

Decision No. 39272

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of SOUTHERN CALIFORNIA EDISON COMPANY, for a certificate that present and future public convenience and necessity require the construction of a hydroelectric power house on the San Joaquin River, Fresno County, with appurtenant penstocks, water conduits and transmission line, all of which will constitute an extension to the hydroelectric generating system of Applicant.

ORIGINAL

Application No. 7071

Gail C. Larkin, B. F. Woodard and G. E. Trowbridge
for Applicant

FIRST SUPPLEMENTAL OPINION

In this First Supplemental Application, Southern California Edison Company Ltd, requests that the Railroad Commission issue a supplemental certificate that present and future public convenience and necessity require or will require the construction and operation of certain hydroelectric generating facilities.

It appears from the record that Edison, by the original order in this proceeding Decision No. 9486, dated September 8, 1921, was granted a certificate authorizing the erection of a hydroelectric plant known as Big Creek No. 3 with the ultimate capacity of 150,000 kw in six units. The plant is located in Fresno County, California, on the San Joaquin River below the confluence of Stevenson Creek in Township 9 South, Range 24 East, M.D.B & M. Pursuant to said certificate, Edison thereafter erected said plant and installed therein three units and has since operated the plant with that installed capacity. Because of load and economic conditions prevailing in the intervening period, no further additions were economically justified. Since the beginning of the war, however, growth of load and

changes in its characteristics, coupled with scarcity of materials which prevented normal additions to capacity, now make the addition of a generating unit at Big Creek No. 3 economically feasible.

The evidence offered in support of this application has been presented in conjunction with Edison's Application No. 27403 for a certificate authorizing the installation of a large steam electric generating station at Redondo Beach.

It appears that at the time Big Creek No. 3 was originally installed, much of the work to accommodate the initially contemplated 6 units was then completed. The waterway from the diversion dam to the penstocks is of adequate size, the power house building is large enough to accommodate a fourth unit, and the transmission facilities, with the exception of the transformer banks at the power house, are adequate to carry the additional power generated. It is therefore proposed to install a fourth penstock and a fourth unit of 35,000 kw capacity, and to make the changes necessary to connect the new unit to the system. Edison estimates the cost of the additions at \$1,600,000, which indicates a cost of \$46 per kw. This total cost is segregated to the main features of the proposed construction as shown on the following table:

<u>Hydraulic Production Plant</u>			
<u>Acct. No.</u>	<u>Title</u>	<u>Amount</u>	<u>Cost per kw</u>
321	Structures and Improvements	\$ 183,000	\$ 5.2
322	Reservoirs, Dams and Waterways	692,600	19.8
323	Water Wheels, Turbines, and Generators	674,400	19.2
324	Accessory Electrical Equipment	50,000	1.4
Total Hydraulic Production Plant		\$1,600,000	\$45.6

Since the operating rating of the three present machines is 33,000 kw, the station, after the addition of the fourth unit, will have a total of 134,000 kw. Studies made by Edison indicate that the addition of the fourth unit to Big Creek No. 3 will make available to the system an average annual output of 102,000,000 kwh based upon median water conditions of the past 30 years. The actual amount of energy available to the system in any year, by reason of this addition, will vary with the hydraulic conditions then obtaining, ranging from

nothing in a dry water year to approximately twice the median year output in a maximum type water year. Even in a dry year, however, certain advantages will arise in that additional facilities will be available for maximum utilization of available water in the event of machine outages. Edison estimates that the incremental cost of the additional energy available in this new unit will average approximately 1.21 mills per kwh. Inasmuch as this fourth unit can now be properly coordinated with the balance of Edison's hydro facilities, and in view of the urgent need for the new capacity that is available at this project under favorable circumstances, it is apparent that the supplemental and confirmatory certificate herein sought should be granted.

A public hearing was had on the application on June 13, 1946, at which time no representations opposing the company's application were made. The following form of Order is hereby recommended:

O R D E R

A public hearing having been held, evidence submitted, and the Commission being of the opinion that the application should be granted, and finding as a fact that present and future public convenience and necessity require or will require the installation by Edison Company of the hydroelectric facilities described in the application, therefore

IT IS HEREBY ORDERED that Southern California Edison Company Ltd. be and it is hereby granted a supplemental certificate that present and future public convenience and necessity require or will require construction of the above described hydroelectric works and appurtenances, the operation of the same, and the acquisition of all necessary or convenient permits, licenses, rights of way and other rights required in connection therewith.

The effective date of this Order shall be the date hereof,

Dated at San Francisco California, this 30 day of
July 1946.

Richard Anderson
Justin F. Cassen
Francis Glavin
Samuel L. Ladd
Harold P. Hills

Commissioners