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Five Years of Energy Paralysis

Five years ago the United States received notice that it could not depend indefinitely on obtaining imports of oil. Soon it was also evident that the world would be enduring economic dislocations due to high costs of petroleum and that shortages of oil would be experienced 5 to 15 years from now. Lately, confidence in the dollar has evaporated and the possibility of wild inflation here looms ever larger. On the world scene great changes have occurred in less than a year. In the meantime the United States plods along with a time scale for energy development measured in decades and more. During the past 5 years some constructive developments have occurred, but on balance, this country has drifted backward.

The easiest and quickest way to avoid energy shortages is through conservation. In this area, modest progress has been made. Following the recent severe winters, substantial amounts of insulation were installed in homes. Newly constructed buildings are also better protected. Industry now uses 14 percent less energy per unit of product than it did 5 years ago. But public recycling efforts have largely stopped. Gasoline consumption sets new records.

Unconventional energy sources, though highly touted, have not made much of a contribution. For a time solar heating and cooling caught the attention and interest of the public. Many new companies were formed to meet an eager demand for installations. But in recent months, orders have dropped to 10 percent or less of their peak rate and many companies have folded.

Domestic reserves and production of oil and natural gas continue to drop. In 1973 crude oil production was 9.3 million barrels per day. It is now about 8.7 million barrels per day. This includes the contribution of 1.2 million barrels per day of Alaskan oil. In the 48 contiguous states production has dropped rapidly. Although drilling activity on land is now at a 20-year high there have been few announcements of discoveries of giant fields. Exploration of frontier areas (incomplete) has thus far not been very encouraging. In the 5 years there has been a large increase in oil imports and in balance of payments deficits.

After conservation, substitution of other fuels should be the most practical way of lowering demand for imported oil. This means expanded use of coal, nuclear energy, or shale oil. But progress in substitution has been slow and future prospects are bleak.

During the past 5 years regulatory and legal delays have lengthened drastically. The time necessary to open a large coal mine has increased from 5 years to as much as 10 years or more. Many federal, state, and local agencies have set separate but often overlapping requirements which differ from place to place. As many as 100 permits are required to open a mine, all of which must be obtained before construction can begin. The time required to bring a coal-fired electric plant on line has increased by several years and is approaching the 10 to 12 years needed for nuclear power plants.

Considerably more oil might be obtained fairly quickly from tertiary recovery and from pools of heavy oil, but large-scale efforts await economic incentives. Huge amounts of shale oil are potentially available by use of already developed processes, but under existing economic and regulatory conditions little is being done.

Our people have repeatedly given evidence that they will not gladly accept shortages of energy whether natural gas, electricity, or gasoline. Infatuation with the automobile is such that any political party that engineers a shortage of fuel can count on defeat at the polls. Proposition 13 is a minor breeze in comparison with the hurricane that could result from failure to deal with energy matters.

The sad part of the situation is that the technology and resources exist to enable the United States to live smoothly through the transition to more efficient energy use and to long-term and renewable energy sources. But continuation of present paralysis invites turmoil.—PHILIP H. ABELSON