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ORIGINAL

Decision No. 74086

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of PACIFIC GAS AND ELECTRIC COMPANY for a certificate of public convenience and necessity to construct, install, own, operate, maintain and use at its Pittsburg Power Plant Unit No. 7 in the County of Contra Costa, together with transmission lines and related facilities. (Electric)	Application No. 50021 (Filed February 15, 1968)

OPINION AND ORDER

Pacific Gas and Electric Company (Applicant) requests a certificate of public convenience and necessity for the construction and operation of steam-electric generating Unit No. 7 at its Pittsburg Power Plant in Contra Costa County along with necessary transmission lines and related facilities.

Units Nos. 1 through 6 at the Pittsburg Power Plant have heretofore been certificated by this Commission. Unit No. 1 was placed in commercial operation September 23, 1954; Unit No. 2 on August 19, 1954; Unit No. 3 on December 15, 1954; Unit No. 4 on December 30, 1954; Unit No. 5 on September 21, 1960 and Unit No. 6 on June 9, 1961. The existing gross normal operating capacity of the Pittsburg Plant is 1,340,000 kw.

Applicant proposes to install at Applicant's Pittsburg Power Plant an additional fossil-fueled steam turbine-generator unit with related transmission and other appurtenant facilities, to be designated Unit No. 7. This unit will consist of one reheat turbine-generator with a nameplate rating of approximately 700,000 kw and one boiler having a capacity of approximately 4,570,000 pounds of steam per hour with steam conditions at the throttle of 3,500 psig

and 1,000 degrees F. and with reheat to 1,000 degrees F. The gross normal operating capacity of the unit is expected to be approximately 750,000 kw. The unit will be complete with auxiliaries and related steam plant equipment, including high voltage step-up transformers and switching equipment.

With the addition of this unit, Applicant expects to have a total gross normal operating capability of 2,090,000 kw at the Pittsburg Plant. Applicant has scheduled Unit No. 7 for operation in the fall of 1972.

In order to make the output of Unit No. 7 available to its interconnected system, Applicant proposes to install a 230 kv bundled conductor, double-circuit tower line extending 21.2 miles from Pittsburg Power Plant to its existing Sobrante Substation as indicated on the map marked Exhibit A attached to the application.

The estimated cost to install Unit No. 7, together with the related transmission facilities, based on current labor and material prices, is shown in Exhibit B, attached to the application, summarized as follows:

Unit No. 7	Steam Production	$75,865,000	
Total Steam Production			$75,865,000
Substation-Pittsburg		4,485,000	
-Terminal		2,675,000	
Transmission Line		3,065,000	
Total Transmission			10,225,000
Total			$86,090,000

Applicant proposes to finance the cost of constructing these additions by using, to the extent available, its working capital, moneys in reserve, funds not required for immediate use, and the proceeds of the issue and sale of such stocks, bonds, notes or other evidences of indebtedness as the Commission shall hereafter, upon application, authorize for that purpose.

The development of annual costs and the cost of power for Pittsburg Unit No. 7 are shown in Exhibit C, attached to the application. Power costs are shown for a composite of 20% oil and 80% gas fuels. The average delivered cost of power is shown for operation at various capacity factors as follows:

Capacity Factor	Average Delivered Cost Mills/Kwhr
90%	5.04
80	5.34
70	5.72
60	6.23

Exhibit D attached to the application shows the historical average annual growth of peak load within Applicant's gross service area to be 537 megawatts for the period 1963 through 1967. Applicant predicts the rate of growth in peak load of 800, 876 and 932 megawatts in 1972, 1973 and 1974, respectively. The historical and estimated area peak loads set forth in Exhibit D are summarized as follows:

AREA PEAK LOADS
(Megawatts)

Year	Actual	Estimated Average Year	Estimated Adverse Year	Growth
1958	4,154			
1959	4,769			615
1960	5,310			541
1961	5,698			388
1962	5,830			132
1963	6,300			470
1964	6,769			469
1965	7,357			588
1966	7,994			637
1967	8,514			520
1968		8,999	9,079	485(a)
1969		9,597	9,667	598(b)
1970		10,361	10,431	764(b)
1971		11,020	11,080	659(b)
1972		11,820	11,880	800(b)
1973		12,696	12,756	876(b)
1974		13,628	13,678	932(b)

(a) Growth from 1967 actual to estimated 1968 average year load.

(b) Growth of estimated average year load.

Applicant states that in reviewing its plans for 1972 and 1973, it has given serious consideration to recent experiences throughout the electric power industry and, as a result, has concluded that it is in the public interest to provide increased generation reserves during this period. Plans for this period by utilities throughout the nation have resulted in a great demand for new large generating units and the time within which such units are shipped and installed has tended to lengthen. Applicant and other utilities have found that the initial operating periods of the large new-type units, during which time adjustments must be made to the new and complex equipment, have increased beyond that previously required for new generating units. In considering these circumstances, Applicant has scheduled the Pittsburg No. 7 unit for operating in the fall of 1972 to provide the additional reserves believed to be necessary. Without this unit the area would be depending more heavily than would be warranted upon three other new large units also scheduled for completion during this time period to serve Applicant's area load as described in the application. Complete reliance on such units would be required in order to have available an adequate and reliable power supply to meet the growing power demands during this period.

In view of the circumstances described above and its estimate of loads and resources, Applicant states it has concluded that it cannot prudently place complete reliance on such units during the initial years of their operation. The scheduling of Pittsburg Unit No. 7, a conventional thermal plant, for commercial operation in the fall of 1972 will provide the increased reserves that Applicant states it considers to be reasonable and necessary.

The Commission finds that with the continuing growth in demand and energy requirements that Applicant is experiencing, the generating capacity and transmission facilities proposed herein will

be needed to provide adequately reliable and reasonable electric service within the area Applicant serves. The Commission further finds that public convenience and necessity require or will require the construction and operation of Unit No. 7 at the Pittsburg Power Plant together with related transmission facilities as described in this application.

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

> The Commission shall have no power to authorize the capitalization of the 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 or a 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 future proceedings for the purpose of determining just and reasonable rates.

The Commission concludes that the application should be granted and that a public hearing is not necessary.

IT IS ORDERED that:

1. A certificate of public convenience and necessity is granted to Pacific Gas and Electric Company for the construction and operation of Unit No. 7 at its Pittsburg Power Plant, together with transmission lines and related facilities as described in the application.

2. Applicant shall file with this Commission a detailed statement including subaccounts of the capital costs of Pittsburg Power Plant Unit No. 7, together with transmission lines and related facilities herein authorized within one year following the date Unit No. 7 is placed in commercial operation.

3. The authorization granted will expire if not exercised within three years from the date hereof.

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

Dated at San Francisco, California, this 7th day of MAY, 1968.

President

Commissioners