

223

Does the United States Have an Energy Policy?

Remarks of
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My assigned topic today is whether the United States has an energy policy. My answer is generally "No," and much of my discussion will be devoted to detailing how our government has failed to develop a policy. To the extent that the present Administration does have an energy policy, it is composed of bits and pieces accepted without critical scrutiny from industry groups, particularly from the major integrated oil companies.

It does not take much courage these days to dump on the Administration regarding any issue. Its performance in the energy field has been about as good or as bad as its performance in other areas of the national economy. I confess that I am somewhat partisan, but let me begin with a caveat. The United States has never had a coherent energy policy, because until the last two years, energy as such was not seen as a problem around which governmental policies ought to be organized. Certainly we have had great national controversies over public versus private power, oil leasing policies on the public lands, strip mining, the depletion allowance, and the regulation of natural gas pipelines. But these were seen as questions of regional economic development, environmental quality, consumer protection, antitrust policy, or almost anything besides national energy policy. Neither the public nor Congress saw any imperative to bring together the various laws

and institutions into one consistent and coordinated whole with respect to their impact on energy. The lack of a national energy policy is not Nixon's invention, and to give him proper credit, he is the first President who has given even lip service to the concept.

This Administration's policies toward energy, coherent or not, are mainly those of the energy industry trade associations, and they lean heavily toward investment tax incentives, higher fuel prices, and relaxation of environmental standards. The Administration has placed little emphasis upon federal research and development regarding new energy sources or upon measures for energy conservation. The middle level personnel in government who formulate and administer energy policy -- Assistant Secretaries, Bureau Directors, members of regulatory commissions and White House advisors -- are drawn disproportionately from the big energy companies and the big law firms that serve them. It is my personal experience that when the decision makers in the Interior Department's Office of Oil and Gas use the term "we" they are usually talking about the oil industry.

Let me make another caveat here in defense of the present Administration, however. Industry influence in the federal government was not invented by the Republicans, nor by the Watergate crowd. Bob Kerr of Oklahoma, and Sam Rayburn and

Lyndon Johnson of Texas, were for many years running the United States Congress; and Johnson brought his own attitudes, inclinations and connections with him to the Presidency. These men were all of course Democrats.

The Administration and the oil industry both deserve their present lack of credibility with the American people. But despite my own differences with them over energy policy, I am seriously concerned about the effect that the current lack of direction, authority and credibility will have on this country's energy situation. We do face a series of very serious energy problems. I don't want to quibble whether they add up to a "crisis" or only to a "challenge", as the President prefers to call our situation. Part of the solution is going to involve higher consumer prices for fuels and energy. There are instances in which achievement of environmental standards will have to be postponed. The government will have to enforce curtailment of certain fuel uses and cut back supplies to certain consumers. All these decisions are bound to hurt some Americans and benefit others.

But the present atmosphere is not conducive to making hard decisions. If Americans believe that the present shortages are phony, that they have been created entirely by a conspiracy of the major oil companies to drive up prices, bankrupt the independents, obtain new tax concessions or the repeal of environmental legislation, people will be reluctant to do

what is necessary to head off real shortages in the future. If the people believe that any move by government which benefits the oil industry reflects illegal contributions of laundered hundred dollar bills, it will be impossible to make these moves, even if they are the right decisions for the country at large.

Last winter the United States experienced spot shortages of fuel oil and natural gas in several parts of the country. A handful of factories and public facilities were shut down for a number of days, but as far as I know, no one really got cold.

Last summer's gasoline shortage was a little bit more severe. Distributors and dealers in some local areas actually ran out of gasoline for several days at a time. Hundreds of dealerships were closed, and gasoline was rationed informally at both the wholesale and retail levels.

This coming winter may see a real heating oil shortage. There certainly will not be enough natural gas to serve both residential customers and all the industrial users who have come to rely upon this cheapest of fuels. There may also be serious problems in the supply of jet fuel to the airlines and diesel fuel to public transportation and commercial trucking.

In a week that has seen the resumption of full-scale warfare in the Middle East, it is easy to assume that the fuel shortages

in the United States flow from the politics of the Arab countries or are, alternatively, only symptoms of a world-wide energy shortage. It is true that the oil exporting countries of the Middle East and North Africa -- all Arabic-speaking countries except for Iran -- contain the vast bulk of the world's proved oil reserves, that these countries are in the process of expropriating the international oil companies, that some have deliberately curtailed production, and that their spokesmen repeatedly warn the United States that our future energy imports depend upon a change in attitudes toward Israel.

