

ORIGINAL

Decision No. 78294

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation on the Commission's own motion into the Rules Pertaining to Underground Extensions to Commercial and Industrial Developments and to Individual Customers of all Electric and Communication Public Utilities in the State of California. Investigation on the Commission's own motion into Mandatory Requirements for Underground Extensions.

Case No. 8993
(Filed November 4, 1969;
Amended February 20, 1970)

(See Appendix A for Appearances)

O P I N I O NIntroduction

This investigation was opened on November 4, 1969 to develop an updated record pertaining to underground extensions by electric and telephone utilities to commercial and industrial developments and to individual customers. The scope of the investigation was enlarged on February 20, 1970 to determine whether or not the underground extension rules for residential subdivisions should be mandatory.

Public hearings on this proceeding were held before Commissioner Sturgeon and Examiner Catey in San Francisco on February 16, June 22, 23, 24 and 25, and September 21 and 23, 1970; in Los Angeles on March 17 and 18, 1970; in San Diego on April 27, 28, 29 and 30, 1970; and in Tahoe City on July 29, 30 and 31, 1970. The portion of the proceeding relating to mandatory underground rules

for residential subdivisions was disposed of by interim Decision No. 77187, dated May 5, 1970, subject only to possible modification in this final decision. The remaining phases of this proceeding were submitted September 23, 1970, subject to receipt of opening briefs on October 23, 1970 and reply briefs on November 2, 1970. Opening briefs were filed by Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), Southern California Edison Company (SCE), Southern California Gas Company (SCG), California Independent Telephone Association (CITA), General Telephone Company of California (General), The Pacific Telephone and Telegraph Company (TPT&T), the Commission staff (Staff), California Builders Council (Builders), The Irvine Company (Irvine), Westlake Village (Westlake), Western Developers Council (Developers) and League of California Cities (Cities). Reply briefs were filed by the same parties, excluding Staff, Developers and Cities.

The matter now is ready for decision.

Present Commercial and Industrial Rules

The present rules applicable to underground extensions of electric lines to serve new commercial and industrial developments provide, in general:

- (1) Underground line extensions will be made only where mutually agreed upon by the utility and the applicant for the extension, or where the utility has adopted underground construction for the utility's operating convenience or to comply with requirements of public authorities.
- (2) The applicant for the extension must provide a nonrefundable contribution of the difference in cost between the underground and an equivalent overhead extension.

- (3) The applicant for an extension must provide a refundable advance of the cost, based upon overhead construction costs, of any length of extension in excess of a free-footage allowance based upon connected load.
- (4) Refunds of advances are based upon additional loads connected to the extension within ten years and the additional free footage consistent therewith that would have been allowed if the additional load had been connected initially.

The present rules applicable to underground extensions of telephone lines to serve new commercial and industrial developments where the electric line extensions are also underground provide, in general:

- (1) Where underground costs do not materially exceed aerial costs, the utility will construct an underground line extension at no charge to the applicant for the extension.
- (2) Where underground costs materially exceed aerial costs, the applicant for the extension must provide a nonrefundable contribution of the difference in cost between the underground and an equivalent overhead extension.

Proposed Commercial and Industrial Rules

The rule originally proposed in Exhibit No. 3 by PG&E, SCE and SDG&E, to be applicable to underground extensions of electric lines to serve new commercial and industrial developments provides, in general:

- (1) The applicant for the extension must provide, as a nonrefundable contribution, all necessary excavation and backfill.
- (2) The applicant for the extension must furnish and install, as a nonrefundable contribution, transformer vaults and/or subsurface transformer enclosures.

- (3) The applicant for the extension must furnish and install, with the cost being treated as a refundable advance, any necessary conduit and other substructures required, excluding transformer vaults and subsurface transformer enclosures.
- (4) The utility will complete, at its own expense, the remainder of the underground distribution system within the development.
- (5) Refunds of advances are made if, within ten years, the annual revenue from the development exceeds the "total cost", excluding that of excavation and backfill, of the utility's facilities installed to extend service to the development.
- (6) Until annual revenue from the development equals or exceeds 50 percent of the "total cost", as that term is used in (5), the applicant for the extension must pay (in the form of reduction in ultimate potential refund of advances) annual ownership charges of nine percent of the unrefunded advances.

