

Decision No. 85497**ORIGINAL**

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation on the Commission's Own  
 Motion into the Planning, Construction,  
 Operations, Practices, Aesthetics, and  
 Economics of Overhead and Underground  
 Transmission Facilities of all  
 Electric Public Utilities in the  
 State of California.

Case No. 9365  
 (Filed April 18, 1972)

(Appearances are listed in Appendix A.)

INTERIM OPINION

On April 18, 1972, the Commission opened an investigation on its own motion into the propriety and reasonableness of the planning, construction, operations, practices, aesthetics, and economics of overhead and underground transmission facilities and into the need for the development of uniform principles as a basis for Commission orders, rules, or guidelines pertaining to transmission facilities of all electric public utilities in the State of California, as defined in Section 217 of the Public Utilities Code.

Prehearing conferences were held in San Francisco on August 14, and 15, 1973. During the period November 28, 1973 to October 21, 1975, 26 days of hearing were held before Examiner Gillanders at various locations in California.

Among the many items discussed at the hearings was the matter of the limitation on the use of so-called 8209 funds.

C. 8209

The Commission on June 22, 1965, instituted an investigation (C.8209) to determine what revision of existing rules, what new rules, or new rates would be required to stimulate, encourage, and promote the undergrounding for aesthetic as well as economic reasons of electric and communications services and facilities. The Commission

said that however useful and often necessary had been the seemingly total preoccupation with the engineering and commercial aspects of our utilities, the time had long passed when we could continue to ignore the need for more emphasis on aesthetic values in those new areas where natural beauty has remained relatively unspoiled or in established areas which have been victimized by man's handiwork.

The Commission said in D.73078 (C.8209) that:

"The proposals made by various respondent electric utilities for conversions and for new construction were limited to so-called distribution facilities (those of voltage rating below 34.5 kv) because of the widely held belief that conversions or new construction of facilities above 34.5 kv (so-called transmission) is not economically feasible at today's state of the art.

"The record is clear that most parties to the proceeding recognize that undergrounding of transmission lines (110 kv and above) carried on steel towers is a desirable objective, but that such objective is neither economically nor technically possible at this time except in isolated cases.

"The record is also clear that respondent electric utilities have given little thought to undergrounding of transmission lines normally carried on single wooden poles, i.e., transmission lines of 66 kv and below. The record shows that in numerous cases, the existence of, or possibility of, construction of such lines has created considerable concern to certain cities.

"The record indicates that respondent utilities should seriously consider undergrounding of such transmission lines in conjunction with undergrounding of distribution lines carried on the same poles. If such undergrounding of transmission lines is not considered practical, then such overhead lines should be routed to another area."  
(67 CPUC 490, 491.)

The Commission in D.73078 ordered the electric and telephone utilities to allocate funds every year for the purpose of financing projects to convert existing overhead facilities and lines to underground. ((1967) 67 CPUC 490.) Since 1967 an amount of approximately 2 percent of yearly gross revenues is annually budgeted in advance by the companies and set aside for conversion projects. The proposed budget for 1975 is \$28.8 million: for PG&E (\$12.5), SCE (\$11), and SDC&E (\$5.3). The allocated funds are spread among hundreds of cities and counties on the basis of the utility's consumers within that political subdivision. The cities and counties annually propose overhead projects to be converted within their boundaries and establish an underground district by ordinance in order to be entitled to the funds. A number of cities have overexpended the amount they are entitled to and have been permitted to receive "advance" payments from projected future year allocations. The League of California Cities has made the conversion of overhead facilities a major concern. It has continuously participated in underground cases and recently urged the Commission to accelerate the underground program by requiring the utilities to spend more for conversions and eliminate carryover funds not actually expended. The League, individual cities, and the staff have offered evidence and urged the Commission to permit the cities to use conversion funds for slightly higher voltage transmission lines--up to 69 kv. (The maximum voltage that can be converted with funds now is 27-33 kv.) Substantial evidence was introduced that there are facilities in areas of unusually heavy concentration of overhead facilities where the rights-of-way are extensively used by the public.

