

Decision No. \_\_\_\_\_

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA.

\_\_\_\_\_ )  
 In the matter of the application )  
 of PACIFIC GAS AND ELECTRIC COM- )  
 PANY, a corporation, for an order )  
 of the Railroad Commission of the )  
 State of California issuing to )  
 applicant a certificate declaring )  
 that the present and future public )  
 convenience and necessity require )  
 or will require the construction, )  
 operation, maintenance and use of )  
 the electric production and trans- )  
 mission project herein described. )  
 \_\_\_\_\_ )

ORIGINAL

Application No. 23917.

R. W. DuVal, for Pacific Gas and Electric Company, Applicant.

BAKER, COMMISSIONER:

O P I N I O N

In this application Pacific Gas and Electric Company, herein-  
 after sometimes referred to as Applicant, requests an order and a finding  
 by this Commission that public convenience and necessity will require  
 Applicant to construct, operate, maintain and use certain electric  
 facilities, known as the Dutch Flat project, as described in the application  
 and in the location as shown on a map attached to the application as  
 Exhibit "A."

A public hearing in the application was had in the Commission's  
 court room at San Francisco on February 11, 1941, at which time and place  
 evidence was taken and the matter was submitted for decision.

The application and the evidence submitted show that the  
 Dutch Flat project is a hydro-electric power development that Applicant

proposes to construct, operate, maintain and use on the Bear River and to transmit the electric energy therefrom to its markets in order to meet, in part, increasing load requirements of Applicant beginning with the years 1942 and 1943. The project is to be in service by August, 1942. The record shows that the development will have very desirable load characteristics due to large head water storage, which will permit the plant to be used for dry year power demands and also as a base load plant to supply kilowatt-hours. The following tabulation presents the hydraulic head to be developed by the plant, stream flow data and the electric plant capacity and output:

Plant	Head Ft.		Max. Flow at Plant Cfs.	Installed Capacity Kvs.	Estimated Annual Output	
	Static	Effective			Million Kw-hr.	Peak Kw.
Dutch Flat	653	587	475	27,500	138	21,000

The aforesaid development, among other things, will require a diversion of the Bear River at Applicant's Drum afterbay dam (in the SW $\frac{1}{4}$  of NW $\frac{1}{4}$  of Section 17, Township 16 North, Range 11 East, MDB&M), through suitable headgate structure and a proposed tunnel approximately 4.1 miles long, a penstock, power house with the necessary hydraulic, generating and substation facilities. It will also require the building of a transmission line from the Dutch Flat power house to Halsey Junction, a distance of some 19 miles. In addition, the present transmission facilities will require reinforcement between Applicant's Vaca-Drum and Contra Costa substations in order to handle the added production. The aforesaid lines will be insulated for 110 kilovolt operation.

Applicant represents that the proposed transmission lines to be constructed will extend through portions of the Counties of Placer and Nevada,

in California, and will be constructed almost entirely upon private right of way but, in some places, will be located upon certain roads, highways or public ways. The record further shows that Applicant now, and for some time past, has had the necessary franchises for the erection, construction and maintenance of electric lines in the aforesaid Counties. It likewise is of record that Applicant now holds general certificates of public convenience and necessity, issued by this Commission, in both of the aforesaid Counties.

The cost of the Dutch Flat project is estimated at \$3,780,000, which may be roughly itemized as follows:

	Cost
<u>Power Plant:</u>	
Lands and Rights of Way	\$ 40,000
Tunnel and Intake	1,291,000
Surge Tank	67,000
Penstock Line	465,000
Power House and Buildings	296,000
Power Plant Equipment	808,000
Step-up Transformers	203,000
Construction Roads	40,000
Total Power Plant	<u>3,210,000</u>
<u>Transmission Lines:</u>	
Dutch Flat to Halsey Junction	285,000
Vaca-Dixon-Contra Costa Sub-line	200,000
Switching Station - Vaca-Drum Substation	40,000
Switching - Contra Costa Substation	45,000
Total Transmission Lines	<u>570,000</u>
GRAND TOTAL	<u>\$3,780,000</u>

Applicant represents that it intends to pay the cost of the construction of the aforesaid project "out of its income and from funds in its treasury not obtained from the issue of stock, bonds, notes or other evidences of indebtedness and/or from such funds as it may obtain from the issuance of such stock, bonds, notes or other evidences of indebtedness

as the Railroad Commission of the State of California shall hereafter, upon proper application, authorize for that purpose."

In support of its request for a certificate to proceed with the construction, operation, maintenance and use of the Dutch Flat project, Applicant presents evidence to show that its system load growth would be such within the next few years as to require substantial increases in its production requirements and that the project here under consideration was one of the sources that could be developed to provide a part of this increased power requirement. In this respect, it was shown by Applicant that the added costs involved in the development and operation of this project would result in an estimated cost of power developed at the rate of \$16.08 per kilowatt-year and if this is translated into terms of cost per kilowatt-hour at Applicant's primary substations, such as Newark, the cost is estimated to approximate 2.4 mills and if the added steam cost is included, to give proper support during dry year conditions, the cost is increased to 2.9 mills; both figures being predicated at system load factor.

It is my judgment that Applicant has clearly shown that it is necessary to secure added power supplies to take care of its growing system loads and, further, that the proposed Dutch Flat project is a natural and a logical expansion of Applicant's plans for added water power development. These considerations, when coupled with the favorable costs of generation that are estimated to be realized, are clearly in the public interest and, accordingly, it is my opinion that the application should be granted.

At the public hearing on this matter, heretofore mentioned, no one appeared to oppose or protest the granting of the application and I recommend the following form of Order.

O R D E R

A public hearing having been held in the above entitled application and the matter having been fully considered and it appearing and

being found as a fact that public convenience and necessity so require,

IT IS ORDERED that a certificate of public convenience and necessity be granted Pacific Gas and Electric Company to construct, operate, use and maintain the electric production and transmission facilities heretofore referred to in the Opinion as the Dutch Flat project.

This Order shall become effective immediately.

The foregoing Opinion and Order are hereby approved and filed as the Opinion and Order of the Railroad Commission of the State of California.

Dated, San Francisco, California, March 4, 1941.

*[Signature]*  
*[Signature]*  
*[Signature]*  
*[Signature]*  
*[Signature]*  
Commissioners.