# Planning for an Oil Cutoff

## *Academics and industrialists meeting at Stanford find the United States unready to confront energy threats*

If the nation is ready to go to war for Persian Gulf oil, as the President has said it is, shouldn't it be prepared to do something more constructive to reduce the importance of this source of energy and lessen the risk of bloodshed?

A group of about 60 academic and industrial energy specialists met at Stanford University last month to consider this question and suggest how the government might act quickly to buy some protective insurance against disaster.

The meeting was sponsored jointly by Stanford, the Hoover Institution on War, Revolution, and Peace—a conservative think tank with influence in the Ronald Reagan camp—and by the Scientists and Engineers for Secure Energy ($SE_2$)—an academic group organized in 1976 to defend the cause of nuclear power. The $SE_2$ sponsors, reluctant to place too heavy an emphasis on the nuclear option, made it clear nonetheless that they are more interested in producing energy (particularly electricity) than in devising conservation plans. As one speaker summarized the dominant outlook, "Conservation may be absolutely necessary as a tactic, but it is potentially disastrous as a strategy."

The conference examined some weaknesses in current emergency planning and endorsed a handful of proposals for quickly increasing energy supplies. In essence, the wish list asked for a relaxation of environmental laws, faster decontrol of oil and gas prices, and accelerated building of coal and nuclear electric plants.

The first objective should be to fill the strategic petroleum reserve, the group decided. The reserve was meant to hold at least 1 billion barrels of oil, but now holds only 92 million. For more than a year, from the winter of 1978 to the summer of 1980, the government refrained from adding to this stockpile. The moratorium was begun during the Iranian oil production cutback in an attempt to avoid bidding up prices in a short market.

Participants in the Stanford meeting were shocked by reports that before ending the moratorium, the Department of Energy (DOE) this year asked Saudi Arabia whether it had any objection to DOE's resuming the fill. When the Saudi king objected, the DOE hesitated. This deferential nod apparently bought no favors from OPEC, as the recent price increases demonstrated. The Administration has decided now to resume filling the reserve, at a rate of 100,000 barrels a day. At this pace, the maximum planned capacity of 1 billion barrels will be achieved in 26 years.

The Stanford conferees agreed that this is a poor safety net, and they proposed instead that the reserve be filled at a rate of between 300,000 and 1 million barrels a day. If the faster rate were adopted, the United States would have enough oil on hand in 2 years to make up for a total loss of imports lasting 3 months. All these figures assume that the government would honor its pledge to the International Energy Agency, which, in a total Mideast oil cutoff, would require the United States to share most of its remaining imports with the allies, reducing oil shipments to this country by 6.3 million barrels a day.

Despite its symbolic importance, the reserve now has little practical value except as a means of buying some time, extending the 90-day shipping lag that already exists between the source of oil and consumers in the United States. During the grace period between a cutoff and its impact, emergency programs would be rushed into force. What should they be?

The Stanford group considered, but stopped short of recommending anything that involved a warlike mobilization of the economy to produce additional energy supplies. Centralized coordination of the energy industry, necessarily involving the federal government as an overseer, seemed anathema to most of those present. They were eager to find free market (nongovernmental) solutions to the oil dependence problem.

The federal government is not well prepared itself, a point that became clear during the conference. One law, passed in 1975, allows the President to institute an oil allocation and gasoline rationing program during an emergency. It has some important weaknesses. Another law, passed in 1979, will require each state to come up with an energy emergency plan or else accept a plan designed by federal bureaucrats. This effort is still unfinished; regulations are being drafted now. Finally, on 30 June the President signed a bill creating a federal synthetic fuels corporation and a bank to finance energy-related renovations made by homeowners. The corporation has been given $20 billion to spend in launching a synthetic liquid fuel industry in the United States, and a promise that it will get an additional $68 billion later. The objective is to encourage the production of 500,000 barrels of synthetic fuel a day by 1987 and 2 million barrels a day by 1992. This would provide a little protection against a cutoff by the end of the decade. The bank has been authorized to give $3 billion in subsidies over the next 4 years to homeowners who install solar energy devices or make other energy-saving investments. Another $1.2 billion has been set aside to subsidize investments in biomass and grain-based fuels.

What would the government be prepared to do if the oil were cut off tomorrow? Barton House, the DOE official in charge of contingency planning, told the conference that he was authorized in May to bring together a "core group" of planners, numbering about 25, to think about five to ten "significant shortage scenarios." His first oil loss scenario (1.6 million barrels a day) will be about one-fourth as severe as the one being considered at Stanford. House's task, as he described it, will be to create a matrix management chart to coordinate the emergency functions of federal agencies, local governments, and industry. The first draft of this document may be ready in the fall.

If events in the Middle East move faster than the U.S. bureaucracy, which is not inconceivable, an oil supply crisis might force the government to work with the only tools it has now: gasoline rationing, and anything else that could be improvised quickly.

Alvin Alm, a former assistant secretary of DOE for policy in the Carter administration, now at Harvard's Kennedy School of Government, said flatly that the government is not ready to cope with the kind of shortage being discussed, and that the rationing program now on the


0036-8075/80/0711-0246$00.50/0 

books would lead to chaos. If imports were reduced by 6 to 7 million barrels a day, Alm calculated that the government would have to cut back gasoline sales at least by 37 percent, but, more likely, by 50 percent if school buses and other essential vehicles were kept running on normal schedules. Alm said that the effect would be to render the nation "virtually immobile" and plunge the economy into a slide worse than the Great Depression of the 1930's.