The Assembly of the State of California, the Senate thereof concurring, recently requested that the Commission expand its program for the undergrounding of transmission facilities and to include the undergrounding of service connections in special cases of hardship or inequity. (ACR No. 78.)

Some of the problems caused by the limitations placed on the use of 8209 funds was disclosed through the testimony presented by the city of Ventura at the hearing held on October 21, 1975.

The city and the county have what they consider a critical problem in the undergrounding of a 66 kv transmission line along Hill Road and Telephone Road within the city of Ventura. These streets border the area of the Ventura County Government Center as well as a private commercial development scheduled for start of construction in the very near future. The Government Center is located at the northeast corner of Victoria Avenue and Telephone Road and the County Square development is located at the northwest corner of Victoria Avenue and Telephone Road. The two parcels together will receive a public and private investment in excess of \$90,000,000.

The city of San Buenaventura and the county of Ventura are embarking upon a joint street improvement project. This total project is estimated to cost \$8.2 million and includes both Victoria Avenue and Telephone Road. The city and county have formed a joint undergrounding district on Victoria Avenue where the distribution lines on this major city arterial are being undergrounded as part of the 8209 Program utilizing county of Ventura allocations.

In conjunction with the Underground Utility District, the undergrounding of the distribution lines on Telephone Road and Hill Road is being done and financed through the use of discretionary funds by Southern California Edison Company. On Hill Road and Telephone Road, however, the 66 kv transmission line will remain in place after the expenditure of nearly \$100,000,000 of public and private capital.

Victoria Avenue and Telephone Road are two of the city's heaviest traveled streets. The Government Center will employ 3,000 to 4,000 people at this location which will increase the volume of traffic on both Victoria and Telephone Road. Traffic projections for Telephone Road exceed 20,000 vehicles per day and on Victoria Avenue exceed 35,000 vehicles per day. There is no question that undergrounding this transmission line would provide for greater safety to the motoring public and greater reliability to the utility companies involved.

In addition to providing a safer street, the removal of these poles would also contribute significantly to the aesthetics of the area. The city and county are concerned about the appearance of these major arterials and as a part of their joint street construction project will be spending approximately \$175,000 for landscaping and beautification on both streets.

They are concerned additionally about the overall effect of their undergrounding program that leaves the transmission lines still in place after spending significant amounts of money to underground the distribution system. It appears to them that there are just not sufficient funds being allocated under Section 8209 to meet the high priority needs of cities in undergrounding overhead lines.

The city has an undergrounding project under way in the downtown area where it is spending substantial state and federal funds for a Neighborhood Development Project. The city has committed its funds through mid-1977 for projects already underway in the downtown area. The city has additional high priority projects planned in the same area using funds through 1979. It is for these reasons that the city requests that the Commission permit or direct Southern California Edison Company to use another source of funds for undergrounding of this transmission line. The undergrounding of the 66 kv transmission lines has been estimated by Southern California Edison Company to cost \$441,000.

During the course of the proceeding, the staff presented testimony and an exhibit which proposed certain changes in Rule No. 20<sup>1/</sup>. The proposed rule is entitled "Replacement of Overhead With Underground Electric Facilities Below 70 kv." The effect of the proposed rule is to allow use of 8209 funds for the undergrounding of transmission lines up to a nominal rating of 70 kv at the discretion of the public body.

PG&E and Southern California Edison Company, while not opposing the staff's suggested rule, request that consideration be given to include a provision that the Commission rule on any doubtful projects or on projects not mutually agreeable to the public body and concerned utility.

The city of Long Beach pointed out some problems that could arise when its undergrounding program encompassed areas in which the property owner would be required to pay for the conversion of portions of his service so that he might receive service from the underground electrical facilities.

#### Discussion

This record reveals that undergrounding of lines operating at voltages of 66 kv (transmission) is now not only technically feasible, but also is economically feasible in many cases. As the state of the art advances, and as time passes, it becomes apparent that the industry will be able economically to underground lines of 110 kv and above as circumstances require.