The rule then proposed in Exhibit No. 21 by Staff, to be applicable to underground extensions of electric lines to serve new commercial and industrial developments, differs from the rule proposed in Exhibit No. 3 in the following general aspects:

- (1) The utility will provide, at its own expense, the first 200 feet of supply circuit extending beyond the boundaries of the development to reach the utility's existing supply facilities.
- (2) Cost of subsurface transformer enclosures will be part of the refundable advance instead of being part of a nonrefundable contribution.
- (3) Instead of lump sum refunds of advances within a ten-year qualifying period and qualifying annual revenue of 100 percent of "total cost" of the extension, partial refunds will become payable as annual revenue within three years reaches 25 percent of "total cost", with proportionately larger refunds becoming due as annual revenue increases, and with full refund when annual revenue within three years reaches 100 percent of "total cost".

- (4) "Total cost" excludes, rather than includes, transformers, meters and services.
- (5) No ownership costs are payable to the utility by the applicant for the extension.

The revised rule subsequently proposed in Exhibit No. 3-A by PG&E, to be applicable to underground extensions of electric lines to serve new commercial and industrial developments, differs from the rule originally proposed in Exhibit No. 3 in the following general aspects:

- (1) Staff's recommendation of a 200-foot utility-financed supply circuit outside the development is adopted, but only where the existing supply facility is underground.
- (2) Staff's recommendation regarding inclusion of the cost of subsurface enclosures as a refundable advance, rather than a nonrefundable contribution, is expanded to include vaults but both enclosures and vaults will be contributions if they are for three-phase service.
- (3) Staff's recommendation regarding graduated proportional refunds of advances, with a three-year time limit, is adopted with minor modifications.
- (4) Staff's recommendation regarding elimination of ownership costs is adopted.

No specific rules for commercial and industrial electric line extensions were presented by other parties. In the opening brief filed jointly by Builders, Irvine and Westlake, however, those parties conclude that "...underground installations are going to be at utility expense...." At the other end of the spectrum of potential rules, the opening brief for Cities concludes that "City officials...strongly believe that any additional costs [due to undergrounding] should be borne directly by the benefitting property owners - as opposed to increasing utility rates...".

The rule proposed in Exhibit No. 10 by TPT&T, to be applicable to underground extensions of telephone lines to serve new commercial and industrial developments provides, in general:

- (1) Where conduit construction is required, the applicant for the extension will construct the underground supporting structure. The conduit materials will be at the utility's expense but the cost of installation will be a nonrefundable contribution by the applicant. The utility will install the cable and otherwise complete the underground line extension at its expense.
- (2) Where buried cable can be used in a joint trench with others, the applicant for the extension will pay only the cost of any required pavement cutting and replacing, as a nonrefundable contribution and the utility will construct the underground extension without charge.

An alternative telephone line extension rule proposed in Exhibit No. 16 resulted from discussions among TPT&T, General, CITA and Staff. The portion of this rule applicable to underground commercial and industrial extensions is similar to the rule in Exhibit No. 10 but provision has been added for a refundable advance by an applicant for an extension to a low-density (less than five main telephones, or less than one main telephone per acre) development. The amount to be advanced is the cost which the utility would have provided if the density requirements had been met. No refund of the advance will be made after three years. The language in the proposed rule was clarified in the modified rule presented in the telephone utilities' Exhibit No. 16-A. Further such minor changes were incorporated in those utilities' final version of their proposed rule in Exhibit No. 16-B.

No specific rules for commercial and industrial telephone line extensions were presented by other parties. The only reference to telephone line extension rules in the parties' opening briefs

is the advocacy by CITA, General, TPT&T and Staff of the rule proposed in Exhibit No. 16-B. In the joint closing brief of Builders, Irvine and Westlake, however, those parties objected to the rule in Exhibit No. 16-B, contending that when underground is mandatory, then underground is the standard and the utility should pay the costs of trenching and backfill.

Present Individual Rules

The present rules applicable to underground extensions of electric and telephone lines to serve new individual customers are essentially the same as those applicable to underground extensions to serve new commercial and industrial customers. None of the parties suggested any modification in the rules applicable to extensions to serve individual customers.

