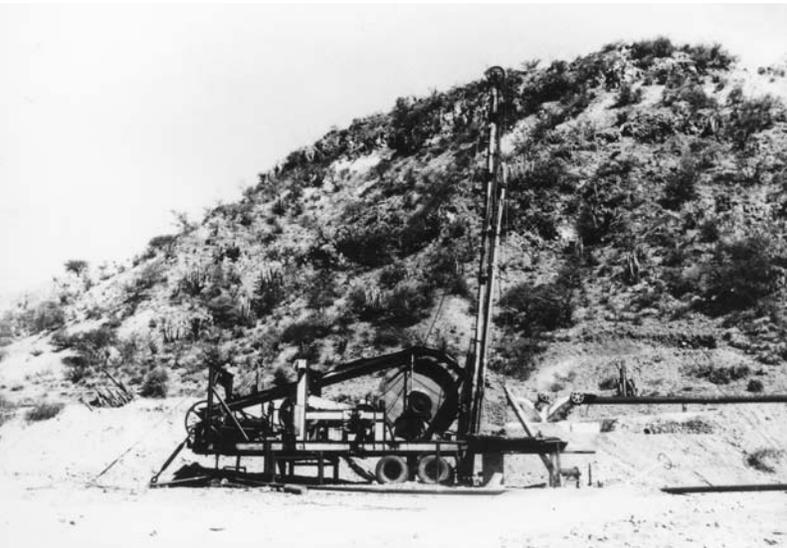
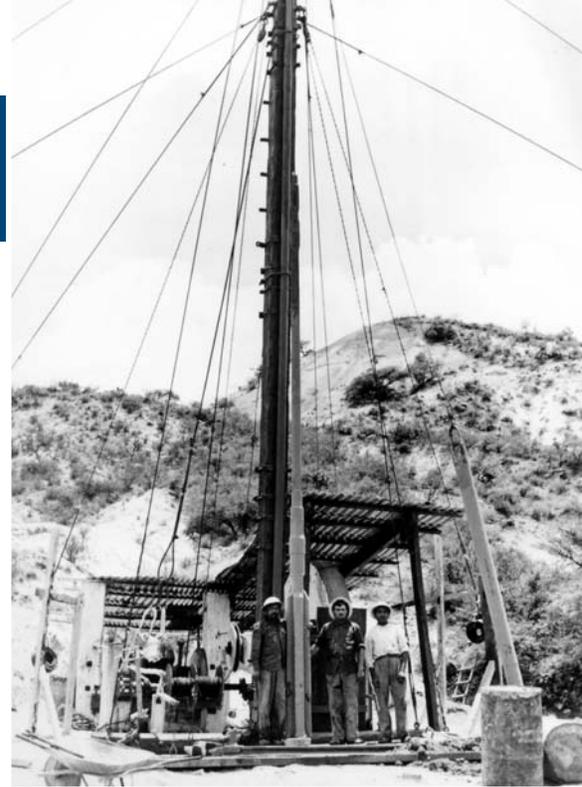


PIONEERING PAST

Geothermal Development in Mexico Highlighted in Rarely Seen Photographs

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Blessed by nature with abundant volcanic and hydrothermal activity, Mexico was a pioneer in the exploration for geothermal resources and the development of geothermal power projects in the North American Continent and worldwide. It was the inspiration, courage and dedication of many people that made it possible to produce electricity with geothermal steam as early as 1959 in Mexico.

