

Great POWER Firm Serves Electrical Age

S. C. Edison Lines Span Vast Area of Southland

QUITE a long time before Southern California was discovered by the real estate subdividers and the movies, the company which today is the Southern California Edison Company had its genesis. The place was Redlands and the year was 1893. Mill Creek No. 1 was the plant—America's first hydro-electric, three-phase plant for long distance transmission of electric energy. It still is in daily operation, modernized some time ago, as a part of Edison's extensive system of hydro-electric plants.

A lot of water has gone over the Pelton wheels since Mill Creek No. 1 went into service. The hydro-electric capacities of virtually all of the Southland's mountain streams have been developed. Boulder Dam power is a reality. A mammoth steam-electric plant has been built by Edison at Long Beach to supplement and reinforce the sources of hydro energy.

Southern California's Electric Age grows apace—and the real estate subdividers and the movies are but representatives of the vast commercial and industrial empire that has been developed, with electricity's aid, on the shores of the Pacific and in the fertile valleys of Southern and Central California.

530,000 Customers

Southern California Edison Company supplies electrical service to all or part of each of the ten Southern and Central counties of California, an area approximately 12,000 square miles. This extensive area is distinguished in the national field of electrical service for a wide variety of year around activities into which the service of electricity enters as one of the most important factors. The diversity of topography, climate and natural resources of this territory provides a liberal and fundamentally sound basis for the established business of this company for future development.

Service of the company is supplied directly to 530,000 customers—more than 400,000 urban homes, 23,000 factories, 55,000 commercial establishments and 43,000 farms. The company supplies service both directly and indirectly to the homes, farms, factories and stores of Southern and Central California—directly to its retail customers on its own distribution lines and indirectly to other consumers through wholesale service to the cities of Anaheim, Azusa, Colton and Riverside.

Most of the large industrial areas of Southern California are situated on the lines of Edison service. Here an abundance of raw materials for manufacture is reinforced economically by the immediate availability of a plentiful supply of low-cost electric power. Agriculture, dependent largely upon pumped water for the irrigation of crops of all seasons, similarly is supported by the electric service of the Edison Company which reaches into all sections of the Southern and Central California territory, irrespective of isolation from established centers.

24 Huge Plants

The savings of nearly 90,000 people are invested in the company, most of whom are residents of California. The company is thus a community enterprise—contributing to and anticipating the assured growth and progress of Southern and Central California. Founded by California citizens and always directed and managed by California men, the Edison Company is a vital and integral part of the communities it serves.

The company operates 24 hydro-electric plants having a combined operating capacity of 659,914 horsepower and four fuel-electric plants with a combined capacity of 588,807 horsepower. The generating capacity thus is 1,248,721 horsepower.

The largest hydro-electric development of the company is in the Sierra Nevada mountains of Fresno county, on the headwaters of the San Joaquin River, and has an operating capacity of 534,852 horsepower, installed in five plants. The steam-electric station, located on Terminal Island, Long Beach, is one of the largest in the nation. Other hydro-electric developments are located in Tulare, Kern, Los Angeles and San Bernardino counties. In connection with its hydro-electric plants, the company owns and operates three large reservoirs and four smaller ones for storage purposes and for the regulation of the flow of the streams upon which the developments are located. The combined capacity of the three large reservoirs, Florence, Huntington and Shaver Lakes in the High Sierras, is 289,285 acre feet.

Romantic Development

For the transmission and distribution of electric energy the Edison Company operates 3,040 circuit miles of high tension transmission line and 13,800 circuit miles of distribution line. The company also has 5,200 circuit miles of private telephone lines, serving approximately 2,000 telephones for organization use.

The story of the development of electric service in the territory served by Edison is a romance that is woven closely with the history of the growth of the cities and towns of this western empire. Its romance is as enthralling as the story of the development of water which gives life to this land which was once largely desert.

In fact, the stories of the development of water and of electric light and power supply have gone hand in hand. And again today, as for years in the past, electricity is the mighty aid to the development of greater water supply and conservation. Conservation and regulation of the winter-born waters of the High Sierras for years has been made possible through the great hydro-electric works of the company at the headwaters of the San Joaquin River.

