Donald A. Carman, for applicant.
Bruce Renwick, Rollin E. Woodbury and
Barnard Morse by R. E. Woodbury, for
Southern California Edison Company,
interested party.
L. S. Patterson, for the Commission staff.

OPINION ON FIRST SUPPLEMENTAL APPLICATION

Applicant's Request

California Electric Power Company filed the above-entitled first supplemental application on June 8, 1956, requesting a certificate of public convenience and necessity, supplemental to that issued by Decision No. 52692 for the San Bernardino Steam Plant and for the first unit therein, authorizing a 60,000 kw second unit, and for additional transmission lines and equipment to connect this proposed No. 2 Unit to the system's main transmission circuits.

Public Hearing

After due notice, a public hearing was held upon this first supplemental application before Commissioner Ray E. Untereiner and Examiner M. W. Edwards on September 12, 1956 at San Bernardino, California. At the hearing applicant submitted two exhibits and tostimony by four witnesses in support of its supplemental application. Authorization for the first unit in the plant was granted on February 28, 1956, and the Commission staff, represented by an electrical engineer, was concerned over the reason why applicant so promptly thereafter should seek authorization for another unit. The

staff representative thoroughly cross-examined the witnesses so that the Commission would have the detailed facts in the record to aid it in properly deciding this matter. No one offered any objection to the granting of the request.

Revised Load Growth Estimates

Applicant's earlier load growth estimate of approximately ll per cent compounded annually was revised upward to 16.7 per cent for the next three years primarily because of large new industrial loads to be connected in the next six to nine months. Some of these larger industrial loads are:

West End Chemical Company	2,000	hp
Pacific Coast Borax Company	5,500	_
Kaiser Eagle Mountain Mine	8,160	
Riverside Cement Co. at Oro Grande	4,500	
Permanente Cement Co. at Cushenbury	13,000	****
Gladding McBean Co. at Corona	13,000	
Total	36,560	

In addition, a new 8,000 hp liquid oxygen plant is to be installed at Edwards Air Force Base.

Applicant's exhibits show the following trend in system kwhr sales and kw demands, both recorded and estimated for the operating years (June 1-May 31):

Operating Years	Kwhr Sa Quantity I	<u>les</u> ncrease	Gross kw l <u>at Produ</u> Quantity	
Recorded: 1951-52 1952-53 1953-54 1954-55 1955-56 Estimated:	762,194,000 860,397,000 975,503,000 1,037,842,000 1,150,057,000	13% 13 13	150,332 170,598 194,953 217,768 238,444	13% 14 12 10
1956-57 1957-58 1958-59	1,325,363,000 1,629,700,000 1,825,900,000	15 23 12	270,000 349,000 396,000	13 29 13

Power Resources

The power resources and margins which applicant anticipates having available during the months when system peak loads occur are:

Resources	Operat	ing Year a	nd Month
	1956-57	1957-58	1958-59
	September	July	July
Owned Hydro Highgrove Steam San Bernardino Steam #1 Unit San Bernardino Steam #2 Unit Hoover Dam - Unit A-8 M.W.D Edison (Excess) Purchased Power Total Capability	46,000 kw 162,000 0 39,000 3,000 53,000 303,000	50,000 k 162,000 66,000 42,000 52,000 372,000	y 50,000 kw 162,000 66,000 45,000 45,000 444,000
Estimated Peak Loads	270,000	349,000	396,000
Margin - Quantity	33,000	23,000	48,000
- Ratio to Load	12%	7%	12%

The above tabulation does not include any allowance for capacity of up to 50,000 kw which applicant may obtain from the power system of the City of Los Angeles on an emergency basis over an interconnecting line. In the past the Commission has considered that 30,000 kw of this 50,000 kw is reasonably firm capacity, but applicant considers this capacity as 30,000 kw of spinning reserve plus 20,000 kw of mutual reserve, available only in emergencies, that should not be included in its list of firm resources.

Estimated Plant Cost

Applicant estimates the cost of Unit No. 2 at \$8,004,116 and in Exhibit No. 2 furnished the following cost segregation:

Account	Amount
311 Structures and Improvements 312 Boiler Plant Equipment 314 Turbo-Generator Units 315 Accessory Electric Equipment 316 Miscellaneous Power Plant Equipment Total - Steam Production Plant	\$ 273,622 3,278,422 4,021,470 407,832 22,770 8,004,116

In addition to the above figures, applicant estimates that transmission facilities directly associated with Unit No. 2 will cost approximately \$895,000.

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Applicant proposes to finance the unit initially by bank loans from the Bank of America which, from time to time, it plans to refund by proceeds of issues of bonds and stocks as the Commission shall hereafter, upon proper application, authorize for that purpose.

