The Next Oil Crisis

The next great oil crisis, according to the standard forecast, will arrive in the mid-1980s. That forecast is the basis not only for President Carter's energy policy, but for many industries' planning as well. Because of the importance of this view of the future in forming the nation's preparations, it's worth going back to actual performance from time to time to see how things are going. There are beginning to be interesting hints, here and there, that the coming oil squeeze may work out differently than most Americans have been assuming—not necessarily better or more easily, but differently.

When the Carter administration took office it foresaw, for good reason, a dismaying sequence of events ahead. The industrial nations would try to make their economies grow faster to reduce the high unemployment that was, and still is, common to all of them. This economic growth would greatly increase the demand for oil. For the next two or three years that increased demand would be met by a couple of lucky discoveries in the north—in Alaska and in the North Sea. But starting some time after 1981, the full weight of increasing oil requirements would fall back onto the countries of the Persian Gulf. As these rising demands started pressing the limits of world supply, prices would then shoot suddenly upward again—perhaps with severe disruptions in deliveries. It would be like the sixfold price increases and the embargoes of 1973 and 1974 all over again, on a larger scale. That is why Mr. Carter called for the conservation and tax legislation that, a year later, is still stuck in the House-Senate conference.

But meanwhile there have been some slight changes in the signals. They were recently outlined by John H. Lichtblau, an experienced analyst of the oil industry, writing in the OPEC Review. Excerpts of that article are printed on the opposite page. Mr. Lichtblau notes two particularly significant points.

Over the past two years there has been a sharp drop in the amount of oil required to produce each additional dollar's worth of economic output in this country. That is pure conservation—and a very good sign. But there is another and more ominous trend that appears to be developing along with it. Most of the industrial countries' economies are expanding more slowly than their governments expected, and, in particular, business investment has been low. It is beginning to look as though the industrial world may be entering a period of prolonged low growth—one reason for which would be the expectation of energy shortages ahead.

If those trends continue, the world won't see the widely forecast energy convulsions of 1985, with the demand for oil bumping against the production ceilings and buyers bidding frantically against each other for limited supplies. Instead, the world would see something much less dramatic—but not necessarily less damaging. If you are not an optimist, you might almost say that we are beginning to see it now. It is simply a continued level of economic performance that is, by the past decade's standards, very poor.

Does it all mean that Congress ought not pass the languishing energy bill? On the contrary, the unfinished bill is making matters worse by aggravating all the uncertainties over future government policy. Nobody knows what the future energy taxes will be or the import rules or price controls or fuel supply plans. That means postponed investment, which leads in turn to still lower growth rates. Low economic growth would make oil shortages less likely in the 1980s. But it would exact a high price in unemployment and diminished opportunity in our society.
The United States is the world's largest oil importer, by far. It is the only major country whose oil imports in 1977 were above the level of 1973. And it is, of course, the single most important customer of the Organization of Petroleum Exporting Countries (OPEC).

These factors have given U.S. oil a dominant role in world oil economics. In the future this role could become still more pivotal: If the high end of the range of recent forecasts of U.S. oil import requirements by 1985—14 to 15 million barrels per day—is correct, a world oil shortage in the mid-1980s is a probability. If the low end of the range—6 to 7 million barrels per day—is correct, the world oil surplus could be larger than at present.

It may, therefore, be of interest to analyze briefly the reason for the remarkable increase in U.S. oil imports in recent years as well as their likely future level. But first a few figures to establish a frame of reference:

In 1977, U.S. oil imports of about 8.6 million barrels supplied 46 percent of U.S. oil demand. These imports accounted for about one quarter of total world oil trade (nearly 80 percent of them came directly from OPEC; about 22 percent of OPEC's exports went directly to the United States).

Between 1973 and 1977 total U.S. oil imports rose by 2.3 million barrels per day or 38 percent, while imports from OPEC alone rose by 3.5 million barrels per day, an increase of more than 100 percent. These increases were of major significance to both oil exporters and other oil importers. For OPEC it has meant that total exports in 1977 were probably fractionally above the previous record of 1973. In the absence of the U.S. import increases, OPEC's oil surplus, i.e. the difference between actual production and allowed maximum production levels, would have been about twice the currently reported size of 2.5 to 3 million barrels per day. Underlinings of OPEC oil of that magnitude would clearly have had some downward effect on prices.

Thus, from OPEC's point of view, the U.S. import increases of 1976 and, particularly, 1977 have been the major factor in containing the current world oil surplus and, hence, supporting the price levels set by OPEC members.

The reason for the expected leveling off in the growth in U.S. oil import requirements is a combination of factors: the reaction to higher oil prices, technological improvements in energy utilization, the growth of non-oil energy sources and, perhaps most important, substantially slower economic growth rates than in the last two years.

Take the energy/GNP growth ratio, the so-called energy coefficient, which is considered a very good indicator of a nation's efficiency of energy utilization. For the 20-year period, 1953 to 1973, the ratio was about 1.1. That is, each percentage increase in GNP required a similar percentage increase in energy expenditure. In the last two years (1976-1977) the ratio has declined by one third to about 0.65.

It is not unreasonable to assume that it will remain significantly below the historic level, given the mandated improvement in the fuel efficiency of automobiles, the current boom in the sale of home insulating material and the many announced plans by industrial firms to reduce energy input per unit of output.

In 1976 and 1977 the U.S. GNP grew at 6 percent and almost 5 percent, respectively, pulling energy demand along with it.

In 1978 the growth rate may hover around 4 percent and in the 1980s it will probably average less than 3.5 percent per year. With an expected population increase of less than 1 percent per year and a progressive increase in the average age of the population, this can be considered a normal and practically tolerable development for a mature, highly industrialized economy, resulting in a corresponding deceleration in the growth in energy demand.

Taken together, these developments will not be enough to actually reduce the volume of oil imports from the level of 1977 (except for this year). Hence, the administration's announced import goal for 1983 in its National Energy Plan will not be reached or approached.

But market forces plus existing and planned legislation to conserve gasoline demand through improved automobile efficiency, to convert electric utilities from oil and gas to coal and to give preference to coal in new industrial plants, are bound to have a significant collective impact on future demand.

Since oil imports are the balancing fuel in U.S. energy supplies, any reduction in the growth rate of total energy requirements will ultimately be translated into lower oil imports. Thus, a scenario under which these imports will grow only very modestly from 1977 on must be considered a realistic one.