Discussion

Customers receiving electric and telephone service can be grouped, for the purposes of this discussion, into five general categories:

- (1) Customers still served by overhead lines and thus where no additional installation cost for undergrounding has been incurred.
- (2) Customers served by underground extensions which were installed originally, or which replaced formerly overhead lines, under present and previous rules wherein the additional installation cost of undergrounding has been contributed by the applicant for the extension or replacement.
- (3) Customers served by underground extensions which were installed under the present residential subdivision rule, wherein part of the additional installation cost of undergrounding may have been provided by the utility.

- (4) Customers served by underground facilities which replaced overhead lines, at the utility's expense, in underground districts created by local ordinances.
- (5) Customers served by underground extensions installed under whatever rules are prescribed herein.

No distinction now is made, nor do we consider it appropriate for a distinction to be made, in the utility rates charged to these five groups. It is important, then, that the line extension rules do not result in unreasonable disparities in utility investment in facilities to serve similar customers in the five groups.

There would be some justification in keeping the present line extension rules unchanged. By so doing, the utilities' rate bases would not include any additional cost of undergrounding lines to serve individuals, commercial developments and industrial developments and the utilities' rates would not include provision for any return on that additional cost. Customers still receiving service from overhead extensions would not be subsidizing the benefits of undergrounding, most of which benefits they do not themselves receive. Customers receiving service from underground lines installed under various present and previous extension and replacement rules would not be paying twice for undergrounding: once when the extra cost of their particular extension was contributed to the utility; a second time when paying part of the return on the extra cost of extensions to serve others who did not contribute those extra costs.

It is recognized, however, that we are in the relatively early stages of transition from essentially overhead to essentially underground electric and telephone lines. As new residential extensions are installed underground and existing overhead lines are

replaced by underground facilities, present rules for such installations result in a progressively larger utility investment in the extra cost of undergrounding. Under these circumstances, it is not inappropriate to liberalize somewhat the rules for commercial, industrial and individual underground extensions. As conversion of existing overhead lines to underground progresses over the years, it may eventually become reasonable for the utilities to absorb all of the cost differential relating to subsequent extensions.

In the meantime, equitable treatment to the various customers of the utilities requires that applicants for extensions to serve new commercial, industrial and individual customers continue to pay a reasonable portion of the cost of undergrounding. Continuing the present rules, whereby all of the extra cost is contributed by the applicant for the extension, would not give recognition to the aesthetic benefits to the public at large in avoiding unsightly poles, wires and cables. The underground facilities provide an intangible benefit to the public on the streets and sidewalks within sight of the premises served. This is in addition to the intangible and tangible benefits to the commercial, industrial and individual customers served by the extensions. In recognition of, among other considerations, the visual improvement of the environment effected by undergrounding utility lines, the rules prescribed by the order which follows will result in partial participation by the utilities in the extra costs of undergrounding.

Revised Commercial, Industrial and Individual Rules

The revised rules prescribed herein to be applicable to underground extensions of electric lines to serve new commercial and industrial developments are based upon the rule proposed by Staff in Exhibit No. 21, with the following modifications:

Rule Section

Modifications

- B.1.b. Instead of having the applicant for the extension furnish and install "any necessary conduit", the applicant will be required to furnish and install only that conduit necessary to serve the development, with the utility paying for conduit installed in anticipation of future extensions. The applicant will, however, be required to reimburse the utility for conduits which the utility had already installed in conjunction with a previous extension in anticipation of the current extension. This places the burden upon the applicant who benefits from the advance planning.
- B.1.b. The "substructures" to be provided by the applicant are more clearly defined to include such items as switchgear vaults and concrete encasement of conduit, where required. A statement also is added that transformer pads normally will be utilized but that subsurface transformer enclosures, if feasible, or vaults may be substituted at the option of the applicant. This should avoid confusion and result in uniform interpretation of the rule.
- B.2.a. The statement of facilities to be completed at utility's expense is amplified to show that it includes fences or boxes required by the utility around pad-mounted transformers.
- B.2.b. The description is enlarged to explain that the 200-foot extension outside the development and provided by the utility includes a riser to bring the underground lines up to overhead line level when existing supply lines are overhead. This gives more equitable treatment between extensions connected to existing underground and existing overhead lines.
- B.2.b. The description is amplified to state that the length of the extension will be based upon the utility's nearest existing supply facilities, irrespective of whether that point of connection actually is used or not. This permits the utility to use a more distant connection point for its own convenience without penalizing the applicant.
- B.5. The statement regarding installation of street lights is expanded to clarify that appurtenant facilities specifically for

the street lights, as well as the street lights themselves, are installed in accordance with the appropriate tariff schedule. The various street lighting rate schedules of the utilities set forth the relative responsibilities of the applicant and the utility for such installations.