The DOE rationing plan now on the table, Alm thinks, is "simply unworkable" (i) because it would distribute supplies according to records of car registrations, and (ii) because it would create a new paper currency (coupons) two and one half times more voluminous than the dollar currency now in circulation. Based on his research on car registration systems, he concluded that even in ideal conditions, only 80 percent of the coupons would get to the correct owners. The plan would encourage people to buy and register junk cars, for the gasoline coupons would have a cash value. Finally, Alm said, the government simply does not have the technical ability to supervise a new currency larger than the one now managed by the Federal Reserve Board. Alm predicted that any federal attempt at rationing, no matter how well intentioned, would increase confusion and heighten public cynicism.

Alm proposed an alternative: he would lift government price controls on oil and let the market allocate gasoline. His plan, which would be difficult to put into effect unless adopted before the shortage hit, would impose a tax of up to 90 percent on any windfall increase in the price of petroleum caused by supply cutoff. The money collected this way would be returned to households by the Internal Revenue Service, making the system just as equitable in economic terms as coupon rationing. The tax and rebate system would be phased out gradually as the economy recovered from the shock of a cutoff. The advantages of this approach are its flexibility, its relative incorruptibility, and its equity. The tax, Alm said, would make people adjust quickly to the oil shortage, but not add to their burden by forcing them to live with a new rationing bureaucracy. Its economic virtue is that it would gather up most of the cash windfall that would normally go to the oil companies and OPEC and redistribute it to American consumers.

Although many at the conference liked the concept, they did not endorse it. One participant, former Treasury Secretary George Shultz, now vice chairman of Bechtel Inc., spoke strongly against the idea, saying the country would be ill served by a second windfall tax on oil. Oddly, an Exxon official then spoke in defense of the tax. But in the end, the conference came up only with the vague recommendation that "a plan for emergency energy curtailment measures . . . should be prepared."

After cutting back gasoline use, there are few steps the government could take that would relieve the shortage quickly. There is some potential for fuel switching—ordering industry to use coal, electricity, natural gas, or other substitutes for oil. But even the electric utilities, which seem to have the greatest flexibility, claim there are physical constraints on the extent of switching that could be done in the first year or two. According to Michehl Gent, executive director of the National Electric Reliability Council, the utilities burn about 1.7 million barrels of petroleum a day. Current plans call for the utilities to scale this appetite down to 1.5 million barrels a day by 1989. It will take a prodigious effort just to meet that target, Gent said. He thought it unlikely that oil consumption could be trimmed in a crisis by more than 150,000 barrels a day.

"The financial condition of the electric power industry is the worst it has ever been," said Gordon Corey, of Chicago's Commonwealth Edison.

Several industry analysts presented decidedly optimistic scenarios for increasing energy output. A vice president of Bechtel estimated that coal production could be speeded up, if the government and the environmentalists were cooperative. Within 6 months, he said, coal could be made to substitute for 300,000 barrels of oil a day; within 5 years, for 1.3 million barrels a day. Gent said these calculations represented wishful thinking.

Benjamin Schlesinger, a policy analyst for the American Gas Association, made an equally hopeful estimate. By 1985, he said, the United States could obtain new natural gas supplies equivalent to about 2.3 million barrels of oil a day. (If no crash program is started immediately, however, gas supplies will decline.) To accomplish this feat, the gas industry will have to increase underground storage capacity by 24 percent, complete the new Alaska gas pipeline and ship gas through it, increase imports from Mexico and Canada, produce gas from domestic landfill sites, and synthesize gas from coal.

Charles Zraket of the MITRE corporation estimated that with adequate government subsidies, renewable energy sources (wood, alcohol, methanol, wind, hydropower, geothermal heat, and solar energy) could make a big contribution. Within 2 years, under the best circumstances, Zraket guessed these could produce the equivalent of 600,000 barrels of oil a day; within 5 years, 3 million barrels a day.

One of the easily accessible, untapped sources of energy is nuclear power. Scores of plants have been started already and are partially built. J. J. Taylor of Westinghouse said that it would be possible, if desired, to reduce the lead time for building a nuclear plant from the present 11 years to about 5½ years, "even without wartime priorities." If the government endorsed such a program, Taylor said, nuclear power could provide the equivalent of an extra 700,000 barrels of oil a day within 6 months, 1.6 million barrels in 2½ years, and 3.8 million barrels in 5 years.

The catch in this scenario, as in the others, is that it assumes an extraordinary degree of governmental and financial support. That support is not available today. The point was driven home by Gordon Corey, vice chairman of Commonwealth Edison, the Chicago utility which was one of the earliest users of nuclear power. "The financial condition of the electric power industry is the worst it has ever been," he told the conference. "We can't proceed with the nuclear program or any of the things we're talking about," Corey said, unless something is done to make the utility business more profitable. He saw no encouraging signs.

Thus, while it may be technically possible to turn on the energy taps in the United States, the impetus to do so is not present. That could change if there were a major oil cutoff. But, as one conference goer asked, will there be any private energy industry if such a calamity strikes?

—ELIOT MARSHALL