the United States could meet all of its new energy needs for the next 25 years through measures such as making use of some of the heat wasted in electric power generation, improving the fuel economy of automobiles and transportation systems generally, and improving the insulation of new and existing buildings. Moreover, he argues that only through conservation can the nation's heavy and growing dependence on foreign oil be eliminated.

In an interview with *Science*, Hayes spoke to the question of how best to bring about conservation in the comprehensive manner he advocates. One strategy for policy-makers would be to look directly to the implementation of a multitude of specific conservation measures by automobile manufacturers, transportation agencies, homebuilders, big industrial consumers of energy, and other energy users. A very different strategy would be to look instead to a Btu tax as a sure way to induce energy conservation across the board. Hayes much prefers the Btu tax approach, provided that the tax is applied gradually over several years to all nonrenewable fuels at the point of extraction, that it is coupled with rebates for lower income people, and that none of the proceeds of the tax is used on energy-wasting activities. As for examples of the latter, Hayes points to construction of highways and to the proposed deployment of a fleet of B-1 bombers (the B-1 fleet, he says, will use at least as much fuel each year as was consumed by all buses in the nation's cities and towns in the year 1974).

Although conceding that the relationship between energy consumption and economic growth is complex, Hayes sees no reason to fear that energy conservation—by which he means only the elimination of waste, not curtailment of any vital services—would bring an economic slowdown and hard times.—L.J.C.

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prices produce a major conservation effect, it is often pointed out that, with the sharp increase in the world market price of oil and petroleum products brought about by OPEC in late 1973 and early 1974, the United States is now consuming about 3 million barrels of oil a day less than what was projected several years ago. The economic recession has accounted for maybe half of this, but not more.

President Ford set forth his proposal for immediate decontrol of oil prices, together with the rest of his energy program, in his State of the Union message of January 1975. What followed was a year-long battle in Congress over the decontrol issue. The widespread suspicion that the oil companies would in one way or another evade any excess profits taxes that might be enacted and fatten themselves obscenely at the public's expense made for strong opposition to decontrol. Also many senators and representatives feared that, unless they opposed decontrol, their constituents would hold them partly accountable for any increase in gasoline or heating oil prices.

The upshot of the prolonged congressional debate was the compromise providing for the 40-month phaseout of controls. The existing two-tier pricing system will continue for the time being, with "old oil" to be sold at substantially lower prices than those allowed for oil from new fields. It was this compromise that made possible the Energy Policy and Conservation Act of 1975, which President Ford signed on 22 December, despite the pleas from major oil companies that he veto it.

Although decontrol will be accomplished only gradually, in its other provisions the act either meets or exceeds most of the President's other proposals with respect to energy conservation and certain programs needed as a hedge against future embargoes or other emergencies. The act provides for:

- A strategic oil reserve of 150 million barrels to be established within 3 years and expanded to a capacity of 400 million barrels within 7 years.

- Standby authority for the President to impose controls on fuel prices and allocations in the event of a national emergency.

- Extension of the Energy Supply and Environmental Coordination Act (ESECA) allowing the FEA to order utilities, under certain conditions, to convert power plants from oil or natural gas to coal.

- Automobile fuel economy standards stipulating that the passenger cars of every manufacturer shall get at least 18 miles per gallon by the 1978 model year, with mileage then to be improved in stages to 27.5 by 1985.

- Fuel economy or energy-efficiency labeling for automobiles and a wide variety of home appliances, plus "energy efficiency improvement targets" to be prescribed for the appliances (if necessary, mandatory standards shall ultimately be established).

Voluntary energy efficiency improvement targets will be fixed for each of the ten most energy-consuming industries, and the FEA will monitor the industries' performance. The act also mandates conservation standards for the management of all federal agencies and requires several

key regulatory agencies, such as the Civil Aeronautics Board and the Interstate Commerce Commission, to report to Congress on how their policies bear on the efficient use of energy. In addition, the states will be encouraged through a new program of grants-in-aid to establish programs of energy conservation.