- C.1.a. PG&E's recommendation of including cost of vaults for single-phase transformers in refundable advances and including cost of vaults and enclosures for three-phase transformers as nonrefundable advances appears to be a reasonable division of the extra costs of undergrounding. It is adopted as set forth in Exhibit No. 3-A.
- C.2.b. This is changed to provide for second- and third-year refunds when the total refund due exceeds the amount already refunded. There could be unusual situations where construction takes place over more than one year and the comparisons of revenue-to-cost percentages in Staff's rule, instead of total refunds due, would be inequitable.
- C.3. The statement of the three-year refund period is clarified as recommended in briefs filed by Staff and by SCG.

In the various briefs, a number of objections and suggested modifications to Staff's proposed rule in Exhibit No. 21 were presented, only some of which we have reflected in the rule prescribed herein. Some of the objections and suggestions not so reflected are worthy of discussion.

Builders^{1/} contends the proposed rule is discriminatory because it results in a higher revenue-to-investment ratio for commercial and industrial extensions than for residential extensions. Although revenue is used as a convenient basis for determining

^{1/} Irvine and Westlake joined in Builders' briefs.

timing and extent of refund of advances under Staff's proposed rule, in lieu of the connected-load basis used in the present rule, there is nothing to indicate that the ratio of gross revenue to the cost of an extension should necessarily be the same for all types of extensions.

Builders contends that the utilities should pay for trenching and backfill because gas and water utilities do. Gas and water utilities do not have major portions of their present distribution systems above ground. The provision for the applicant to perform the excavation and backfill is similar to the requirements of the extension rules for residential subdivisions and is directly related to the fact that no such trenching and backfill is required for overhead lines.

Builders contends that the utilities should be prohibited from requiring duplicate ducts installed to facilitate continuity of service in the event the original cable becomes unusable. We have not placed this restriction in the rule because there may well be instances where redundancy is warranted by local conditions.

Builders contends that the three-year limit on refunds of advances is unreasonably short. Although three years is admittedly a fairly short time for some commercial and industrial developments, it is noted that cost-of-ownership charges such as those found reasonable for residential extensions and proposed in

Exhibit No. 3 for commercial and industrial extensions would have reduced the refundable portion of the advance by 27 percent within three years. Under Staff's proposed rule, no such reduction is made. In recognition of the utilities' absorbing costs of ownership, the three-year period is reasonable.

Builders suggests that limitations might be placed on concrete encasement of conduit. There are many possible divergent local conditions that are not feasible to incorporate in the rule. Also, there are times when concrete encasement may result in lower overall cost, where lighter weight conduit can be employed due to the encasement.

Builders questions the use of a single project "completion date" for determining when the three-year period for refund of advances will commence, inasmuch as some developments take place in stages over several years. There is nothing in the rule to prevent the installation of the necessary extensions under a master plan whereby (1) reasonable portions of the extensions are assigned to each phase of the development, (2) customers within each phase are assigned to the related facilities, and (3) "completion dates" are based upon the dates applicable to each phase.

Builders suggest that a definition might be added to decide whether a mixed development is residential or commercial. This does not appear to be necessary. Any reasonable proration of facilities between the residential and the commercial extension rules would be acceptable.

Builders contends that mandatory underground extension rules establish undergrounding as "standard" and that no contribution should be provided by applicants for extensions to cover any of the extra costs of underground as compared with aerial construction. That is not a valid conclusion, as we have explained under "Discussion".

SCG suggests that the "completion date" be defined as the date on which service is first supplied, rather than the date the utility is first ready to render service. This change could result in requests for completion of extensions unreasonably far in advance of need. It is not adopted.

SCG suggests that the rule set forth specific unit costs for conduit installations. With the many diverse physical situations which might be encountered under this rule, this suggestion does not appear feasible.

The electric utilities propose that the "total cost", which is compared with revenues to determine refund of advances, include the cost of transformers, meters and services. On the other hand, SCG recommends not only exclusion of those items from "total cost" as proposed by the Staff, but also exclusion of the cost of

vaults. The use of comparative ratios of revenues to costs is a convenient means of judging the timing and extent of refunds but is not so precise as to require conclusively that the items in question be either included or excluded. The Staff's proposal appears to represent a reasonable middle ground within the range of acceptable definitions of "total cost".