It is tempting to blame the mounting fuel shortages in the United States upon our dependence upon Arab oil and upon the refusal of these countries to supply us because of American support for Israel. This reasoning is popular and understandable but it is totally wrong, at least at the present.

First of all, we have not been heavily dependent upon Arab oil in the past and we are not heavily dependent upon Arab oil today. In the first half of 1973, less than 7 percent of our total crude oil came from Arab countries and less than 8 percent from all countries in the Middle East and North Africa combined. Our dependence upon these sources for all petroleum products, crude and imported, is even less: the Middle East and North Africa account for a little more than 2 percent of total U.S. energy.

Second, the Arab countries have in no way embargoed or restrained their deliveries to the United States. If the current warfare does not result in any unscheduled reduction, Arab exports to the United States in 1973 will be approximately double those of 1972.

Finally, no other country seems to be suffering an oil shortage, despite the fact that Western European oil consumption has been increasing at an annual rate twice that of the United States, while Japan's consumption has been growing at five times the United States' rate, and despite the fact that both Western Europe and Japan depend overwhelmingly upon the Middle East and North Africa, they have not been affected by fuel shortages such as those we are suffering.

The background to the growing fuel shortages in the United States includes the topping out of the domestic production of oil and gas, the sudden impact of air quality standards, and a host of other circumstances. The principal underlying cause, however, is a shortage of domestic refining capacity. The immediate cause of our present shortages was a deliberate attempt by the major oil companies to reduce the supply of petroleum products during the first three-quarters of 1972. The impact of this action was compounded by the Administration's uncritical acceptance of policy advice

by the oil companies and by flagrantly inept management of the oil import program in the second half of 1972.

There are a number of reasons why U.S. oil companies have not built sufficient domestic refining capacity to meet the growth in demand for gasoline, heating oil, and other petroleum products. Industry and the administration like to single out environmental legislation and the reduction of the depletion allowance from 27-1/2 to 22 percent as the major reasons. It is true that future refinery construction will run into increasing problems

in meeting air and water quality standards, and will encounter a degree of local citizen opposition almost unknown in the past. Yet with the exception of one refinery plan that had to be abandoned because of state law in Delaware, Congress could find no instance, and the Administration or the industry could name none, in which construction or expansion of domestic refineries was thwarted by environmental restrictions. The depletion allowance is completely irrelevant. Though its reduction undoubtedly had an impact on oil company after-tax-earnings, depletion is a subsidy to crude oil production and not to refining. The reduction in the allowance in no way diminished the profit expectations from new refineries.

The fundamental reason for the lack of refinery construction was the oil import quota system, which was enthusiastically supported by all segments of the oil industry until only a few days before it was abolished. On the urging of the industry, President Nixon continued the quotas for roughly three years after his Cabinet Task Force overwhelmingly recommended their abolition.

The way in which the quota system prevented refinery construction was quite simple. As U.S. crude oil production approached 100 percent of capacity, the major refiners knew that there was no point in expanding their capacity to process greater amounts of domestic oil; new refineries would have to be built to process foreign crude. But imports of foreign crude oil were restricted by the quota system, and import licenses were allocated on an arbitrary basis, and for only one year at a time.

There were a few observers who pointed out that the quota system could not keep functioning as domestic oil demand increased, once Texas and Louisiana were producing at 100 percent of capacity. But no one had any idea what would succeed this system and the White House, in a posture that has been characteristic of the Nixon Administration on one issue after another, simply pretended the problem didn't exist and refused even to discuss it.

The shortage of refinery capacity is complicated by problems of location and type of oil. Most domestic production has been relatively "sweet," that is, low in sulphur content. Existing U.S. refineries were built to run this kind of oil. Venezuelan and Persian Gulf crudes are, however, mainly sour, that is, high-sulphur. In addition, under the import quota system, independent refiners in the interior of the United States could trade their import licenses to the major oil companies which had refineries on the Atlantic and Gulf coasts, for low-sulphur domestic crude. As the supply of domestic crude got tighter, the majors tended to hold on to the domestic oil under their control and to run it in their own refineries. When the Administration finally got around to liberalizing oil imports in the fall of 1972, it did so in a way that removed most of the incentive to continue supplying oil to the Midwestern independents. In May of 1973, when the quota system was abolished in favor of tariffs, the new system was designed in such a way that it eliminated this incentive entirely.

