UNIVERSITY OF UTAH RESEARCH INSTITUTE EARTH SCIENCE LAB.

Comparative Economics of Geothermal Power TSVI MEIDAY

The question of whether geothermal energy would assume a significant role in the total energy supply framework largely depends upon its competitiveness with other alternatives. In the U.S., the most important competitor is nuclear power. At present, newly ordered nuclear power plants vary in cost from \$500 to \$1000 per kilowatt of capacity, while new dry-steam plants are being ordered at less than \$200 per kilowatt.

An economic analysis, based upon different assumptions, shows that the differential between nuclear and geothermal power plant costs is sufficiently great to justify exploration for resources that were considered submarginal hitherto, development of more expensive binary cycle power plants, and extraction of energy from hot dry rock.