

erating in the United States, The Geysers facility operated by the Pacific Gas and Electric Company 90 miles north of San Francisco. It is to have 15 turbines by 1977 and a capacity of 908,000 kilowatts. By early this year, the U.S. Geological Survey had identified 1.8 million acres as Known Geothermal Resource Areas, plus another 99 million acres believed to have some potential. An interagency panel for the FEA has reported that, given an accelerated development program, geothermal facilities could be producing up to 111,000 megawatts by the year 1990.

Environmental problems arising from geothermal resource development could be troublesome, although possibly no more so than those arising from other kinds of power development. Land subsidence can result from the withdrawal of large volumes of fluids from geological formations. Also, earthquakes can be triggered by high-pressure injection of fluids into a formation if they come in contact with an active fault. Pollution of surface or ground water can result from the disposal of toxic and saline wastes.

#### A Mandate for ERDA

Inasmuch as ERDA is endowed with broad powers to develop all potential energy sources, the new solar and geothermal legislation is important chiefly as a clear mandate for ERDA to move ambitiously into these two fields of energy development. It also should help ERDA to obtain the congressional appropriations needed.

Actually, the solar and geothermal energy legislation was formulated in such a manner that the programs envisioned would be carried out whether ERDA was established or not. With ERDA, the interagency management mechanisms that were provided for simply will not be activated. The legislative history of the solar and geothermal legislation is such, however, as to make clear that Congress expects ERDA to give important roles to other federal agencies such as NASA and the departments of Interior and Housing and Urban Development. HUD, especially, will have a major part in implementation of the solar heating and cooling program.

In the hearings, there was much sentiment expressed by Senator Humphrey and others to the effect that solar technology will be adopted more widely, and more quickly, if there is strong interagency and industry participation in the R & D effort.—LUTHER J. CARTER

## APPOINTMENTS

**Paul H. Newell, Jr.**, chairman, industrial engineering department, Texas A & M University, to president, Newark College of Engineering. . . . **Fujio Matsuda**, vice president for business affairs, University of Hawaii, to president of the university. . . . **William A. Jenkins**, dean, School of Education, Portland State University, to vice president for academic affairs, Florida International University. . . . **Barry A. Marks**, chairman of literature, American University, to dean, College of Arts and Sciences, University of Rhode Island. . . . **John W. Jutila**, professor of microbiology, Montana State University, to dean, College of Letters and Science at the university. . . . **Helen P. Gouldner**, professor of sociology, University of Delaware, to dean, College of Arts and Sciences at the university. . . . **Edward M. Melby, Jr.**, director, laboratory animal medicine division, Johns Hopkins University, to dean, New York State Veterinary College, Cornell University. . . . **Leonard A. Levy**, dean, California College of Podiatric Medicine, to dean, School of Podiatric Medicine, State University of New York, Stony Brook. . . . **Gardner Lindzey**, vice president, University of Texas, Austin, to director, Center for Advanced Study in the Behavioral Sciences. . . . **Leslie F. Malpass**, vice president for academic affairs, Western Illinois University, to president of the university. . . . **Cecil K. Byrd**, dean of faculties, American University, Cairo, to president of the university. . . . **Frank H. Blackington III**, director, Honors College, Michigan State University, to president, University of Pittsburgh. . . . **Lee H. Smith**, vice president for academic affairs, University of Texas, Dallas, to president, Southwest Texas State University. . . . **Arliss H. Roaden**, vice provost for research, Ohio State University, to president, Tennessee Technological University. . . . **Lewis W. Bluemle, Jr.**, president, Upstate Medical Center, State University of New York, to president, University of Oregon Health Sciences Center. . . . **Joseph C. Burke**, vice president for academic affairs, State University of New York College, Plattsburgh, to president of the college. . . . **Jill K. Conway**, vice president for internal affairs, University of Toronto, to president, Smith College. . . . **Harold H. Haak**, vice president, University of Colorado, Denver, to chancellor at the university. . . .

## RECENT DEATHS

**William E. Adams**, 71; professor emeritus of surgery, University of Chicago; 25 November 1973.

**H. O. Burdick**, 77; former chairman, biology department, Alfred University; 8 July.

**Joseph P. Canty**, 67; former associate professor of mathematics, University of Maine; 29 May.

**Archie B. Carran**, 43; professor of psychology, State University of New York College, Brockport; 3 July.

**Frederick M. Clement**, 89; former dean of agriculture, University of British Columbia; 9 June.

**John W. Cline**, 76; professor emeritus of surgery, Stanford University; 10 July.

**Lyman C. Craig**, 68; professor of chemistry, Rockefeller University; 7 July.

**O. W. Davison**, 68; former professor of education, University of Oklahoma; 7 June.

**Samuel H. DeVault**, 85; former chairman, agricultural economics and marketing department, University of Maryland; 23 June.

**Leo Friedman**, 59; director, toxicology division, Food and Drug Administration; 6 July.

**Alfred N. Goldsmith**, 86; former director of research, RCA Corporation; 1 July.

**Frank A. Graig**, 59; professor of medicine, New York Medical College; 12 June.

**Estill I. Green**, 78; retired executive vice president, Bell Laboratories; 24 June.

**William F. Hall**, 82; professor emeritus of agricultural education, Pennsylvania State University; 17 June.

**James R. Hastings**, 50; professor of meteorology, University of Arizona; 30 June.

**Leonard M. Logan**, 83; professor emeritus of sociology, University of Oklahoma; 27 June.

**George D. Lukes**, 58; retired senior scientist, National Security Agency; 13 June.

**Theodore R. Lusebrink**, 46; research chemist, IBM Corporation; 14 May.

**Kurt Salomon**, 76; retired professor of radiation biology and biophysics, University of Rochester School of Medicine; 17 June.

**Lucy Wing**, 59; chairman, School of Psychology and Counseling, State University of New York College, Oswego; 16 July.