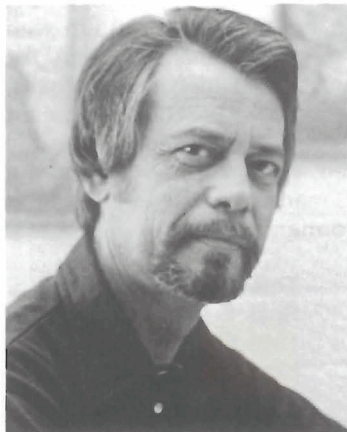


EVENING MEETING APRIL 11, 1977

MYRON H. DORFMAN — Biographical Sketch



Dr. Myron H. Dorfman holds three degrees in Petroleum Engineering from The University of Texas at Austin, receiving his Ph.D. in 1975. He is an Associate Professor, Dept. of Petroleum Engineering, UT at Austin, and he has been Director for Geotherman Studies, Center for Energy Studies since 1974. He is a Registered Professional Geologist, Louisiana and a Registered Professional Engineer, Texas.

Prior to joining The University of Texas faculty, he has over twenty years experience in the oil industry as both an engineer and geologist. From 1959 to 1971, he was an oil and gas producer in Shreveport, La. with Dorfman Oil Properties and Dorfman Production Company. He is the author of numerous papers, many of them on geothermal energy. Dr. Dorfman has been elected to Tau Beta Pi and Pi Epsilon Tau; and to the National Academy of Sciences, Yugoslavia. Reflecting his stature in the field of geothermal energy, he is a member of the Geothermal Resources Committee, Interstate Oil Compact Commission; Committee on Nuclear and Alternative Energy Systems, National Resources Council; Geothermal Advisory Panel; and the National Coordinating Committee for ERDA Sponsored Geothermal Research. Dr. Dorfman is a member of a number of national scientific societies including AAPG, AGU, AAAS, GSA (Fellow), SPWLA, and SPE of AIME.

EVALUATION OF THE GEOPRESSURED GEOTHERMAL RESOURCES OF THE TEXAS GULF COAST (Abstract)

by: Myron H. Dorfman

The United States Energy Research and Development Administration, together with various industries in Texas, have supported efforts to evaluate the potential contribution to the national energy supply of geopressured geothermal resources in the Gulf Coast. Efforts include a program of resources assessment and programs to examine utilization of the resource for the production of electricity and as a source of industrial-process heat. Other programs concerning legal, institutional, and environmental constraints are also in progress. Work on resource assessment has emphasized finding significantly large sand bodies within the geopressured stragigraphic section in addition to defining the distribution of abnormal fluid pressures and formation temperatures. Regional sand facies analyses conducted thus far indicate several locations in the Frio formation of coastal Texas where adequately large geopressured geothermal resources may exist, if sufficient

permeability and porosity to allow large flow rates are present. Engineering studies of energy-conservation systems based of total-flow, flashed-steam, and binary-cycle concepts show that development of electric power from the Gulf Coast geopressure resource is technically feasible. However, such recovery is only marginally economic in view of the relatively low temperatures involved (less than 300° F or 149° C), and especially if dissolved methane is not present at saturation levels. Under favorable circumstances, investment in exploitation of the complete geothermal resource can produce rates of return of 15 to 30 percent. Rates of return as large as 10 percent appear unlikely under present and near-term future circumstances if only electric energy is recovered from the resources. All programs have pointed out clearly the need for better specific understanding of the resource, especially its dissolved methane content and its ability to produce for many years. Toward this end, a well will be drilled within one year in an optimum reservoir in Texas to determine fluid content, longterm deliverability, and answers to environmental concerns.