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The Deteriorating Energy Position

The energy position of the United States continues to deteriorate, and Congress and the Administration provide few indications that they are going to do anything substantive about it quickly. Efforts at conservation have diminished. Hydrocarbons are being consumed at the same rate as they were a year ago. But because of declining domestic reserves and production, we are more dependent on foreign sources than ever and are obliged to pay enormous sums for the imports. We are bringing in 40 percent of our needs, and the current volume of imports is 16 percent above that of a year ago. At the moment world supplies of petroleum are more than adequate and some prices have softened. We have increased our inventories by the equivalent of 3 days' consumption. However, more than before we are vulnerable to the actions of others in the form of new embargoes, price squeezes, or economic chaos elsewhere.

Congress is nearing final passage of legislation that will create an Energy Research and Development Agency (ERDA), and also a Nuclear Safety and Licensing Commission. Creation of the Nuclear Safety and Licensing Commission represents a desirable separation of those functions from others of the Atomic Energy Commission (AEC). However, ERDA is largely to be a mixture made up of most of the AEC, the Office of Coal Research, a small piece of the National Science Foundation, and major functions of the Bureau of Mines thrown in. As for the funding of ERDA, the largest budget component is for nuclear weapons production and development. The next largest component is for the civilian nuclear program—including the breeder reactor. Coal research and development are slated for only about 10 percent of the budget, conservation efforts 3 percent, while the total of geothermal and solar energy funding will come to only 1 percent. In the light of our recognized need to move toward energy independence, two clichés are applicable: (i) the mountain labored and brought forth a mouse; and (ii) the more things change, the more they remain the same.

In the Senate version of legislation creating ERDA, the intent of Congress is stated to be that "no energy technology be given an unwarranted priority." In practice, priorities are established by budgets. In effect, Congress is saying that nuclear energy has an overwhelmingly high priority. By budgeting comparatively little money for conservation, Congress gives the impression that such efforts are not important. By providing comparatively small sums for liquefaction of coal, Congress is saying that increased production of hydrocarbons is not urgent. Failure of the Congress to put more emphasis on development of processes for obtaining hydrocarbons from coal is puzzling. A nation that could spend tens of billions of dollars on going to the moon is unable to spend a few billion dollars on demonstration plants for meeting urgent needs.

During the past year, prospects for finding additional quantities of domestic oil have receded. Wildcat drilling has been largely unsuccessful. As noted in the 12 July issue of *Science*, major companies have recently issued low estimates of producible undiscovered petroleum in the conterminous 48 states. These figures are in disagreement with those of the U.S. Geological Survey, which has estimated that large amounts remain undiscovered. However, the companies retort, "If you know where oil is, show us. We will be pleased to drill." Ultimately, additional Alaskan oil will flow, and perhaps some more will come from the outer continental shelves. However, there is no chance that we will come close to meeting domestic hydrocarbon needs from crude oil production. As the new sources come in, older sources will be closer to exhaustion.

Thus, despite a sharp lesson in the folly of excessive dependence on foreign sources of oil, we are now drifting into still deeper dependence with no real relief in sight. Apparently, we will have to endure a more jarring experience with crippling shortages before vigorous action can be taken.—PHILIP H. ABELSON