

Decision No. 74926

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application
of PACIFIC GAS AND ELECTRIC
COMPANY for a certificate of
public convenience and necessity
to construct, install, operate,
maintain and use Unit No. 6 at
The Geysers Power Plant.
(Electric)

Application No. 50556
(Filed September 18, 1968)

OPINION AND ORDER

Pacific Gas and Electric Company (Pacific) requests a certificate of public convenience and necessity for the construction, operation, and maintenance of Unit No. 6 at its geothermal steam-electric generating station in Sonoma County, known as The Geysers Power Plant.

Unit No. 1 The Geysers Power Plant and its accompanying transmission-line project were certificated by this Commission's Decision No. 58243, dated April 7, 1959, in Application No. 40641. Unit No. 1 was placed in commercial operation on September 25, 1960. Subsequently and pursuant to the authorization contained in Decision No. 62243, dated July 11, 1961, in Application No. 43331, Pacific constructed Unit No. 2. Unit No. 2 was placed in commercial operation March 19, 1963. Unit No. 3 was certificated by this Commission's Decision No. 67858, dated September 22, 1964, in Application No. 46807. Unit No. 3 was placed in commercial operation April 28, 1967. By Decision No. 70940 dated July 12, 1966, in Application No. 48448, Unit No. 4 was authorized. Commercial operation of Unit No. 4 is scheduled for December 1, 1968. Construction of Unit No. 5 was authorized by Decision No. 73646, dated January 23, 1968, in Application No. 49869 and is expected to go into commercial operation by June 1, 1971.

Pacific now proposes to install Unit No. 6 which will consist of one 55,000 kw (nominal) capacity turbine designed for steam at 100 pounds per square inch gauge and 355 degrees Fahrenheit, one 66,000 kva, 13,800 volt, hydrogen cooled generator, one direct contact condenser with gas ejectors and circulating water pumps, and one cooling tower, together with related facilities including one 66.0 mva, 13.8-115/230 kv, 3-phase transformer. Unit No. 6 will be provided with a steam supply of not less than 1,000,000 pounds of steam per hour at a pressure of 100 pounds per square inch gauge and a temperature of about 355 degrees Fahrenheit. Pacific proposes to have Unit No. 6 in commercial operation by November 1, 1972.

Unit No. 6 will be located adjacent to Unit No. 5 and transmission facilities being constructed for Unit No. 5 are stated to be adequate for both Unit Nos. 5 and 6.

With the completion of Unit No. 6 the total gross normal operating capacity of The Geysers Power Plant will be as follows:

<u>Unit No.</u>	<u>Operating Capacity (KW)</u>
1 -	12,000
2 -	14,000
3 -	28,000
4 -	28,000
5 -	55,000
6 -	55,000
Total	192,000

The estimated cost to install Unit No. 6 is \$5,250,000.

A detailed estimate of the costs is shown in Exhibit B attached to this application.

The development of annual costs and the cost of power for Unit No. 6 are shown in Exhibit D attached to the application. The average delivered cost of power is shown for operation at various capacity factors as follows:

<u>Capacity Factor %</u>	<u>Cost-Mills/Kwhr</u>
60	4.87
70	4.48
80	4.18
90	3.95

For the operation of The Geysers Power Plant, Pacific purchases geothermal steam from wells located in Sonoma County pursuant to the terms and conditions of an agreement with Magma Power Company and Thermal Power Company dated October 30, 1958, as amended by agreements dated respectively, March 31, 1961, August 4, 1964, April 13, 1966, May 10, 1967, and June 25, 1968. The agreement dated October 30, 1958 and its amendment dated March 31, 1961 are attached to Application No. 43331. The amendments dated August 4, 1964, April 13, 1966, and May 10, 1967 were forwarded to the Commission in connection with Application Nos. 46807, 48448 and 49869, respectively. The amendment dated June 25, 1968 is attached as Exhibit C to the application herein. The agreement of October 30, 1958 as amended is incorporated herein by reference.

Pacific has conducted a series of steam tests within recent times and has determined that there is a sufficiency of steam energy to supply all six generating units during their prospective service lives.

The Commission finds that applicant's proposal is in the public interest, that present and future public convenience and necessity now require and will require the construction of Unit No. 6 of The Geysers Power Plant, together with related facilities as proposed in this application, that a public hearing is not necessary, and that a certificate should be issued. No protests to granting the application have been received.

The certificate of public convenience and necessity which will issue herein is subject to the following provision 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.

The action taken herein is for the issuance of a certificate of public convenience and necessity only and is not to be considered as indicative of amounts to be included in proceedings for the purpose of determining just and reasonable rates.

IT IS ORDERED that:

1. A certificate of public convenience and necessity is granted to Pacific Gas and Electric Company to construct, operate, maintain and use geothermal steam-electric generating Unit No. 6 of The Geysers Power Plant as described in the application.

2. Pacific Gas and Electric Company shall file with this Commission a detailed statement of the capital cost of The Geysers Power Plant Unit No. 6 and related facilities within one year following the date said unit is placed in commercial operation.

3. The authorization granted shall expire if not exercised within five years from the effective date hereof.

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

Dated at San Francisco, California, this 13th day of NOVEMBER, 1968.

William L. Burnett President
Attorney
W. P. Morrissey Commissioners

Commissioner William Symons, Jr., being necessarily absent, did not participate in the disposition of this proceeding.

Commissioner Peter E. Mitchell, being necessarily absent, did not participate in the disposition of this proceeding.