

Decision No. 61241**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 its pro-)
 posed new De Sabla hydroelectric)
 power plant, together with related)
 facilities. }

Application No. 42476

(Electric)OPINION AND ORDERNature of Request

Pacific Gas and Electric Company, an operating public utility, on July 18, 1960, filed the above-entitled application requesting a certificate of public convenience and necessity to construct, install, operate, maintain and use its proposed new De Sabla hydroelectric plant, together with related facilities. The new hydroelectric plant is to be built at the site of the existing plant.

De Sabla Power Plant

Applicant presently owns and operates an electric power plant known as De Sabla Power Plant, located on Big Butte Creek about 25 miles north of Oroville, California. The plant first generated electric power in 1903 and has a total installed capacity of 13,000 kilowatts. The power generated is transmitted over a single 60 kv circuit. The company states that the 57-year old plant including powerhouse building, equipment, penstocks and intake structure is obsolete, inefficient and of doubtful dependability and, as a result, proposes to replace this plant. The new plant, located at the same site, will have an installed capacity of 18,500 kilowatts.

Supplemental Information

To provide supplemental information necessary for a thorough evaluation of this application and in response to a staff request, the Pacific Gas and Electric Company forwarded five verified exhibits as follows: Area Peak Loads, Exhibit No. 1; Load and Resource, Exhibit No. 2; Gross Normal Operating Capacity of Generating Plants in Operation as of September 30, 1960, Exhibit No. 3; Estimated Cost of New De Sabla Hydroelectric Plant, Exhibit No. 4; Economic Justification for Abandoning Existing Plant and Constructing New Plant, Exhibit No. 5. This supplemental information is hereby made part of the record and received as exhibits herein.

New De Sabla Power Plant

In order to continue to utilize the existing water storage and collection facilities for the generation of hydroelectric power and to meet load requirements in its service area, applicant proposes to construct the new De Sabla Power Plant and related facilities listed below and described in more detail in the company's application:

- a. A new intake structure and a single new penstock, 6,500 feet in length.
- b. One 24,800 horsepower impulse turbine connected to a 20,500 kva generator.
- c. Necessary switching and transforming equipment for connecting the plant to the 60 kv system. No new transmission facilities will be required.

Applicant's schedule for completion of the construction of the new plant is late in 1962.

A general map showing the location of the new De Sabla Power Plant, together with associated canals and reservoirs, is attached to the application as Exhibit A.

Water Rights

Applicant states that it owns and has utilized water rights necessary for operation of the De Sabla development for many years, and that these rights are sufficient for operation of the new powerhouse.

Cost of Proposed Construction

Applicant states that the cost of the proposed new facilities is estimated to be \$3,467,000, of which \$120,000 is for substation equipment. A detail of this amount, by accounts, is shown in Exhibit No. 4. The company proposes to finance the cost of construction 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 proper application, authorize for that purpose.

Additional Capacity Requirement and Program

The company states that there will be a demand within the territory in which it operates for the additional power to be generated at the new De Sabla Power Plant.

In connection with the demand for power, applicant states that the average annual growth of peak load within applicant's gross service area has exceeded 250,000 kilowatts for the six-year period from 1953 through 1959 and was nearly 300,000 kilowatts for the four-year period 1955 through 1959. Applicant further states that in order to meet future load growth of such magnitude and to maintain reasonable reserve capacity, it will be necessary in the winter of 1962-1963 to provide additional capacity to that presently installed and available, or to become available. Applicant's proposed new

capacity program for the next three years is listed in Exhibit No. 2 and includes 140,000 kilowatts of hydroelectric and 1,068,500 kilowatts of thermal power.

Resource Margin

Applicant's estimates of margins of available generating capacity over maximum demands for the years 1959 through 1963, based on an average and adverse year hydro conditions, are summarized from Exhibit No. 2, in the following tabulation:

Year	Average Hydro Conditions		Adverse Hydro Conditions	
	Gross Margin (1,000 KW)	Percent Margin	Gross Margin (1,000 KW)	Percent Margin
1959* (Aug.)	1,036	21.1%	900	18.3%
1960* (Aug.)	854	15.6	717	13.1
1961 (Aug.)	961	16.6	723	12.3
1962 (Aug.)	937	15.0	739	11.7
1963 (Aug.)	1,091	16.4	882	13.1

*Actual

Similar estimates of margins of available energy over annual load requirements are:

Year	Average Hydro Conditions		Adverse Hydro Conditions	
	Gross Margin (Million Kwhr.)	Percent Margin	Gross Margin (Million Kwhr.)	Percent Margin
1959*	9,092	32.6%	5,909	21.2%
1960	7,688	25.0	4,437	14.4
1961	9,439	29.0	5,120	15.4
1962	9,063	26.0	4,763	13.3
1963	10,891	29.1	5,823	15.2

*Actual

Economic Justification

In Exhibit No. 5 applicant sets forth its economical justification for constructing the new plant in lieu of rehabilitating its old plant. The company states that with an estimated capital expenditure of \$1,870,000 to rehabilitate the existing plant, the rehabilitated plant could not be considered as completely reliable as

a new plant and that the construction of the new plant also provides an opportunity to increase the capacity of the plant to more efficiently utilize the existing water supply.

This exhibit also shows details of annual costs for the existing plant if it were rehabilitated, for the proposed new plant, and for the increment of capacity added to the plant. The cost of power as shown in Exhibit No. 5 is 5.2 mills per kilowatt hour for the proposed new plant. The annual cost per kilowatt of plant capacity of the proposed new plant is \$32.89 per kilowatt as compared with an annual cost of \$34.62 per kilowatt for the existing plant rehabilitated.

Conclusion

The existing De Sabla plant has been in operation for 57 years and the powerhouse equipment, penstocks, and related structures are obsolete and inefficient. The increased capacity will also be needed for future load growth.

The certificate of public convenience and necessity issued 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 Commission having considered the above-entitled application and the supplemental information furnished by the aforementioned Exhibits 1 through 5, and being of the opinion that the application should be granted and that a public hearing thereon is not necessary; therefore,

IT IS HEREBY FOUND AS A FACT that public convenience and necessity require the construction, operation, maintenance and use of the De Sabla hydroelectric generation project as described in the application; therefore,

IT IS HEREBY ORDERED that a certificate of public convenience and necessity be and it is hereby granted to Pacific Gas and Electric Company to construct, install, operate, maintain and use the De Sabla hydroelectric generating plant and related facilities described in this Application No. 42476.

IT IS HEREBY FURTHER ORDERED that Pacific Gas and Electric Company shall file with this Commission a detailed statement of capital cost of the generation and transmission project within one year following the date of completion.

The authorization herein 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 20th day of December, 1960.

[Signature]
President

[Signature]

[Signature]

[Signature]
Commissioners