

Decision No. 42247

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of SOUTHERN CALIFORNIA EDISON COMPANY, a corporation, for an Order of the Public Utilities Commission of the State of California authorizing Applicant, Southern California Edison Company, to enter into a special agreement with Fontana Union Water Company.

Application No. 29664

OPINION AND ORDER

In this application Southern California Edison Company, hereinafter referred to as Edison Company, requests authority to execute an agreement with Fontana Union Water Company, hereinafter referred to as Water Company, covering the supplying of electric power by Edison Company for the pumping of water into Edison Company's Lytle Creek conduit by the Water Company, which water in turn would be used for the generation of electric energy by Edison Company. A copy of the agreement, designated as Exhibit "B", is attached to and made a part of the application.

Edison Company at present owns and operates the Lytle Creek Power House and Fontana Power House on Lytle Creek in San Bernardino County. Water for the operation of the two Power Houses is diverted from Lytle Creek at a location near what is known as "Miller's Narrows". From that diversion point the water is conveyed through Edison Company's Lytle Creek conduit to the Lytle Creek Power House. The discharge from that Power House enters an intake works of the Water Company which in turn is connected to Edison Company's conduit for the conveyance of water to the Fontana Power House. Discharge from the Fontana Power House is into a second intake works of the Water Company for supply of the Water Company's needs.

The Water Company is engaged in the furnishing of water from Lytle Creek and its tributaries for the irrigation of lands. As a part of its development, the Water Company maintains and operates two pumps at Miller's Narrows which are used to supplement the stream flow available to the Water Company by lifting of water from underground sources at Miller's Narrows. The waters developed by said pumps have been conveyed through a pipe line and tunnel owned and operated by the Water Company. Tests indicate a substantial loss of water in the conveyance through the Water Company's pipe line and tunnel, and the Water Company desires that the pumped water be received in and conveyed through Edison Company's Lytle Creek conduit whenever surplus capacity exists in said conduit. When the natural run-off available for diversion from Lytle Creek into Edison Company's Lytle Creek conduit is less than the capacity of said conduit, the addition of waters pumped by the Water Company's pumps at Miller's Narrows will provide additional water for power and additional power at Edison Company's Lytle Creek Power House. Furthermore, the elimination of losses in the Water Company's tunnel and pipe line will provide additional water for the operation of Edison Company's Fontana Power House. In view of the additional power and energy capabilities accruing to Edison Company under the proposed arrangement, Edison Company agrees to provide power for the operation of said pumps without charge to the Water Company when said pumps are discharging into Edison Company's Lytle Creek conduit.

Tests have indicated that with both pumps operating an expenditure of 69.5 kw at the pumps will result in 6.41 second feet additional flow in the Lytle Creek conduit and approximately 156 kw of additional power output at Edison Company's Lytle Creek Power House. Such operation would also result in the saving of approximately 1.06 second feet of water now lost in the Water Company's pipe line and tunnel, which additional flow would provide approximately 44 kw additional power output at Edison Company's Fontana Power House.

During a wet year the stream flow of Lytle Creek is sufficient to fill Edison Company's Lytle Creek conduit to its capacity of 24 second feet. Accordingly, under wet-year conditions the discharge of the pumps will be handled through the Water Company's pipe line and tunnel. It is estimated that the discharge of the pumps can be handled by Edison Company's Lytle Creek conduit during a portion of average years and throughout dry years. The following table shows the estimated operation and energy gain under three representative annual water run-off conditions:

Estimated Operation and Energy Gain

	<u>Wet Year (1943)</u>	<u>Average Year (1919)</u>	<u>Dry Year (1925)</u>
Months of single-pump operation	None	February	None
Months of two-pump operation	None	June-Dec.	All
Net Kwh gain at Lytle Creek Power House	None	468,140	744,600
Kwh gain at Fontana Power House	None	242,000	385,440
Net energy gain to Edison Company	None	710,140	1,130,040

Under the agreement, the Edison Company gains increased power and energy capacity during dry or average years and the Water Company benefits to the extent of obtaining electric energy free-of-charge for the operation of the pumps during such periods, and also a saving of water which otherwise would be lost through the conveyance of the water through its own pipe line and tunnel. The agreement may be terminated by either party upon 30 days' notice or whenever in the judgment of the power company the cost of providing the electric energy for the operation of said pumps exceeds the value to it of the energy produced by the water discharged by said pumps into its Lytle Creek conduit. It is further provided that the agreement shall not become effective unless and until authorized by the Public Utilities Commission of California, and shall at all times be subject to such changes or modifications as said Commission may from time to time direct in the exercise of its jurisdiction.

The Commission having considered the petition and being of the opinion that the application should be granted and that a public hearing in the matter is not necessary, and good cause appearing, therefore,

IT IS HEREBY ORDERED that Southern California Edison Company is hereby authorized to consummate that certain agreement with Fontana Union Water Company dated July 22, 1948, a copy of which is attached to the application as Exhibit "B", and to render electric service under the terms and conditions set forth in said agreement.

The effective date of this order shall be twenty (20) days from and after the date hereof.

Dated at San Francisco, California, this 23rd day of November, 1948.

R. T. [Signature]
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Commissioners