

Decision No. 58243**ORIGINAL**

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the matter of the application of )  
 PACIFIC GAS AND ELECTRIC COMPANY )  
 for an order issuing to applicant a )  
 certificate declaring that public )  
 convenience and necessity require )  
 the construction, operation and )  
 maintenance by applicant of a )  
 geothermal steam electric generating )  
 and transmission project as herein )  
 set forth. )

Application No. 40641

(Electric)

F. T. Searls, John C. Morrissey, and Phillip A. Crane, Jr., for applicant;  
A. E. Williams in propria persona, protestant;  
Burle Laton for U. S. Bureau of Reclamation,  
Edward J. Terhaar for the Director of Water Resources of the State of California, James R. McNitt for California Division of Mines,  
Dion R. Holm and Robert R. Laughead for the City and County of San Francisco, interested parties;  
Kenneth J. Hedstrom for the Commission staff.

O P I N I O N

By the above-entitled application, filed December 5, 1958, Pacific Gas and Electric Company seeks a certificate under Section 1001 of the Public Utilities Code declaring that the present and future public convenience and necessity require and will require the construction, operation, and maintenance by Pacific of a geothermal steam-electric generating and transmission project to be located in Sonoma County.

Public hearing in the matter was held before Commissioner Theodore H. Jenner and Examiner F. Everett Emerson on March 4, 1959, at San Francisco and the matter was submitted on such date.

Magma Power Company, a Nevada corporation, and Thermal Power Company, a California corporation, for some period of years have been developing geothermal steam wells along Big Sulphur Creek in Sonoma and Lake Counties, on lands which are leased by them from The Geysers Development Company. The evidence is clear that Magma and Thermal have and control an assured supply of geothermal steam in sufficient quantities and at pressures and temperatures adequate for use in a steam-electric generating plant. By written agreement of October 30, 1958, Magma, Thermal, and Pacific have set out the terms and conditions under which Pacific will use and pay for the steam supply and develop the generating capabilities of such supply. The agreement is subject to Pacific's obtaining the necessary certificate from this Commission and, in general, contemplates a continuing and expanding operation extending to 50 years beyond the date when the most recent generating unit, or the replacement of a unit, shall have been put into regular operation by Pacific.

Pacific proposes to construct, install, own, and operate a steam-electric generating plant on Big Sulphur Creek in Sonoma County, to be known as The Geysers Power Plant, and proposes to utilize the geothermal steam supplied from the Magma and Thermal steam wells. The initial project, basically to consist of one 12,500 kilowatt (nominal) capacity turbine-generator, together with its auxiliaries and related electrical facilities, and a 60 kv transmission line by which the electrical energy will enter Pacific's integrated system, is estimated to cost approximately \$2,000,000.

Of such sum, \$1,750,000 is attributable to generation and \$250,000 to transmission facilities. The initial project may be completed and operating by the middle of 1960. It is anticipated that it will be operated at its maximum capacity for at least 90 per cent of the time and that under such operation the average delivered cost, at the new transmission line's connection to Pacific's existing system, will approximate \$.0059 per kilowatt-hour.

In view of the evidence, the Commission is of the opinion that Pacific's proposal is in the public interest and that Pacific has conclusively demonstrated the need for and feasibility of the project. The Commission finds as a fact that public convenience and necessity now require and will require the construction and development of The Geysers Power Plant as proposed in this proceeding, and that a certificate should be issued for the same. Such certificate is, of course, subject to the provisions of law:

That the Commission shall have no power to authorize the capitalization of this certificate of public convenience and necessity or the right to own, operate or enjoy such certificate of public convenience and necessity in excess of the amount (exclusive of any tax or annual charge) actually paid to the State as the consideration for the issuance of such certificate of public convenience and necessity or right.

O R D E R

Based upon the evidence and the findings and conclusions contained in the foregoing opinion,

IT IS ORDERED that a certificate of public convenience and necessity be and it is hereby granted Pacific Gas and Electric Company to construct, own, operate, maintain and use the geothermal steam-electric generating plant and transmission project described in this Application No. 40641.

The effective date of this order shall be twenty days after the date hereof.

Dated at San Francisco, California, this 7<sup>th</sup> day of April, 1959.

*E. J. Fox*  
 President

*W. H. ...*

*Matthew ...*

*Theodore ...*

*Robert ...*  
 Commissioners