

ORIGINAL

Decision No. 64309

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 or certificates)
declaring that public convenience)
and necessity require the construc-)
tion of certain hydroelectric proj-)
ects as part of a plan to develop)
the power potential of the McCloud)
River and lower Pit River, Shasta)
County, California.)
(Electric)

Application No. 44421
Filed May 8, 1962

John C. Morrissey and Leland R. Selna, Jr.,
for applicant.
James A. Elliot and Arsh Merrifield, for
Five Counties Central Labor Council;
Elton D. Bailey and Millard H. Coots,
for California Department of Fish and
Game; Edward J. Terhaar, for William E.
Warne, Director of California Depart-
ment of Water Resources; and Edw. T.
Salvo, interested parties.
Robert W. Hollis, for the Commission staff.

O P I N I O N

This application was heard before Commissioner Peter E. Mitchell and Examiner Carol T. Coffey, at Redding, on July 19, 1962. It was submitted on August 15, 1962, upon the receipt of late-filed exhibits. Copies of the application and notice were served in accordance with the Commission's procedural rules. Representatives of a number of public and civic bodies attended the hearing and spoke in support of the application. These included the Shasta County Board of Supervisors, Shasta County Economic Commission, the Shasta Dam Area Chamber of Commerce, the Redding Chamber of Commerce, Shasta-Cascade Wonderland Association and the Five Counties Central Labor Council. There were no protests.

Applicant's Request

Applicant requests the issuance of a certificate of public convenience and necessity to construct three hydroelectric powerhouses, five reservoirs, two tunnels, and transmission lines as part of a plan to continue the development of the power potential of the McCloud and lower Pit Rivers in Shasta County.

Proposed Development

The present and proposed developments by applicant on the McCloud-Pit river system are delineated in Exhibit 1, together with a tabulation of summarized physical data. The proposed development will divert water by tunnel from the McCloud Diversion Reservoir on the McCloud River to the Iron Canyon Reservoir on Iron Canyon Creek and thence by tunnel to the McCloud-Pit powerhouse. This powerhouse is about one half mile upstream from applicant's existing Pit No. 5 powerhouse. The water so diverted will be combined with the Pit River flows and be utilized through the Pit No. 6 and Pit No. 7 powerhouses, located on the lower part of the Pit River. Reservoirs are to be located immediately upstream from the new powerhouses on the Pit River and an afterbay will regulate stream flow after Pit No. 7. Approximately 21 miles of transmission lines will interconnect these facilities with the existing power transmission system of applicant. Applicant does not propose to build Pit No. 2 powerhouse at this time. The total dependable capacity to be developed by the proposed development will be 312 megawatts. The total average annual energy to be generated by the development will be 1,563 million kilowatt-hours per year.

Plant Cost

This development is estimated to cost \$91,674,000, including transmission and terminal facilities, or \$294 per megawatt of

dependable capacity. The cost of construction will be financed by using available funds or the proceeds obtained through the sale of securities, applications for the issuance of which will be filed with the Commission.

Cost of Power

The annual cost of power from the proposed development is estimated by the applicant to be \$11,524,000 as detailed in Exhibit 1. This results at an average annual capacity factor of 57.2 percent at terminal substations at high voltage in an average delivered cost of 7.76 mills per kilowatt-hour. Exhibit 2 indicates that this cost is reasonably comparable with the cost of energy from conventional thermal and the estimated Bodega Bay nuclear power plants, which range from 6.9 to 8.6 mills per kilowatt-hour at 57.2 percent capacity factor.

Load Growth

Applicant's records and studies indicate that its area peak demand has increased from 3,356 megawatts in 1953 to 5,872 megawatts in 1961, and that it is estimated to increase to 8,480 megawatts under dry year conditions in 1966. During the same period the area energy requirement has increased from 18.6 billion kilowatt-hours in 1953 to 33.1 billion kilowatt-hours in 1961, and that it is estimated to increase to 48.1 billion kilowatt-hours in 1966 under dry year conditions.

The tabulation below shows applicant's estimates of the area reserve under average and dry year conditions and the dry

year reserve requirements at the time of peak loads in August for each of the next five years:

<u>Year</u>	<u>Area Reserve Megawatts</u>		<u>Dry Year Reserve Requirement</u>	
	<u>Dry Year</u>	<u>Avg. Year</u>	<u>Megawatts</u>	<u>% of Peak</u>
1962	682	993	936	14.8%
1963	949	1,282	960	14.1
1964	1,062	1,399	985	13.5
1965	1,001	1,300	1,013	12.9
1966	1,003	1,369	1,044	12.3

These estimates reflect the capacity of the proposed project becoming available during the spring and winter of 1965.

Exhibit 3, filed at the staff's request, lists the 1961 maximum forced unscheduled outage of equipment which reduced generating capacity, together with a listing of other such outages during July, August and December 1961. The year's maximum outage of 960 megawatts occurred August 11, 1961. The exhibit shows that problems created by outages affecting generating capacity are significant and should be reviewed by applicant.

Findings

Upon consideration of the evidence the Commission finds as follows:

1. Public convenience and necessity require that the application be granted as set forth in the ensuing order.
2. Applicant possesses the financial resources to construct and operate the proposed development.

The certificate hereinafter granted shall be 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 a future rate base for the purpose of determining just and reasonable rates.

ORDER

Public hearing having been held and based upon the evidence therein adduced,

IT IS ORDERED that:

1. A certificate of public convenience and necessity is granted applicant to construct, install, operate, maintain and use the hydroelectric generating and transmission project described in the application.

2. Within one year following the date of completion of the project described in the application, applicant shall file with this Commission a detailed statement of the capital costs of said project.

3. The authorization herein granted will 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 25th day of SEPTEMBER, 1962.

George E. Trover
President

John S. Mitchell

S. Lynn Fox

Robert A. Page

Fredrick B. Hallock
Commissioners