

ABSTRACT

New Mexico Geothermal Exploration and Development

A Decade of Experience

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New Mexico possesses in excess of 10^{18} J of low-temperature geothermal resource base. Most of the resource base lies within the Rio Grande Rift and is largely co-located with the population centers of the state. Since 1978, coordinated linking of state government, universities, and private firms has resulted in a multi-faceted approach for development of the geothermal resource base for economic development initiatives. State government, with additional funds leveraged from the Federal government, has supported exploration projects associated with substantial risk. State supported universities have participated in cost-shared exploration and development activities and have provided long term program continuity. Through a variety of financial incentives (e.g., grants, loans, and tax credits), private firms have been encouraged to perform extensive drilling, geophysical, and geochemical operations.

Positive results of the combined efforts are beginning to appear. Ten years ago there were no companies using geothermal energy in New Mexico. Geothermal-related firms now employ over 100 persons and their employees make annual income tax payments in excess of \$200,000. Annual corporate income tax payments for these companies are estimated to be over \$500,000. Operating cost savings for the major geothermal users in the state total nearly \$450,000 per year. State and Federal lease rental and bonus fees received by New Mexico are greater than \$2.6 million for the past ten years.

New policy directions are emerging in response to the needs of current and future geothermal users. Financial incentives are being phased out and replaced with technical assistance services. Engineering and regulatory assistance programs have supplanted exploration services, largely because the resource base is now relatively well defined. A variety of promotional efforts are directed towards attracting businesses to utilize the resource base.