The revised rule prescribed herein to be applicable to underground extensions of telephone lines to serve new commercial and industrial developments is essentially the rule proposed in Exhibit No. 16-B by TPT&T and concurred in by CITA, General and Staff. Builders' objections to contributions by applicants for underground telephone line extensions on the grounds that undergrounding is "standard" construction are similar to Builders' parallel objections in regard to electric lines. They are not valid, as hereinbefore discussed.

We have previously discussed herein the concept that early in the transition period from essentially all overhead to essentially all underground electric and telephone distribution lines, much of the extra costs of undergrounding should be borne by applicants for extensions but, part might appropriately be borne by the utilities. This concept is reflected in the rules prescribed herein for commercial and industrial extensions. Consistent therewith, the rules for underground extensions to serve new individual customers should be modified to provide for partial participation by utilities in the extra costs of undergrounding. The extent of such participation is

a matter of judgment of this Commission and does not lend itself to precise mathematical calculations. Considering the utilities' participation in extra costs of underground extensions other than to individuals, it appears that about one-fourth of the extra cost of extensions to individuals could be appropriately furnished by utilities. The rules prescribed herein so provide.

Mandatory Undergrounding

Decision No. 77187, dated May 5, 1970, made undergrounding of electric and telephone line extensions in any new residential subdivision mandatory unless a specific deviation is authorized by the Commission. Several developers of recreational subdivisions and some rural cooperative electric utilities object to this.

A number of blanket exemptions have been proposed, such as extensions to "land project" developments where the local governing body condones overhead extensions. We do not consider any such blanket exemptions to be appropriate. With improvements in technology and materials, undergrounding may become economically feasible in many instances where it may not now be feasible. We wish to review the particular situation in each case where a deviation is to be considered. We do not wish to abdicate our responsibilities by delegating to local governing bodies the right to deny or grant deviations from the rules we have prescribed.

Similarly, the rules prescribed herein for extensions to commercial and industrial developments require undergrounding unless specific deviations are authorized in individual cases. There is

insufficient evidence in the record, however, to warrant making undergrounding mandatory for an extension to serve an individual customer. The general provisions of the present rule applicable to extensions to individuals result in undergrounding of such extensions where existing and planned nearby facilities also are underground. To require a single individual to be served by an underground extension where all other facilities in the area are overhead might be unreasonable.

Findings and Conclusions

The Commission finds that:

1. The present rules for extension of underground electric and telephone lines to serve individuals and to serve commercial and industrial developments require the applicant for the extension to contribute to the utility essentially all of the difference in cost between the underground extension and an equivalent overhead extension.
2. The present rules for extension of underground electric and telephone lines to serve new residential subdivisions require the applicant for the extension to provide trenching and backfilling for electric lines but require the utilities to absorb essentially all other additional costs of undergrounding.
3. The present rules for conversion of existing electric and telephone lines to underground lines require that the extra cost of undergrounding be contributed by the applicant in some cases and absorbed by the utility in other cases.

4. It is reasonable to modify the present rules for extension of electric lines to serve individuals and to serve commercial and industrial developments so that, on the average, the utilities will absorb a portion of the extra costs of underground as compared with overhead extensions.

5. The revised rules prescribed in the order which follows result in an equitable sharing by the applicant and the utility of the costs of undergrounding.

6. All extensions of electric and telephone lines to serve new residential subdivisions and new commercial or industrial developments should be underground unless a deviation from this requirement is authorized by this Commission.

The Commission concludes that the present rules for extension of electric and telephone lines to serve individuals and to serve commercial and industrial developments should now be modified as set forth in the order which follows.

O R D E R

IT IS ORDERED that:

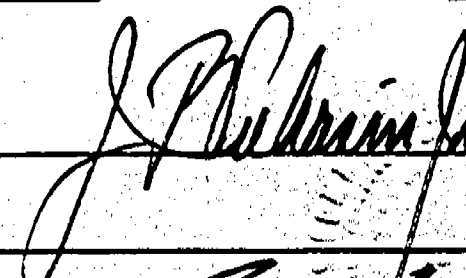
1. Within thirty days after the effective date of this order, each respondent providing electric service shall file, in accordance with the procedure prescribed by General Order No. 96-A, the rules substantially as set forth in Appendix B attached to this decision and, concurrently, cancel and revise any of the present tariff sheets as necessary to make them consistent with the rules prescribed in Appendix B. The new and revised tariff sheets shall become effective on the fifth day after the date of filing.