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<sup>1/</sup> According to the staff, the term "underground electric system", as used in its proposed rule, means an electric system with all wires installed underground, except those wires in surface mounted equipment enclosures.

In Decision No. 73078 we set forth our policy of encouraging undergrounding. We reaffirm this policy regarding the undergrounding of distribution lines and expand it to cover the undergrounding of all overhead lines regardless of voltage classification.

Finding and Conclusion

We find and conclude that the use of so-called 8209 funds should not be restricted to distribution lines but, in the best judgement of the appropriate political bodies, should be used to underground lines of any voltage.


INTERIM ORDER

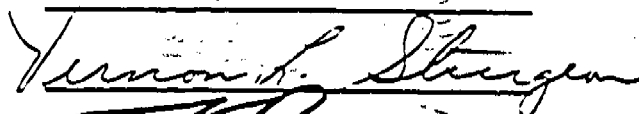

IT IS ORDERED that each respondent providing electric service shall, within thirty days from the effective date of this order, in accordance with the procedure prescribed by General Order No. 96-A, file with this Commission the rule substantially as set forth in Appendix B attached to this decision. Such rule shall become effective on not less than five days' notice to the Commission and to the public and shall cancel and supersede the corresponding existing rule respecting replacement of overhead with underground electric facilities.

The effective date of this order shall be twenty days after the date hereof.

Dated at San Francisco, California, this 2<sup>nd</sup> day of MARCH, 1976.

*I dissent.*  
*William Symons, Jr.*

  
President

  
  
Commissioners

APPENDIX A

Respondents: J. C. Morrissey, M. H. Furbush, Mrs. Kathy T. Graham, Attorneys at Law, for Pacific Gas and Electric Company; R. E. Woodbury, Robert Cahall, and H. Clinton Tinker, Attorneys at Law, for Southern California Edison Company; Chickering & Gregory, by David R. Pigott, Edward P. Nelson, David A. Lawson, James E. Burns, Jr., John Calder MacKay, and Gordon Pearce, Attorneys at Law, for San Diego Gas & Electric Company; and Max L. Jones, for Sierra Pacific Power Company.

Interested Parties: Delvin H. Bechtholdt, Attorney at Law, for Santa Clara County Department of Public Works; Charles C. Bishop, for State of California, Division of Mines and Geology; R. J. Brown, for City of Irvine; Robert B. Carnahan, for Metropolitan Water District of Southern California; Melvin R. Dykman and Robert Munroe, Attorneys at Law, for State of California, Department of Transportation; George R. Elder and Frederick H. Kranz, Jr., Attorney at Law, for Los Angeles Department of Water and Power; Donald M. Haight, for Sacramento Municipal Utility District; Ronald L. Johnson, Attorney at Law, for City of San Diego; Donald Lindberg, Attorney at Law, for City of Chula Vista; Wayne A. McFadden, Attorney at Law, for City Council and City of Foster City; Thomas M. O'Connor, City Attorney and Robert R. Laughhead, for the City and County of San Francisco; Richard E. Pachtman, Attorney at Law and City Councilman, for City of Culver City; Louis Possner, for City of Long Beach; William J. Slimak, for City of Santa Clara; Donald Olson, for City of Inglewood; H. Kent Frewing, Attorney at Law, for La Canada Valley Beautiful, La Canada-Flintridge Chamber of Commerce & Community Association, and La Canada-Flintridge Community Development Committee; and Robert W. Russell, for the City of Los Angeles.

Commission Staff: Peter Arth, Jr., Attorney at Law, and Julian Ajello.