In late 1971 and early 1972, despite the fact that little new refinery capacity was coming onstream, and despite the imminent topping out of domestic crude oil production, the major oil companies perceived a world-wide surplus of refined petroleum products. The trade press was full of references to excess refinery capacity in Europe and to excessive production in

the United States, which was "softening" gasoline and fuel oil prices. The big companies deliberately leveled off their refinery runs in the face of increasing demand, and deliberately drew down their stocks of gasoline and of fuel oil. The record is quite clear on this, because the Texas Railroad Commission, as a basis for regulating production from Texas oil wells, requires each of the companies to disclose on a monthly basis both its desired levels and actual levels of crude and product inventories. The majors across the board announced desired levels of stocks ranging from 5 to 22 percent lower than they had held one year earlier. They held down refinery runs in order to reduce these inventories, and the United States entered the fall of 1972 without adequate fuel oil reserves to cope with a normal winter, let alone an exceptionally cold one.

Despite the emerging shortage the major oil companies continued this policy of drawing down stocks and producing at substantially less than top refinery capacity well into the fall of 1972. At the same time officials of the major companies were assuring the Office of Emergency Preparedness that they were perfectly able to meet all anticipated demands during the coming winter, and argued strongly against any liberalization of fuel oil or gasoline imports.

When the impending crisis became impossible to ignore, the Administration finally did permit additional imports, but the increase was too little and too late to restore the depleted fuel oil stocks. Federal officials also harangued the industry to increase its refinery runs, and we did manage to get through last winter without major disasters.

To replenish the stocks of fuel oil which they had earlier depleted deliberately, the major companies had to produce more fuel oil and less gasoline well into the spring of 1973; they thus precipitated last summer's gasoline shortage. We squeaked through the summer and now enter the fall, this time with an even larger deficit in fuel oil stocks.

The present prospect is that the supply of refined petroleum products will fall further and further behind demand for three or four years, that is, until the new refinery construction announced this spring after the President abolished import restrictions begins to go onstream.

To sum up this part of my presentation: First, the federal government for many years restricted imports of foreign crude oil in order to keep prices up for the domestic industry. The Nixon Administration continued this policy even after domestic production was obviously no longer able to meet domestic demand. The oil companies did not plan or build new refineries because they knew there would not be a supply of additional domestic crude, yet they had no assurance whether, or on what terms, they could import foreign crude.

In the face of this situation the major oil companies mistakenly perceived a surplus of petroleum products in 1971 and 1972 and deliberately reduced their stocks of gasoline and fuel oil. The federal government uncritically accepted the assurances of the major companies that there would be no shortages. At the urging of those companies the Administration refused to permit an increase in the imports of petroleum products almost until it was too late.

Finally, because almost no new refinery capacity has been coming onstream in the last couple years, we have never been able to make up for the crude oil that companies

decided not to refine and the products the Administration did not permit us to import, during 1972. We are, in fact, falling further and further behind each season and there is little prospect for catching up in less than three years, if even then.

The fuel shortages so far have not been caused by a shortage of crude oil. They have certainly not resulted from the use of oil for political purposes by Arab governments. None of the problems we have had, so far at least, would have been avoided, for example, by earlier construction of an Alaska oil pipeline. The operating bottleneck today is refinery capacity and for that reason it will be three or four years before we can have a really substantial increase in the supply of liquid fuels. Shortages of fuel oil, gasoline, diesel, jet fuel and propane will be with us for at least that long.

The shortage of liquid fuels caused by the deficiency in refinery capacity has been aggravated by the natural gas shortage. For many industrial users, including electrical utilities, fuel oil and natural gas are substitutes. A shortage of one increases demand for the other. Domestic natural gas production has reached a peak and started down; would-be gas users are trying to buy low-sulphur residual oil or number 5 fuel oil at precisely the time that oil is also in tight supply.

The decline in domestic natural gas reserves may well be slowed down by higher gas prices and by new offshore leasing. But the payoff from these moves would also be three or four years away. Moreover, sharply increased gas prices are politically unpalatable in the face of public resentment over unprecedented recent increases in living costs.