This year the President is asking Congress to complete action on several other measures which bear in whole or in part on energy conservation. These include bills to lift price controls from newly developed

Blackbird Bill Stirs Flap

Environmentalists are crying foul over a bill, hurriedly slipped through Congress on 27 January, that would allow Kentucky and Tennessee to bypass major environmental laws in an "emergency" pesticide-spraying program to eliminate millions of blackbirds.

The bill, now awaiting presidential signature, would circumvent the National Environmental Policy Act and other federal laws by requiring, as the only condition for spraying, certification by a state's governor that the birds constitute a significant hazard to human health, safety, or property.

Ever since the pesticide Tergitol was approved in 1974, environmental groups have been trying to get the Department of the Interior, which licenses its use, to prepare a comprehensive environmental impact statement on the use of the chemical against migratory birds. Faced with threats of litigation, the department agreed not to grant any licenses until such a statement was completed. Now, in what one environmentalist calls a "grotesque abuse of the legislative process," a bill has been passed that, in some people's opinion, sets a fearsome precedent for special interests to trot bills through Congress waiving federal environmental laws any time an "emergency" is perceived.

The Council on Environmental Quality (CEQ), is also, according to a spokesman, "deeply concerned" about the process by which the bill was passed. No hearings were held on it, and it was not even referred to the relevant committees. Instead, says one source, its Senate originators, Tennesseans Howard Baker and William Brock, hustled it through a near empty floor. The CEQ man also says the bill was "totally unnecessary"; existing laws already authorize Interior to permit a state to spray if it agrees that an emergency exists. The states did in fact request a permit from Interior, but the department hadn't gotten around to responding when the bill was passed.

House passage of the measure has been a cause of considerable embarrassment to Representative William L. Leggett (D-Calif.), chairman of the fish and wildlife subcommittee of the House Merchant Marine and Fisheries Committee. He reportedly went along with the motion to vote on the measure without having it referred to the committee because he was under the impression that it was all right with the committee's chairman, Leonor K. Sullivan (D-Mo.). It was not. So, responding to cries of outrage and concern, Leggett's subcommittee arranged a belated day of hearings to air all sides of the bird-spraying question and to seek "a more permanent solution." It was hoped the President would hold off consideration of the bill until after the hearings.

Procedural questions aside, not all parties agree on whether there is a health emergency. The states say the accumulations of blackbirds, which have become a major local pest over the past half-dozen years, damage crops and have caused a surge in cases of histoplasmosis, a lung infection caused by a fungus whose growth is aided by bird droppings. Environmentalists tend to downplay the health threat and fear the ecological consequences of decimating a local bird population when subtler measures might suffice. The states say other methods, such as bulldozing the roosts, don't work, and only Tergitol, a biodegradable detergent, will do. Tergitol, which works only in damp chilly weather, strips protective oils from birds' feathers and they die from the cold.—C.H.

White House Fellow Program Charged with Bias

One of the finalists for this year's White House Fellowship program is suing the program for discriminating against women.

Psychologist Serena Stier, an administrator at the American Psychological Association (APA), was one of 32 finalists, 9 of whom were women. Of the 14 chosen, 2 were women.

Stier developed doubts about the selection process during a 3-day "final selection" weekend where she says women candidates were asked irrelevant questions about personal and family relationships that were not asked of the men. Her suit contends that the 11-year-old program has manifested bias against women since its inception. Of a total of 182 White House fellows, only 20 have been women, and the propor-

tion of women chosen has been consistently smaller than the proportion of women among the finalists.

Stier is getting financial support for her suit from the Women's Legal Defense Fund and the Washington Lawyers' Committee for Civil Rights. She also has the support of the Women's Equity Action League, and the APA's division on the psychology of women which is filing an amicus curiae brief describing how sex discrimination affects society. Stier, who has served as APA liaison with groups engaged in litigation relating to the rights of the mentally ill, hopes her suit will add to the small number of cases in which social science information has been used to contribute to a legal decision.

The annual White House Fellowship program was set up in 1964 by President Johnson to give outstanding young professionals the opportunity to work at various high-level positions in the Executive Branch.—C.H.

supplies of natural gas, fix mandatory energy conservation standards for all new commercial and residential buildings, and provide tax credits for home insulation (and 100 percent subsidies for insulation in the case of poor families). Congress may go along with all of these proposals, although some significant compromises no doubt will be required (for instance, Congress may insist that the conservation standards for new buildings be voluntary instead of mandatory).