APPENDIX B  
Page 1 of 3

RULE NO. 20

REPLACEMENT OF OVERHEAD WITH  
UNDERGROUND ELECTRIC FACILITIES

- A. The utility will, at its expense, replace its existing overhead electric facilities with underground electric facilities along public streets and roads, and on public lands and private property across which rights-of-way satisfactory to the utility have been obtained by the utility, provided that:
1. The governing body of the city or county in which such electric facilities are and will be located has:
    - a. Determined, after consultation with the utility and after holding public hearings on the subject, that such undergrounding is in the general public interest for one or more of the following reasons:
      - (1) Such undergrounding will avoid or eliminate an unusually heavy concentration of overhead electric facilities.
      - (2) The street or road or right-of-way is extensively used by the general public and carries a heavy volume of pedestrian or vehicular traffic; and
      - (3) The street or road or right-of-way adjoins or passes through a civic area or public recreation area or an area of unusual scenic interest to the general public.
    - b. Adopted an ordinance creating an underground district in the area in which both the existing and new facilities are and will be located requiring, among other things, (1) that all existing overhead communication and electric facilities in such district shall be removed, (2) that each property served from such electric overhead facilities shall have installed in accordance with the utility's rules for underground service, all electrical facility changes on the premises necessary to receive service from the underground facilities of the utility as soon as it is available, and (3) authorizing the utility to discontinue its overhead service.

APPENDIX B  
Page 2 of 3

2. The utility's total annual budgeted amount for undergrounding within any city or the unincorporated area of any county shall be allocated in the same ratio that the number of customers in such city or unincorporated area bears to the total system customers. The amounts so allocated may be exceeded where the utility establishes that additional participation on a project is warranted. Such allocated amounts may be carried over for a reasonable period of time in communities with active undergrounding programs. In order to qualify as a community with an active undergrounding program the governing body must have adopted an ordinance or ordinances creating an underground district and/or districts as set forth in Section A.1.b. of this rule. Where there is a carry-over, the utility has the right to set, as determined by its capability, reasonable limits on the rate of performance of the work to be financed by the funds carried over. When amounts are not expended or carried over for the community to which they are initially allocated they shall be assigned when additional participation on a project is warranted or be reallocated to communities with active undergrounding programs.
  3. The undergrounding extends for a minimum distance of one block or 600 feet, whichever is the lesser.
- B. In circumstances other than those covered by A above, the utility will replace its existing overhead electric facilities with underground electric facilities along public streets and roads or other locations mutually agreed upon when requested by an applicant or applicants when all of the following conditions are met:
- 1.a. All property owners served from the overhead facilities to be removed first agree in writing to have the wiring changes made on their premises so that service may be furnished from the underground distribution system in accordance with the utility's rules and that the utility may discontinue its overhead service upon completion of the underground facilities, or
  - b. Suitable legislation is in effect requiring such necessary wiring changes to be made and authorizing the utility to discontinue its overhead service.

APPENDIX B  
Page 3 of 3

2. The applicant has:
  - a. Furnished and installed the pads and vaults for transformers and associated equipment, conduits, ducts, boxes, pole bases and performed other work related to structures and substructures including breaking of pavement, trenching, backfilling, and repaving required in connection with the installation of the underground system, all in accordance with the utility's specifications, or, in lieu thereof, paid the utility to do so;
  - b. Transferred ownership of such facilities, in good condition, to the utility; and
  - c. Paid a nonrefundable sum equal to the excess, if any, of the estimated costs, exclusive of transformers, meters, and services, of completing the underground system and building a new equivalent overhead system.
3. The area to be undergrounded includes both sides of a street for at least one block or 600 feet, whichever is the lesser, and all existing overhead communication and electric distribution facilities within the area will be removed.
- C. In circumstances other than those covered by A or B above, when mutually agreed upon by the utility and an applicant, overhead electric facilities may be replaced with underground electric facilities, provided the applicant requesting the change pays, in advance, a nonrefundable sum equal to the estimated cost of the underground facilities less the estimated net salvage value and depreciation of the replaced overhead facilities. Underground services will be installed and maintained as provided in the utility's rules applicable thereto.
- D. The term "underground electric system" means an electric system with all wires installed underground, except those wires in surface mounted equipment enclosures.