8. APPLICATION FOR OVERHEAD WIRE CROSSING EASEMENT OVER TIDE AND SUBMERGED LANDS, SACRAMENTO RIVER, SOLANO AND SACRAMENTO COUNTIES; PACIFIC GAS AND ELECTRIC COMPANY - W.O. 5767, P.R.C. 3514.1.

After consideration of Calendar Item 31 attached, and upon motion duly made and carried, the following resolution was adopted:

THE EXECUTIVE OFFICER IS AUTHORIZED TO ISSUE TO PACIFIC GAS AND ELECTRIC COMPANY A 15-YEAR OVERHEAD WIRE CROSSING EASEMENT AT AN ANNUAL KENTAL OF \$154.90, WITH THE RIGHT TO RENEW FOR THREE ADDITIONAL PERIODS OF TEN YEARS EACH UPON SUCH REASONABLE TERMS AS THE STATE MAY THEN THOSE, OVER THE FOLLOWING-DESCRIBED LANDS:

A STRIP OF TIDE AND SUBMERGED LAND OF THE UNIFORM WIDTH OF 400 FEET, EXTENDING ACROSS THE SACRAMENTO RIVER, SACRAMENTO AND SOLANO COUNTIES; LYING 100 FEET NORTHEASTERLY AND 300 FEET SOUTHWESTERLY OF THE FOLLOWING-DESCRIBED LINE:

BEGINNING AT U.S.G.S. PIER NO. 4, ZONE II, LAMBERT COORDINATES (X = 2,072,522.01, Y = 154,227.89); THENCE S. 56° 29' W. 2,579.67 FEET; THENCE S. 40° 23½' E. APPROXIMATELY 1,200 FEET TO A POINT ON THE NORTHWESTERLY BANK OF THE LAST NATURAL CHANNEL OF THE SACRAMENTO RIVER, WHICH POINT IS THE TRUE POINT OF BEGINNING OF THE ABOVE-DESCRIBED LINE; THENCE CONTINUING S. 40° 23½' E. 850 FEET MORE OR LESS TO A POINT ON THE SOUTHEASTERLY BANK OF THE LAST NATURAL CHANNEL OF THE SACRAMENTO RIVER, CONTAINING 7.80 ACRES MORE OR LESS.

Attachment Calendar Item 31 (2 pages) 31.

APPLICATION FOR OVERHEAD WIRE CROSSING EASEMENT OVER TIDE AND SUBMERGED LANDS, SACRAMENTO RIVER, SOLANO AND SACRAMENTO COUNTIES; PACIFIC GAS AND ELECTRIC COMPANY - W.O. 5767.

Pacific Gas and Electric Company has applied for an overhead easement for the construction and maintenance of two tower-line-crossings over the Sacramento River as a part of its Table Mountain-Tesla 500 kv Tower Line. The crossing is approximately six miles northeast of Antioch (see Exhibit "A").

The applicant has offered the following statement relating to the comparative costs of overhead to underground construction:

"The highest voltage at present utilized for sub-surface (underground or submarine) transmission in this country is 345 kv.

"Extending the voltage levels to 500 kv involves technological problems that would require further years of research and development in order to bring this voltage class of cable and accessories into the realm of practicability. Research is now in progress which is pointed toward meeting this objective but at the present, both cables and accessories are not available for manufacture commercially. As with 115 and 230 kv cables, areas of rugged terrain will present situations in which an underground system is not technically feasible.

"Since 500 kv cable systems have not yet been developed by the cable and accessory manufacturers, cost estimates can be made only on a theoretical basis. In view of the large power transmitting capabilities of a 500 kv bundled conductor overhead system, 3 to 4 underground circuits would be required for an equivalent system. Cost ratios of a sub-surface installation to an overhead installation cannot be estimated within practical limits of accuracy at our present level of technology."

Based upon a staff appraisal, the annual rental for a 15-year easement would be \$154.90. The agreement would provide for three renewal periods of ten years each.

IT IS RECOMMENDED THAT THE COMMISSION AUTHORIZE THE EXECUTIVE OFFICER TO ISSUE TO PACIFIC GAS AND ELECTRIC COMPANY A 15-YEAR OVERHEAD WIRE CROSSING EASEMENT AT AN ANNUAL RENTAL OF \$154.90, WITH THE RIGHT TO RENEW FOR THREE ADDITIONAL PERIODS OF TEN YEARS EACH UPON SUCH REASONABLE TERMS AS THE STATE MAY THEN IMPOSE. OVER THE FOLLOWING-DESCRIBED LANDS:

A STRIP OF TIDE AND SUBMERGED LAND OF THE UNIFORM WIDTH OF 400 FEET, EXTENDING ACROSS THE SACRAMENTO RIVER, SACRAMENTO AND SOLANO COUNTIES; LYING 100 FEET NORTHEASTERLY AND 300 FEET SOUTHWESTERLY OF THE FOLLOWING-DESCRIBED LINE:

CALENDAR ITEM 31. (CONTD)

BEGINNING AT U.S.G.S. PIER NO. 4, ZONE II, LAMBERT COORDINATES (X = 2,072,521.01, Y = 154,227.89); THENCE S. 56° 29' W. 2,579.67 FEET; THENCE S. 40° 23½' E. APPROXIMATELY 1,200 FEET TO A POINT ON THE NORTHWESTERLY BANK OF THE LAST NATURAL CHANNEL OF THE SACRAMENTO RIVER, WHICH POINT IS THE TRUE POINT OF BEGINNING OF THE ABOVE-DESCRIBED LINE; THENCE CONTINUING S. 40° 23½' E. 850 FEET MORE OR LESS TO A POINT ON THE SOUTHEASTERLY BANK OF THE LAST NATURAL CHANNEL OF THE SACRAMENTO RIVER, CONTAINING 7.80 ACRES MORE OR LESS.