A Vital State Force

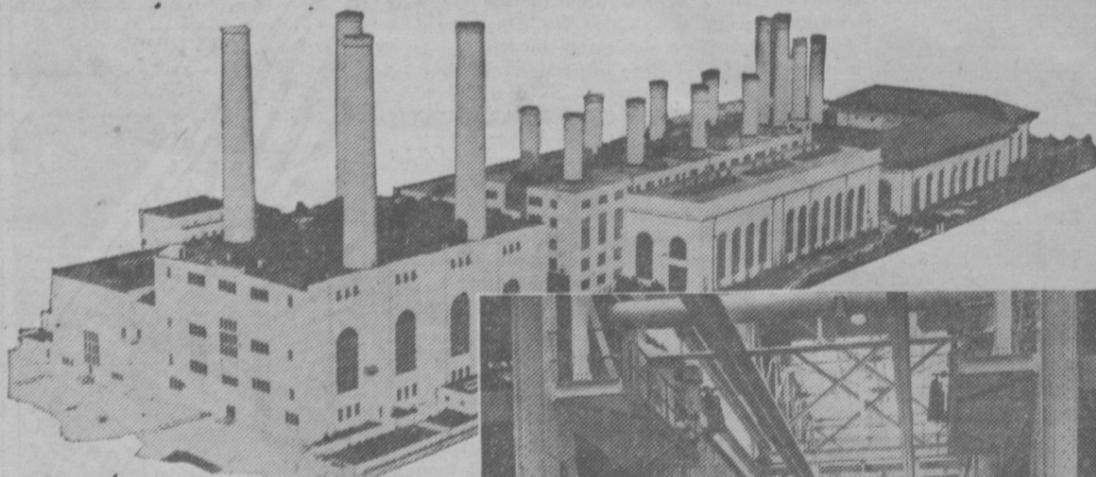
Huge dams forming immense mountain reservoirs hold for summer use in the rich valley below the waters laid as snow and rain over wide-spread forested watersheds. Were it not for these reservoirs from which energy to turn the turbines in the series of power houses in the canyons below is taken, these winter storm waters would sweep unhindered to the sea.

Electricity, since the beginning of electric service, in Southern and Central California, thus has been a vital force in every progressive movement.

Virtually no year in the history of the company is without its record of some outstanding development of electric generation, transmission and distribution facilities, and of utilization of electrical service. Southern California is the birthplace of the science of long distance transmission of electrical energy at high voltages.

Sinews of Development

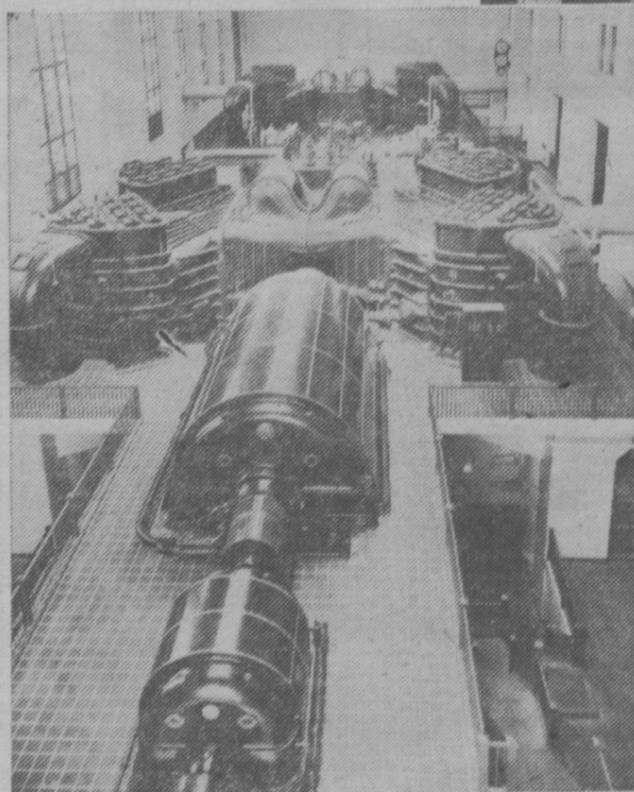
Back of the lines are the power houses. The construction of these, too, under the leadership of Ward, the "Rock Writer," focused the eyes of the world on Central and Southern California—Big



KNX TRANSMITTER GETS POWER FROM EDISON CO.