Annual Operating Cost

Applicant's estimate of the annual operating cost of proposed Unit No. 2 and Units Nc. 1 and No. 2 combined, exclusive of fuel cost, may be summarized as follows:

	San Bernardi Unit No. 2	no Stoam Plant Units 1 and 2
Capital Cost (Rounded)	\$8,00%,100	\$18,286,900
Expenses: Operation and Maintenance (Excl.Fuel) Administration and General Expense (39.3% of 0. & M.) Depreciation Annuity (5% Sink.Fund) Property Taxes (2% on Capital) Return (6% on Capital) Income Taxes (3.9% on Capital) Total Expenses (Excl. Fuel)	74,600 29,300 88,600 160,100 480,200 312,200 \$1,145,000	292,975 115,100 189,600 365,800 1,097,200 713,200 \$2,773,875
Unit Capital Cost - Mills per kwhr (@ 80% plant factor)	2.63	3.19

Fuel costs of 2.66 mills per kwhr are estimated with gas costing 28.56 cents per Mcf and 4.10 mills per kwhr with fuel oil at \$2.6758 per barrel delivered. Applicant's estimates of total unit cost per not kwhr at the switchboard are:

Estimated Energy Costs	Unit No. 2	Units 1 and 2
Using gas fuel only	5.29	5.85 mills/kwhr
Using oil fuel only	6.73	7.29 " "

In its existing 4 units at the Highgrove Steam Plant applicant estimated unit energy costs of 5.82 and 7.47 mills per kwhr respectively with gas and oil. Applicant's witness could not give an estimated average composite cost of power because of uncertainties as to the ratio of gas and oil that may be available for fuel purposes in the future.

Service Rights and Competition

Applicant represents that no certificate is required for the right to serve any cities or counties with the energy from the proposed unit. Such energy will go into its transmission and distribution system as part of the general supply to various cities and counties which applicant represents it is now and has been for many years serving and authorized to serve. Applicant states that the proposed construction will not compete with other utilities or increase or diminish competition, and, in this regard, mentions that it is and, for many years has been, distributing electric energy in competition with Southern California Edison Company. It served a copy of this first supplemental application on the Edison Company. Such company had counsel and a representative at the hearing, but offered no objection to applicant's proposal.

Findings and Conclusions

In the original proceeding herein one of applicant's witnesses testified that the second unit would be needed by July 1, 1958. Now, because of the sharp increase in prospective new industrial loads, an in-service date of June 1, 1958, is suggested for Unit No. 2. On the basis of the applicant's showing at the time of the original hearing we did not see fit to authorize Units Nos. 2, 3 and 4, but desired to wait until actual load growth experience showed that those additional units would be needed. In view of the experienced increase in load in the 1955-56 operating year and thus far in the 1956-57 operating year, and of the prospective large new industrial loads to be connected in the next six to nine months, it appears reasonable to use the applicant's load estimates for the 1958-59 operating year. Accordingly, we find and conclude that the proposed Unit No. 2 will be needed in June, 1958, and its present construction is in the public interest.

A. 37463 (1st Sup.) AH The Commission is concerned that the increase in applicant's investment in plant with units as large as 60,000 kw each might so depress earnings as to be a reason for applicant seeking an increase in rates. In our original decision herein we pointed out that there would be capital savings by installing 40,000 kw units, but because of the improved operating efficiency of the larger units we authorized the first unit at a size of 60,000 kw. One of applicant's witnesses studied this matter and testified that the addition of Unit No. 2 at a size of 60,000 kw would reduce the utility's over-all rate of return by approximately 0.17 per cent and that this reduction should be only temporary in view of the high plant factor at which he expected the unit to operate. He stated that there were other factors that would have a more important effect on rate of return than the installation of Unit No. 2. Apparently, applicant's load and system can reasonably be expected to have grown to such size by 1958 that it can absorb a 60,000 kw generating unit with nothing more than a temporary decrease in rate of return. The Commission finds that public convenience and necessity require the construction, operation and maintenance of the proposed Unit No. 2 in the San Bernardino Steam-Electric Plant together with the necessary transmission line and appurtenances as proposed to place the second unit in operation by June, 1958, and that an order should be issued granting such authority. 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.

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ORDER ON FIRST SUPPLEMENTAL APPLICATION

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

IT IS HEREBY ORDERED that California Electric Power Company be and it is hereby granted a certificate that public convenience and necessity require the construction, operation, maintenance and use of the second unit in the steam-electric generating plant described in this application, and the necessary transmission lines and appurtenances, the procurement of the requisite lands or land rights, permission or such franchises as may be necessary for the construction and operation of the second unit of the project, the production, transmission, distribution, delivery and sale of such electric energy as may be generated by the second unit 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 California Electric Power Company shall file with this Commission a detailed statement of capital costs of the second unit of the generation project and the transmission lines and appurtenances within six months following their dates of completion.

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

California, this San Francisco Dated at __ , 1956. Commissioners

> _, being Justus F. Craemer -7- Commissioner_ pecessarily absent, did not participate in the disposition of this proceeding,