

ORIGINALDecision No. 52181

BEFORE THE PUBLIC UTILITIES 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 or will require)
 the construction and operation by)
 applicant of a new hydroelectric)
 power plant to be known as the)
 Portal Power Plant, together with)
 transmission facilities and other)
 appurtenances to be constructed and)
 used in connection with said plant.)

Application No. 37261

Bruce Renwick, Rollin E. Woodbury, Harry W.
 Sturges, Jr., and John Bury by Rollin E.
 Woodbury and John Bury, for applicant.
 California Farm Bureau Federation by J. J. Deuel,
 interested party.
L. S. Patterson, for the Commission staff.

O P I N I O NApplicant's Request

Southern California Edison Company, a California corporation, engaged in the business of generating, transmitting and distributing electricity in the central and southern portions of the State of California as a public utility, filed this application on August 31, 1955, requesting a certificate of public convenience and necessity to construct and thereafter operate a new hydroelectric power plant to be known as the Portal Power Plant, located near the outlet of the existing Ward Tunnel at Huntington Lake, Fresno County, California.

The proposed generating unit will consist of a single generator with a nameplate capacity of 10,000 kw, directly connected to a vertical reaction turbine. The proposed source of water supply consists of the waters which presently are diverted from the South Fork San Joaquin River and tributary streams and

which now are conveyed through the Ward Tunnel from Florence Lake to Huntington Lake. Applicant states that the completion of Lake Thomas A. Edison and installation of a 325 acre-foot forebay pond now makes the construction and operation of Portal Power Plant economically feasible by reason of the increased and more uniform flows into Ward Tunnel.

Applicant states that the energy to be generated at the Portal powerhouse will normally be used in supplying requirements in the local distribution system in the Huntington Lake area, and any excess generation will be utilized in its integrated system in central and southern California. Replacement of an existing distribution line with a 33,000-volt transmission line will be necessary in order to connect the Portal hydroelectric plant with applicant's existing Big Creek No. 1 plant. It seeks permission to rebuild this transmission line and other appurtenances to be constructed and used in connection with the Portal plant. The proposed new construction is shown on Exhibit "E" attached to the application.

Public Hearing

After due notice public hearing was held on this application before Examiner M. W. Edwards on September 28, 1955, at Los Angeles. At the hearing applicant presented testimony by three witnesses. Prior to the hearing, the Commission staff had investigated the applicant's proposal and at the hearing placed pertinent information into the record for the Commission to consider. No one entered any objection to the granting of applicant's request. The representative of the California Farm Bureau Federation urged the Commission to give favorable consideration to this application.

Additional System Capacity Requirements

Applicant anticipates future load growth at the rate of approximately 7 per cent per year or roughly 160,000 kw per year. During the past ten years the experienced rate of growth has been in excess of 7 per cent per year on the average. Applicant estimates that the Portal Power Plant can be completed by November, 1956. This plant represents a capacity increment of less than one half of one per cent of the anticipated 1956 system peak load of approximately 2,360,000 kw, and it is obvious that this and other new capacity will be necessary to meet the annual load growth increment.

The present program of applicant as presently authorized by the Commission is to bring in new plants in the following sequence:

<u>Name and Type of Plant</u>	<u>Available Capacity</u>	<u>Date Available</u>
El Segundo Steam - (Unit No. 2)	160,000 kw	Fall 1956
Alamitos Steam - (Unit No. 1)	160,000	Fall 1956
Portal Hydroelectric Plant	10,000	Fall 1956
Alamitos Steam - (Unit No..2)	160,000	Fall 1957

In addition, applicant, by First Supplemental Application No. 35132, is seeking approval of a second unit of 160,000 kw capacity at Redondo Steam Plant No. 2, to be completed in the fall of 1957.

Applicant's proposed 1956 capacity additions are about double the rate of the normal load growth but in part are justified by the loss, at the time the El Segundo No. 2 unit is completed, of 125,000 kw of firm capacity now being purchased from Pacific Gas and Electric Company. The need for 160,000 kw of new capacity in 1957, in addition to the 160,000 kw so far authorized, is being considered by the Commission.

