UNIVERSITY OF UTAH RESEARCH INSTITUTE

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EARTH SCIENCE LABORATORY 420 CHIPETA WAY, SUITE 120 SALT LAKE CITY, UTAH 84108 TELEPHONE 801-581-5283

July 20, 1979

Mr. Michael Ruby, Senior Editor
Mr. Merrill Sheils, Senior Writer
Mr. William J. Cook, Washington Energy Correspondent
Newsweek
444 Madison Avenue
New York, N. Y. 10022

Dear Sirs:

Geothermal energy is an attractive energy resource of which the general public is largely unaware. The Earth Science Laboratory at the University of Utah Research Institute would like to help Newsweek write an article on geothermal energy. We can supply Newsweek with generalized geologic descriptions of geothermal systems, information on where geothermal resources occur, how geothermal energy can be used, and the outlook for geothermal exploration and development in this country.

Sincerely,

Debra W. Struhsacker Associate Geologist

DWS/hb

enc.

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July 20, 1979

Letters Editor
Newsweek
444 Madison Avenue
New York, N. Y. 10022

Dear Sir:

Newsweek's coverage of the energy crisis (July 16, 1979) failed to mention the important contribution that geothermal energy can make to this country's energy demand. Geothermal water and steam can replace conventional fuels for the generation of electricity and for direct heat uses such as space heating or cooling and industrial processing.

The U. S. Geological Survey estimates that there are 400 quads (400 quadrillion BTUs) of thermal energy recoverable from U. S. geothermal systems, and an additional 2000 quads (2000 quadrillion BTUs) that might be discovered in the future. Current U. S. consumption of energy is about 80 quads per year.

Geothermal energy is presently being used in the U.S. At the Geysers area north of San Francisco, 663 megawatts of electricity are produced from geothermal steam, nearly enough to meet the electricity needs of San Francisco. Geothermal water is used on a large-scale basis to heat buildings in Salt Lake City, Utah, Klamath Falls, Oregon, Boise, Idaho and Reno, Nevada. The Department of Energy is funding several studies to evaluate this country's geothermal potential. Geothermal energy is a promising resource, one which can help satisfy our energy requirements.

Sincerely yours,

Debra W. Struhsacker Associate Geologist

Newsweek

444 MADISON AVENUE • NEW YORK, N.Y. 10022 • (212) 350-2000

August 21, 1979

Ms. Debra W. Struhsacker Earth Science Laboratory University of Utah Research Institute 420 Chipeta Way, Suite 120 Salt Lake City, Utah 84108

Dear Ms. Struhsacker:

We were sorry to learn of your disappointment with Newsweek's special report "The Energy Crisis: A Program for the '80s." As you probably know, it is most unusual for Newsweek to take an editorial stand on the news -- we have done so only twice before -- but we felt that the urgency and magnitude of the problems involved in meeting America's future energy needs warranted an editorial approach.

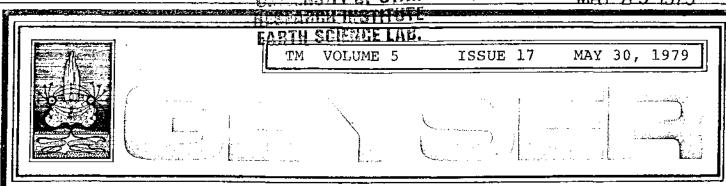
Many readers thought that our proposed energy program was misdirected in its priorities or that we had been negligent in omitting (or dismissing) an important possible solution to the energy crisis, such as solar power, methanol, hydroelectric power, geothermal power, nuclear fusion, wind power, etc. In answer, we can only say that the members of our staff who drew up the nine proposals in the energy program do have considerable expertise in this area and were careful to weigh the available alternatives; each recommendation discussed the benefits and drawbacks of a particular action in terms of its effect on the American public and the business community. But in the final analysis, our energy program was an editorial.

Space limitations prevented us from publishing your letter, but we hope you saw the Letters column of July 30 which contained a representative sampling of our mail on this report. We were glad to get your opinions on this subject and we have circulated a copy of your comments among the members of our staff who worked on the report.

Sincerely,

Karen Andrews For the Editors

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GEOTHERMAL'S COMING OF AGE

WASHINGTON, D.C. -- In a recent report the U.S. Geological Survey said that the United States could tap as much geothermal energy as current oil consumption would supply in 162 years. The Survey said the upper six miles of the earth's crust contains about 32,000 billion-billion British thermal units of heat energy, of which 6.4 billion-billion Btu's could be used. It would take 1.2 trillion barrels of oil for the same amount of energy. Dr. L.J.P. Muffler of the USGS contends that geothermal energy "is a very promising source of energy whose optimum use could substantially affect the energy economy of the United States." Muffler's report, developed with the cooperation of the Department of Energy (DOE) is the first of two national assessments of geothermal potential. The first was in 1975 which estimated available energy from underground hot Improved technologies for cost estimations have water resources. since made that first report obsolete. Muffler said pressurized underground water technology can be developed and would be available along the northern edge of the Gulf of Mexico -- onshore as well as These reservoirs contain heat energy, mechancical energy from pressure, and dissolved natural gases. Currently the most prolific of geothermal energy is generated at The Geysers in Northern California, which is the nation's largest and world's fastest growing resource area: a generating capacity of 608,000 KWs and 12 units.

PACIFIC GAS & ELECTRIC'S NEW PLANT HYBRIDS GROW AT THE GEYSERS

SONOMA COUNTY, Calif. -- New hybrid pine trees have been grown successfully to withstand the rigors of the rugged environmental conditions prevailing at The Geysers geothermal power plant. The hybrids are crosses between the Knobcone and Monterey pine and were developed to endure steepness of hillsides, poor soil quality, and lack of irrigation which normally make it difficult for plants to survive. The California Division of Forestry and PG&E cooperated in the test of the hybrid trees. Of the 150 seedlings representing 28 hybrid cross variations planted near Units 9 and 10 in 1973, some grew to eleven feet. According to the utility, five hybrid crosses

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