The new 50,000-watt KNX transmitter is supplied with power by the Southern California Edison Company, whose large LaFresca sub-station lies a short distance from Columbia Park in Torrance. Two duplicate power lines, each of which carries 16,500 volts, assure continuous operation of the radio transmitter.

In fact, one of the outstanding reasons for locating the new \$350,000 KNX transmitter in Torrance was the enviable record of the Edison company for maintaining almost uninterrupted service over long periods of time—a vital factor in broadcasting.



TOP: LONG BEACH STEAM STATION

Edison's Long Beach Steam Station, on Terminal Island, is one of the nation's

CENTER: L. B. STATION BOILER ROOM

Towering as high as a six story building, this double row of gigantic boilers in Plant No. 3 of Edison's Long Beach

LOWER RIGHT: CHANNEL TOWERS

Tall transmission towers carry the wires from Edison's Long Beach Steam Station

LOWER LEFT: TURBINE GENERATOR

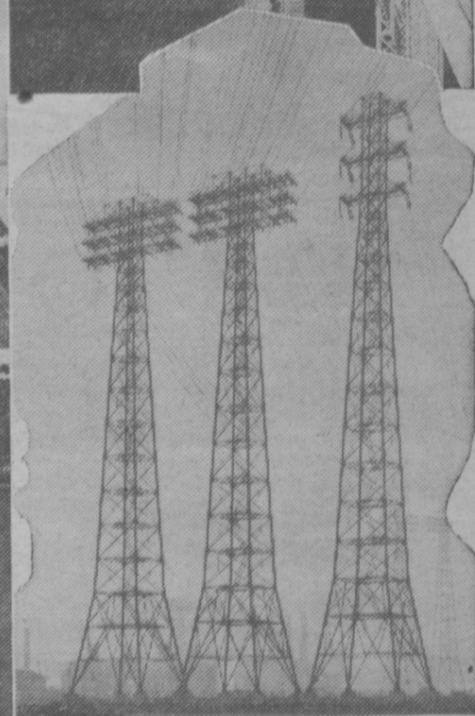
This turbine generator in Edison's Long Beach Steam Station, has under its shining exterior the power to generate elec-

tricity equal to the driving power of 133,000 horses. Edison's Long Beach Steam Station is one of the country's largest fuel-electric plants. A vast industry serves the Southland.

largest and most efficient electric generating stations. There are 11 generating units, capacity is 556,300 h.p. in three plants. Steam Station forms California's "Grand Canyon of Industry." Operating at capacity, these boilers convert 20 tons of water into steam each minute to turn the turbines.

across Cerritos channel, entrance to the Long Beach Harbor. They are among the world's highest electric power line towers.

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Creek, Ward Tunnel, Long Beach Steam Station—all names which now take their place among the construction wonders of the West.

Simultaneously, the Big Creek project and the Long Beach Steam Station project were driven to completion by Edison engineers. Progress on the Big Creek development, despite the handicaps imposed by the rugged topography and severe winter

climate of the Sierra Nevada mountains where the great hydro-electric works were built, was spectacular and constant. On Terminal Island, Long Beach, a gigantic marvel of modern steam engineering was completed, created where once had been only barren mud flats.

Linked together as one vast system by a transmission and distribution network that covers

that rich 12,000 square mile territory of Edison service, these sources of hydro-electric and steam-electric power provide Central and Southern California with a constant, abundant flow of low-cost electrical energy for every use. As its territory has grown, so has the company expanded its service to provide the sinews of community development.