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NO OIL SHORTAGE LIKELY DURING 1980's;
CAN BE AVOIDED FOR REST OF CENTURY

New York, June 6 -- An extended oil shortage of crisis proportions is unlikely before the late 1980's and can be avoided for the rest of the century, a new study of the long-term outlook for world oil supply shows.

The study, prepared by the Petroleum Industry Research Foundation, Inc. (PIRINC) for the Electric Power Research Institute, Palo Alto, California, examined the Non-Communist World (NCW) oil situation under three scenarios for the periods 1976-1990 and 1990-2005.

"Our analysis of both periods is based primarily on economic, technical and natural resource considerations and does not take account of purely political factors, such as military interruptions, the use of oil as a political instrument, or other political constraints on future oil production," said John H. Lichtblau, Executive Director of PIRINC, who conducted the study in collaboration with a group of economists at the University of Arizona headed by Helmut J. Frank, Professor of Economics.

On this basis, the study's key findings are:

* A global oil shortage before the late 1980's is unlikely.

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* A shortage between the late 1980's and the beginning of the 21st century is a possibility but not a probability.

* Over the next 25-30 years, a gradual transition from oil to non-oil sources to meet incremental world energy requirements is more likely than an extended oil shortage of crisis proportions.

Such a gradual transition would take place under conditions of slower world economic growth than in the past 25 years and moderate increases in the real world oil price. The latter would accelerate existing trends towards greater production and utilization of non-oil energy sources and would improve energy-use efficiency. Another major requisite would be maintenance and implementation of existing and planned government policies in the oil consuming countries in support of the development of non-oil energy sources and increased energy conservation.

For the period 1976-1990 the study contains three cases, each based on different assumptions of world economic growth rates and effectiveness of energy conservation. The resulting NCW energy growth rates are 4.1 percent in the case of high economic growth and no significant improvement in energy conservation, 3.7 percent in the case of high economic growth and moderate improvements in energy conservation, and 3.3 percent under conditions of relatively slow economic growth and moderate improvements in energy conservation.

Non-oil energy supplies are assumed to be the same in all cases so that oil becomes the swing fuel, making up the entire difference in energy requirements among the three cases. On this basis total NCW oil demand would grow at annual rates of 3.8 percent, 3.0 percent or 2.2 percent, respectively, in the three cases. Requirements for OPEC oil are calculated to be as follows under these assumptions:

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The study concludes that OPEC might be able to meet these requirements in all three cases in 1985 but only in the two lower cases in 1990. Thus, the highest case would result by the late 1980's in what is popularly referred to as an "energy crisis," a temporary situation during which world oil supplies would be physically insufficient to meet demand at the assumed price level and no further short-term substitution of other energy sources would be possible. The result would be a substantial oil price increase probably starting in the early 1980's to bring demand down to the available level of supply. The higher price, which by 1990 could be nearly twice the 1977 level, would speed up the adjustment process but would probably have a negative temporary impact on world economic growth.

The study concludes that while such a scenario must be considered a realistic possibility, it is the least likely of the three cases because of strong indications of a significant structural decline in the future world economic growth rate and significant improvements in the efficiency of energy utilization.

Among projections relating to the U.S. domestic oil situation, the study forecasts under its three cases:

* An annual growth rate in energy demand in the 1976-90 period ranging from 3.1 percent to 2.4 percent, and a growth in oil demand ranging from 3.0 percent to 1.5 percent annually. This compares with an average annual energy growth rate of 3.5 percent and an oil demand growth rate of 3.7 percent in the

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1960-76 period.

* U.S. oil import requirements will be 9.4 million barrels daily to 12.0 million barrels daily by 1985, and 10.0 million to 14.5 million barrels daily by 1990.

* U.S. energy supplies other than oil will grow at a rate of 1.8 percent a year from 1976 to 1980 and 2.8 percent annually from 1980 to 1990. The faster growth in the latter period will be due primarily to expected increases in coal and nuclear power and a modest increase in natural gas supplies from a combination of stabilized domestic production and rising imports.

During the 15-year period 1990-2005, the study foresees:

* World oil demand growing at a much slower rate than in the period 1976-90 because lead times required to improve energy utilization and to develop alternate energy sources on a global scale are such that their impact will be much stronger in the 1990's than in the 1980's.

* Total OPEC production might peak at about 51 million barrels daily, including a maximum of near 19 million barrels a day from Saudi Arabia. When and whether these production peaks will be reached and required depends on the policy of the producing countries and on NCW demand. However, they are unlikely to be available before the mid-1990's.

EDITORS: Review copies of the report, The Outlook for World Oil Into the 21st Century, With Emphasis on the Period to 1990 (EA 745), can be obtained from Research Reports Center, P.O. Box 10090, Palo Alto, Calif. 94303, or by calling (415) 961-9043.