

sent the efforts of the committee to define more exactly these general terms. Other hearings have been concerned with scientific education, weather reconnaissance and control, intelligence on Russian activities, and many other matters. In time, this exploratory activity, which is under the constant scrutiny of other Congressional committees, will help determine the fields of inquiry which the whole Congress will accept as the proper province of the House group. One other end essential to political life, is also served. The committee and its members, because of the topicality of its subjects and the stature of many of the witnesses, receive rather wide publicity.

Future Hearings

Although the committee does not issue schedules of future hearings, it is expected that a broad pattern of investigation will continue in the future. According to informed sources, hearings may be expected on computers, solid-state physics, and oceanography. The oceanography hearings are expected to include examination of the recent proposal of the National Academy of Sciences for a 10-year program of ocean study, including the construction of a number of research vessels. A bill embodying the Academy's recommendations is said to be in preparation. Another bill, reflecting an idea first suggested by Wernher von Braun, is also expected to come from the committee. This is the so-called "tithe" bill. Under its provisions, a 10-percent increase would be made on every research and development contract let by the Government, this amount to be earmarked for basic research in the field to which the contract is directed. It is estimated that passage of the bill would add approximately \$600 million to the country's annual expenditures for basic research.

Nuclear Reactor Housed in 190-Foot Sphere

The 300-ton reactor for the Commonwealth Edison Company's Dresden Nuclear Power Station is now being installed at the plant near Morris, Ill. The reactor vessel is 42 feet high and 12 feet in diameter. Its walls are 5½ inches thick, and are made of low-carbon steel with an interior lining of ⅜-inch stainless steel. Built by the New York Shipbuilding Corp., the unit was shipped by barge from Camden, N.J., over a circuitous 3600-mile route.

Dresden Station is expected to be ready for regular service by mid-1960. The General Electric Company is building the plant for a contract price of \$45 million.

U.N. Surveys Development of New Sources of Energy

Notable progress in the last 2 years in developing applications of solar, wind, and geothermic energy is reported in a United Nations study on new energy sources. The report, prepared at the request of the U.N. Economic and Social Council, was considered by the council session that opened in Mexico City on 7 April.

Besides describing technical and other developments in the use of energy from the sun, the wind, and the earth, the report proposes the scheduling, in about 2 years, of an international conference on new sources of energy other than the atom. The report also suggests that the agenda for such a conference should focus attention on applications rather than on discussion of scientific principles and basic research.

In a summary of recent developments, the report says that direct conversion of solar energy to electricity by means of solar batteries and by thermoelectric converters is rapidly being advanced.

Work also continues, though at a slower rate, on the use of solar energy in steam-raising, air conditioning, refrigeration, and water distillation. Less progress appears to have been made in developing solar-heat storage, solar engines, and solar furnaces for industrial production. A significant aspect of recent developments has been the increasing attention given to new materials, such as plastics, suited for use in solar equipment.

In the field of wind power, the past 2 years have been a period of "consolidation and of transition from experimentation to applied research and commercial use." In underdeveloped countries, wind-power surveys have led, in a few cases, to the installation of the first modern wind-power plants. The linking of large wind-power plants to local or country-wide grid systems is being explored. Most of the work on this is being done in Europe.

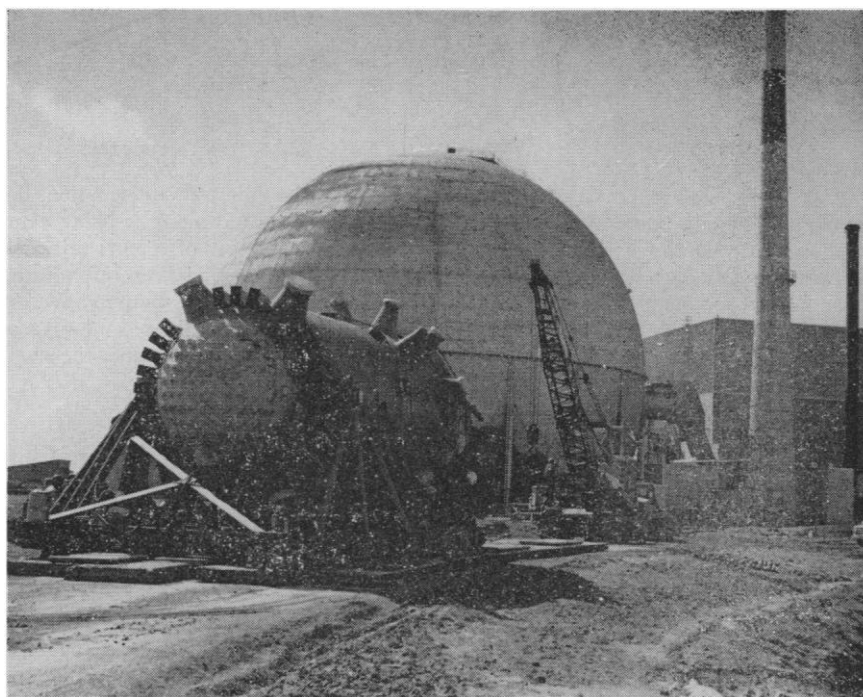
As regards geothermic power (natural steam and hot water), the report notes that production of electricity from this source—limited 2 years ago to Italy—is being started in other countries. The greater interest in geothermic power is also reflected in the search for and discovery of new geothermic fields.

In the section of the report describing development in each of the three new energy fields, the following points are covered.

Solar Energy

Introduction of new devices and materials has helped improve efficiency and reduce costs in practical application of solar energy. The design, manufacture, and installation of solar water heaters are proceeding in Australia, the Belgian Congo, Burma, Chile, Egypt, France, French West Africa, Israel, Italy, Japan, New Zealand, the Union of South Africa, the United States, and the U.S.S.R.

Solar cookers may become a common sight in some countries, where women are accustomed to being out-of-doors, where the main meal is eaten during the



Nuclear power reactor just before it was moved into a steel sphere at a plant near Morris, Ill.