The indicated system capacity at the end of 1956 is 2,660,420 kw and, with an expected load of 2,360,000 kw, indicates a margin of 300,420 kw or about 12.7 per cent. Such calculations are based on a year of favorable water conditions. In a dry year the available capacity would be reduced by some 160,000 kw, leaving a margin of 140,420 kw or approximately 6 per cent. Such a dry-year margin is below a desirable operating figure and indicates the need for the 10,000 kw of capacity represented by the proposed Portal Power Plant.

Estimated Plant Cost and Operating Expense

Increases in production and transmission capital which will result from the proposed Portal plant are estimated as follows:

<u>Power Plant</u>	<u>Total Cost</u>	<u>Unit Cost per Kw</u>
Road Relocation	\$ 30,000	\$ 3.00
Reservoirs, Dams and Waterways	1,123,000	112.30
Structures and Improvements	261,000	26.10
Turbines and Generators	855,000	85.50
Other Equipment	244,000	24.40
Total Plant	\$2,513,000	\$251.30
Transmission Line	319,000	31.90
Total	\$2,832,000	\$283.20

Applicant proposes to finance this plant from available funds, from bank loans, or from funds to be obtained through the sale of securities, as the Commission shall hereafter, upon proper application, authorize.

The estimated annual cost of operating the plant is as follows:

<u>Item</u>	<u>Amount</u>
Operation and Maintenance	\$ 13,000
Depreciation (Straight-Line)	33,000
Income Taxes	70,000
Ad Valorem Taxes	27,000
Interest or Return on Capital	76,000
Total	\$219,000

Assuming an average annual energy output of 56,000,000 kwhr, the unit cost of energy at the Portal powerhouse is computed to be 3.9 mills per kwhr.

Licenses, Franchises and Rights

Applicant represents that it has obtained by an order issued April 19, 1955, a Major Project License from the Federal Power Commission for the construction, operation and maintenance of the Portal Power Plant (Project No. 2174) affecting lands of the United States. Applicant contends that no county or municipal franchises are necessary to complete and put the project into operation. Furthermore, it proposes to obtain from the proper public authorities any permits, licenses or other rights which may be necessary for the construction and operation of the proposed plant.

Conclusion

In view of the past trend in growth of demand for electric energy on applicant's system, it appears reasonable to project a growth trend into the future of approximately 7 per cent and to conclude that the proposed new capacity will be needed when completed to help supply the future public demands for electric energy. The estimated cost of energy from this proposed project appears favorable and should not unreasonably increase the over-all system unit cost of energy production.

Applicant has the financial means to construct the project and place it into successful operation. After considering the record in this proceeding and the statement by the Farm Bureau representative, it is our conclusion that the proposed construction is in the public interest and that an order should be issued, granting in general the authority requested by applicant.

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 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 as the consideration for the issuance of such certificate of public convenience and necessity or right.

O R D E R

The above-entitled application having been considered, a public hearing having been held, the matter having been submitted and now being ready for decision,

IT IS HEREBY FOUND AS A FACT that public convenience and necessity require the construction, operation and maintenance of the hydroelectric generation and transmission project, as shown on Exhibit "E" attached to the application, and as described in the application; therefore,

IT IS HEREBY ORDERED that Southern California Edison Company be and it is hereby granted a certificate that public convenience and necessity require the construction, operation,

maintenance and use of the hydroelectric generating plant and transmission line described in this application, the procurement of the requisite lands or land rights, permission or any additional franchise or franchises as may be necessary for the construction or operation of the projects, the production, transmission, distribution, delivery and sale of such electric energy as may be generated by the project to its present and prospective customers in accordance with its certificates of public convenience and necessity and with its rates, rules and regulations duly filed with the Commission.

IT IS HEREBY FURTHER ORDERED that Southern California Edison Company shall file with this Commission a detailed statement of capital costs of the generation and transmission project within six months following the date of completion.

The authorization herein granted will expire if not exercised within two years from the date hereof.

Dated at San Francisco, California, this 1st day of November, 1955.

Charles E. Mitchell
President
Ray L. Lutz
Walter J. ...
W. H. ...

Commissioners

Commissioner JUSTUS F. CRAEMER, being necessarily absent, did not participate in the disposition of this proceeding.