SCIENTISTS' STATEMENT ON ENERGY POLICY

We, as scientists and citizens of the United States, believe that the Republic is in the most serious situation since World War II. Today's energy crisis is not a matter of just a few years but of decades. It is the new and predominant fact of life in industrialized societies.

The high price of oil which we must now import in order to keep Americans at their jobs threatens our economic structure—indeed, that of the Western World. Energy is the lifeblood of all modern societies and they are currently held hostage by a price structure that they are powerless to influence.

In the next three to five years conservation is essentially the only energy option. We can and we must use energy and existing energy sources more intelligently. But there must also be long range realistic plans and we deplore the fact that they are developing so slowly. We also deplore the fact that the public is given unrealistic assurances that there are easy solutions. There are many interesting proposals for alternative energy sources which deserve vigorous research effort, but none of them is likely to contribute significantly to our energy supply in this century.

Conservation, while urgently necessary and highly desirable, also has its price. One man's conservation may be another man's loss of job. Conservation, the first time around, can trim off fat, but the second time will cut deeply.

When we search for domestic energy sources to substitute for imported oil, we must look at the whole picture. If we look at each possible energy source separately, we can easily find fault with each of them, and rule out each one. Clearly, this would mean the end of our civilization as we know it.

Our domestic oil reserves are running down and the deficit can only partially be replaced by the new sources in Alaska; we must, in addition, permit off-shore exploration. Natural gas is in a similar critical condition; in the last seven years new discoveries have run far below our level of gas consumption. Only with strong measures could we hope to reverse this trend.

We shall have to make much greater use of solid fuels. Here coal and uranium are the most important options. This represents a profound change in the character of the American fuel economy. The nation has truly great reserves of these solid fuels in the earth. Our economically recoverable coal reserves are estimated to be 250 billion tons and exceed the energy of the world's total oil reserves. Our known uranium ores potentially equal the energy of 6,000 billion tons of coal; lower grade ore promises even more abundance.

The U.S. choice is not coal or uranium; we need both. Coal is irreplaceable as the basis of new synthetic fuels to replace oil and natural gas.

However, we see the primary use of solid fuels, especially of uranium, as a source of electricity. Uranium power, the culmination of basic discoveries in physics, is an engineered reality generating electricity today. Nuclear power has its critics, but we believe they lack perspective as to the feasibility of non-nuclear power sources and the gravity of the fuel crisis.

All energy release involves risks and nuclear power is certainly no exception. The safety of civilian nuclear power has been under public surveillance without parallel in the history of technology. As in any new technology there is a learning period. Contrary to the scare publicity given to some mistakes that have occurred, no appreciable amount of radioactive material has escaped from any commercial U.S. power reactor. We have confidence that technical ingenuity and care in operation can continue to improve the safety in all phases of the nuclear power program, including the difficult areas of transportation and nuclear waste disposal.

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The separation of the Atomic Energy Commission into the Energy Research and Development Administration and the Nuclear Regulatory Commission provides added reassurance for realistic management of potential risks and benefits. On any scale the benefits of a clean, inexpensive, and inexhaustible domestic fuel far outweigh the possible risks.

We can see no reasonable alternative to an increased use of nuclear power to satisfy our energy needs.

Many of us have worked for a long time on energy problems and therefore we feel the responsibility to speak out. The energy famine that threatens will require many sacrifices on the part of the American people, but these will be reduced if we marshall the huge scientific and technical resources of our country to improve the use of known energy sources.