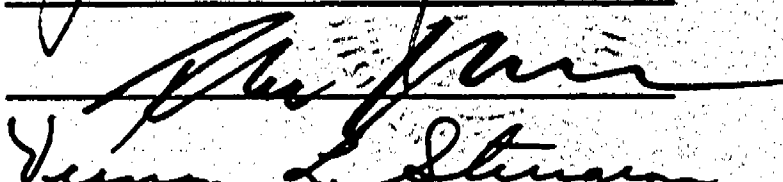
2. Within thirty days after the effective date of this order, each respondent providing communication service shall file, in accordance with the procedure prescribed by General Order No. 96-A, the rules substantially as set forth in Appendix C attached to this decision and, concurrently, cancel and revise any of the present tariff sheets as necessary to make them consistent with the rules prescribed in Appendix C. Concurrently, each respondent providing communication service shall file a revised service connection rule which shall be consistent with the provisos prescribed in Appendix C. The new and revised tariff sheets shall become effective on the fifth day after the date of filing.

3. All motions, not consistent with (a) the findings in the foregoing opinion and (b) the rules prescribed herein, are denied.

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

Dated at San Diego, California, this 9th day of FEBRUARY, 1971.


Chairman


Commissioners

Commissioner William Symons, Jr., being necessarily absent, did not participate in the disposition of this proceeding.

APPENDIX A
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LIST OF APPEARANCES

<u>PARTY</u>	<u>APPEARANCE</u>
<u>Respondent Electric Utilities</u>	
Anza Electric Cooperative, Inc. California-Pacific Utilities Company Pacific Gas and Electric Company	<u>G. J. Whittlinger</u> <u>John P. Vetromile</u> <u>Daniel E. Gibson</u> , <u>John C. Morrissey</u> , <u>F. T. Searls</u> , and <u>Ross Workman</u>
Plumas-Sierra Rural Electric Cooperative San Diego Gas & Electric Company	<u>A. E. Engel</u> <u>Chickering & Gregory</u> (by <u>C. Hayden Ames</u> , <u>Sherman Chickering</u> , <u>David R. Pigott</u> , and <u>Donald J. Richardson, Jr.</u>) and <u>Stanley Jewell</u> <u>Richard G. Campbell</u> and <u>Ralph P. Cromer</u>
Sierra Pacific Power Company	<u>H. W. Sturges, Jr.</u> , <u>H. Clinton Tinker</u> , and <u>R. E. Woodbury</u>
Southern California Edison Company	
Southern California Water Company Surprise Valley Electrification Corporation	<u>William V. Caveney</u> <u>Donald W. Hicks</u>
<u>Respondent Telephone Utilities</u>	
Continental Telephone Company of California General Telephone Company of California The Pacific Telephone and Telegraph Company	<u>C. N. Morris</u> <u>Donald J. Duckett</u> and <u>A. M. Hart</u> <u>George A. Sears</u> and <u>Pillsbury, Madison & Sutro</u>
<u>Interested Parties</u>	
American Water Works Associa- tion, California Section Boise Cascade Properties, Inc., and Boise Cascade Properties, Inc., of Delaware California Builders Council California Farm Bureau Federation California Independent Telephone Association California Manufacturers Association California Water Service Company W. H. Clifford Co.	<u>C. G. Ferguson</u> and <u>G. A. Wyss</u> <u>John H. Cutler</u> <u>Fred F. Cooper</u> <u>William L. Knecht</u> <u>Neal C. Hasbrook</u> <u>Robert E. Burt</u> <u>C. G. Ferguson</u> and <u>Parker M. Robinson, Jr.</u> <u>W. H. Clifford</u>

APPENDIX A
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El Dorado County Developers
Association
The Irvine Company
League of California Cities

City of Los Angeles, Department
of Water & Power
City of Long Beach
Occidental Petroleum Land &
Development Corp.; Rancho
California; Santa Rosa
Ranches; Macco Corp.;
Auland Development Corp.;
Dart Industries
Oceanic Properties, Inc.
Moffett Park Associates

16 Recreational Community
Developers
Sacramento Municipal Utility
District
City of San Diego

Southern California Gas
Company
Tahoe Paradise, Inc.
Titan Group, Inc.
U & D Investment Co.
City of Walnut Creek
Westlake Village
William Lyon Development Co.,
Inc.