The outlook for worsening fuel shortages over the next three or four years is not improved by the fact that Arab or other imported oil may in fact be used for political purposes in the future. For that matter, Palestinian guerrillas or Israeli bombs well may interrupt a substantial part of Middle Eastern production today or tomorrow. It is almost certain that the price of oil will keep going up, from the present Persian Gulf price of three dollars a barrel to two or three times that amount within a very few years. These price increases will be accomplished by deliberate restraints on expanding production, not necessarily for political purposes, but for straightforward economic objectives, that is, simply to get prices up.

There are relatively few choices open to the United States in the next few years with respect to energy. Fuel supplies will not increase substantially, and United States policy will have to focus upon controlling demand. Some relatively unpleasant measures for energy conservation will have to be combined with cumbersome machinery for mandatory

allocation of those fuels that are in short supply. We will have to accept higher fuel prices, and we will most likely have to accept a postponement of the achievement of primary air quality standards.

The President has advocated some of these measures and has given lip service to others but the present Administration program is unbalanced and most likely, unworkable. The White House is pushing for a retreat on air quality, and proposes to decontrol natural gas prices. But it has bitterly resisted implementing the mandatory allocation program demanded by Congress, and even by important parts of the oil industry itself. It has totally avoided any tough conservation measures, such as, for example, requiring the airlines to fly their planes 75 or 80 percent full rather than the present figure which is something less than 50 percent.

The potential for energy conservation even in the short-run should not be underrated. The gasoline shortages this summer were caused by a supply short-fall of about two percent. Yet, if all automobiles sold over the next eighteen months were to be of the compact or sub-compact variety, our gasoline consumption by 1975 would be reduced by almost one-fifth. Certainly an imaginative political leadership could come up with a package of short-term energy conservation measures that would get us past the current refinery shortage and at the same time permit some reduction in air pollution.

Another short-term measure the Nixon Administration has been unable to agree upon is the establishment of a strategic reserve, both of crude oil and of products, to deal with contingencies ranging from unexpectedly cold weather to politically-inspired interruptions of oil imports. Apparently the problem here is that a strategic oil reserve would cost money, and the Administration is not interested in large new outlays on anything except new weapons systems.

My time today does not allow me to devote much attention to energy policy for the long-term. In the period beyond (say) 1980, we have a large number of options both for increasing energy supply and for energy conservation. Fuel shortages and high fuel prices will, in part, tend to correct themselves. The known energy resources of North America in the form of tar sands, oil shales, and coal far exceed those of conventional oil and gas. At the prices we foresee for primary fuels: five, six and more dollars per barrel for oil, and a dollar or more per thousand cubic feet for gas, tar sands, shale or coal could be converted to liquids or to natural gas substitutes.

The problems with these synthetic fuels and with other energy sources like geothermal power, are not basic research or even the invention of basic industrial processes, but the lead times necessary to build and debug pilot plants, and to get through the difficult financing and technical

problems of constructing and operating the first generation of commercial facilities. This is an area in which the government could provide substantial leadership, but in which there has been little activity to date.

High fuel prices will also encourage the increased recovery of oil and gas from known resources. An increase in the recovery rates for crude oil from an average of about 30 percent now to somewhere around 60 percent is not out of the question. Counting only presently proved reserves, such an increase in recovery rates would add ten years to our current domestic oil supply. There are other possibilities. Within five years geophysical techniques will have advanced to the point where oil and gas can be detected positively without drilling. This development may well open a whole new generation of discoveries in the United States and, incidentally, all over the world.

I am not implying that everything will be rosy five or ten years from now. The environmental impacts of producing, transforming and using energy will be an increasingly critical limit upon what we can do as world energy consumption continues to double every ten years. Waste heat, pollutants, and competition for land in the metropolitan areas are more likely to choke off further growth of energy consumption than resource depletion. Another limit is the terrifying potential for disaster from an energy economy based increasingly on nuclear fission.

Further speculation is riskier the further in the future we go. My own intuition is that energy as such will not be seen as a critical problem ten or fifteen years from now, that the issues we now group together as "energy policy" will again go their own ways, to be seen mainly as questions of urban design, life style, economic justice and growth policy. In the meanwhile, we need something more like a national energy policy than we have now.