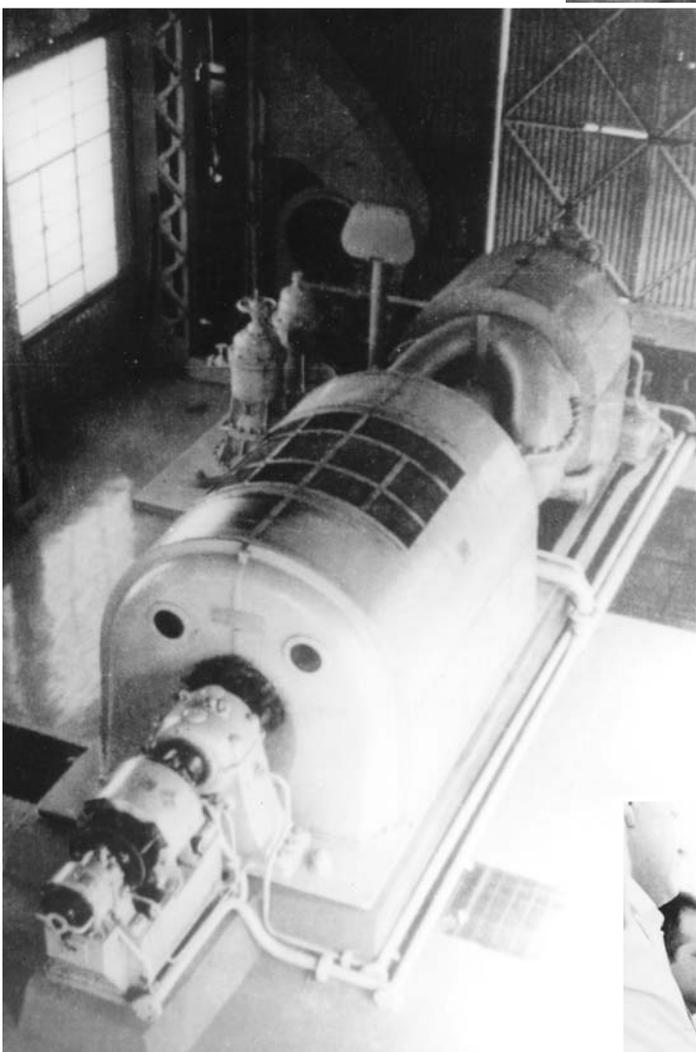
Commercial power generation began at Cerro Prieto in 1973— an accomplishment that presaged 30 years of successful geothermal power production by the Comisión Federal de Electricidad (CFE). Mexico’s contribution to world geothermal power generation now stands at 953 megawatts (MW) with the recent completion of the 100-MW Los Azufres II project, making it the third largest geothermal power producer (after the United States and the Philippines).

Among all of Mexico’s geothermal pioneers, Luis F. de Anda stands out. He was the visionary who placed the cornerstone of Mexican geothermics. Indeed, he is the “Father of Geothermal Development in Mexico,” honored by a Geothermal Resources Council (GRC) Pioneer Award during the GRC 2003 Annual Meeting in Morelia, Michoacán. This photo layout provides a rarely seen historical record of the early days of geothermal development in Mexico. It is a picturesque tribute to the past, but also to the present geothermal community in Mexico and CFE’s many colleagues worldwide.

Top) Pioneer geothermal workers at the Pathé Geothermal Field in the late-1950s are very proud of their job.

Center) Production wells at the Pathé Geothermal Field were drilled in 1957, using old technology based on percussion drilling and steam-powered machinery.

Bottom) Steam flows from the first geothermal production well in Mexico, successfully drilled in August 1956 at the Pathé Geothermal Field, in the central Mexican Volcanic Belt.



Top) The first power house at the Pathé Geothermal Field.

Left center) The first turbine to generate geothermal power in the Americas, at the Pathé Geothermal Field in 1959.

Right center) Luis F. de Anda, the "Father of Geothermal Development in Mexico," and recipient of the GRC 2003 Pioneer Award.

Bottom) Luis F. de Anda shares his experiences with visitors at the Pathé Geothermal Field in the late-1950s.



Top) CFE geophysicists performing electrical soundings at La Primavera during the earlier stages of exploration in 1972. Topography was not much help.

Center) CFE geothermal personnel taking a rest at the "Hilton Hotel" after a hard survey at the Chichonal Volcano.

Bottom) CFE General Director Alberto Escofet visited the Los Azufres Geothermal Field in the early days of development, accompanied by his geothermal staff (1982).



Top) Sampling wells at Cerro Prieto was a tough job. Safety procedures and sophisticated equipment were not the rule in 1971.

Center) The commissioning of Cerro Prieto Units 1 and 2 in 1973 was the beginning of large-scale production of geothermal power in Mexico.

Bottom) Former Mexican President José López Portillo during the commissioning of Cerro Prieto Units 3 and 4 in 1979.