But even if all of the energy conservation measures the Administration has proposed (including the decontrol of oil and natural gas prices) were to be approved and fully implemented by 1985, FEA officials do not think that these measures could make up for a big shortfall in development of any of the major domestic sources of energy supply.

Most energy statistics should be taken with a grain of salt, but the following analysis by a ranking energy official who believes that a Btu tax will ultimately prove necessary seems indicative of the situation that is emerging. As he sees it, the conservation effect of the higher energy prices that have followed the Arab embargo of 1973-74 is itself enough to keep total energy consumption in the United States from being any higher than the equivalent of about 50 million barrels of oil a day (mbd), which would be some 15 mbd greater than total consumption in 1973. The added effect of the various conservation measures which Congress has either already passed

or is considering would reduce demand by maybe another 5 or 6 mbd, thus limiting total consumption to about 44 or 45 mbd.

On the supply side, according to this official, domestic production of energy in 1985 can be put at not less than the 29 mbd produced today even if one proceeds from rather pessimistic assumptions, and it probably will be at least 35 mbd. But if it is no greater than the latter figure, this would mean a gap of about 10 mbd between demand and domestic supply. Under these circumstances, a prolonged embargo could have a crippling effect on the American economy because imports would be much greater than what could be replaced out of a strategic reserve of the size planned.

If energy independence goals were met, the difference between demand and domestic production would be down to 2 or 3 mbd, a level where an embargo would pose little threat. But while the Administration is still trying to put an optimistic face on things, there is reason for pessimism.

Since domestic oil production peaked in 1970, daily production has been decreasing each year by about 400,000 barrels. The production from the Alaskan North Slope that is to begin in 1978, plus whatever additional oil comes through improved recovery methods in old oil fields, may only arrest the overall decline, if indeed it accomplishes even that.

The nuclear industry is in such trouble that many people are saying, with some truth, that a de facto moratorium on further nuclear development already exists.

During 1975, the number of orders for nuclear reactors canceled and deferred was several times greater than the number of new orders placed. And in referenda now pending, the citizens of California and other states may decide that development of nuclear power is to be formally stopped or curtailed.

The mining and burning of coal also is slow to increase. In 1975, production of coal for domestic consumption was up by only about 1 percent over the previous year. Although production should rise substantially during the next few years, many people in the coal industry seriously doubt that the energy independence goal of doubling the present output by 1985 will be attained. FEA officials are watching Congress warily with respect to the Clean Air Act amendments because they think that the tightening of stack emission standards now under consideration would itself limit coal consumption sharply.

Prospects for production of oil and natural gas from the outer continental shelf (OCS), which along with the Alaskan North Slope represents the last frontier for development of these fuels, are also highly uncertain. If anything, the environmental constraints—and the closely related problem of conflicts arising between federal and state authorities—are even more acute in this case than in that of coal development. The extent to which the oil industry is willing to take on the risks of exploring and developing the frontier provinces of the OCS is also unclear. Bidding at the recent sale of leases for OCS tracts off southern California was generally disappointing.

In light of these discouraging indications of the prospects for energy independence, there is nothing fanciful about the idea that a Btu tax will be necessary if this Administration goal is to be seriously pursued. The alternative, of course, is for oil imports to continue at a high and probably increasing level and for Americans simply to learn to live with the possible threat of embargoes—just as the British, French, Germans, Japanese, and the people of nearly all other industrialized countries are living with it.

If this choice between accepting a Btu tax and abandoning the energy independence goal is ever to be confronted, unusually bold political leadership will be required. The more comfortable course for Congress and the White House is simply to allow events to take their course.

Certainly, the energy bureaucracy is not likely to speak up on the issue. The official who referred to a Btu tax as inevitable in an interview with this reporter did not want his name mentioned in connection with it. "I was around when John Sawhill was fired," he remarked.

—LUTHER J. CARTER

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