California Public Utilities
Commission

Staff Counsel
Utilities Division

George C. Baron
Jay Panchal and Gordon Jones
Ralph Andersen and Daniel J.
Curtin, Jr.

Allen D. Fricke and G. A. Wyss
Louis Possner

Kalmbach, De Marco, Knapp &
Chillingsworth, by
Terry E. Rhodes
Reverdy Johnson
Slinger & Associates, Inc. (by
Robert Membreno)

Sam Whiting

Donald M. Haight
John C. Witt (by C. M.
Fitzpatrick and Kenneth H.
Lounsbery)

K. R. Edsall, John Ormasa and
Robert Salter
George C. Baron
Elaine S. Schwartz
Richard A. Dyer
Daniel J. Curtin, Jr.
Ronald F. Mayer

Ronald C. Douglas

Timothy E. Treacy
Kenneth J. Kindblad

APPENDIX B
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ELECTRIC UTILITIES

RULE NO. 15[#] - LINE EXTENSIONS

* * * *

D. Underground Extensions

1. General

- a. All line extensions to serve new residential subdivisions shall be made under Rule No. 15.1[#] unless exempted by Section C of Rule 15[#]. All line extensions to serve commercial and industrial developments shall be made under Rule No. 15.2[#]. Underground line extensions to serve individuals will be made only where mutually agreed upon by the Utility and the applicant, except in those areas where the Utility maintains or desires to maintain underground distribution facilities for its operating convenience or in compliance with applicable laws, ordinances, or similar requirements of public authorities.

2. Utility-Installed Extensions to Serve Individuals

- a. Normally, underground extensions will be installed, owned and maintained by the Utility, provided the applicant pays in advance a nonrefundable sum equal to three-fourths of the estimated difference between the cost, exclusive of transformers, meters and services, of the underground extension and an equivalent overhead extension.
- b. In addition to the nonrefundable sum, applicant shall advance an amount, if any, which shall be determined, as provided in Section B.3., from the difference in length of equivalent overhead extension required and the free allowance.
- c. The amount advanced in accordance with Section D.2.b. will be subject to refund in accordance with Section B.3.b.
- d. Underground services will be installed and maintained as provided in Rule No. 16[#].

[#] Utility to insert appropriate rule number.

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3. Applicant-Installed Extensions to Serve Individuals

- a. Where mutually agreed upon by the Utility and the applicant, all or a portion of an underground extension may be installed by the applicant in accordance with the Utility's specifications. Upon acceptance by the Utility, applicant will transfer ownership of such facilities to the Utility.
- b. Any additional underground facilities necessary to complete the extension, exclusive of transformers, meters and services, shall be installed by the Utility, provided the applicant pays in advance (1) a nonrefundable sum equal to three-fourths of the estimated difference between the cost of that portion of the underground extension and the corresponding portion of an equivalent overhead extension, and (2) a refundable sum equal to the estimated cost of the corresponding portion of an equivalent overhead extension.
- c. Upon meeting the requirements of Sections D.3.a. and D.3.b. by applicant, the Utility shall refund an amount equal to the estimated cost of the equivalent overhead extension necessary to serve the applicant; provided, however, that the length of equivalent line on which such refund is based shall not be greater than the free-footage allowance set forth in Section B.
- d. Underground services will be installed and maintained as provided in Rule No. 16#.

* * * *

RULE NO. 15.2[#] - UNDERGROUND EXTENSIONS
WITHIN NEW COMMERCIAL AND INDUSTRIAL
DEVELOPMENTS

Extension of Utility underground distribution lines at available standard voltages necessary to furnish permanent electric service within a new commercial or industrial development on a single parcel or on two or more contiguous parcels of land will be made by the Utility in accordance with the following provisions:

A. General

The Utility will construct, own, operate, and maintain underground lines only along public streets, roads, and highways which the Utility has the legal right to occupy, and on public lands and private property across which rights of way and easements satisfactory to the Utility may be obtained without cost or condemnation by the Utility.

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B. Installation

1. The developer of the commercial or industrial development will:
 - a. Perform all necessary excavating and backfilling, including furnishing of any imported backfill material required.
 - b. Furnish and install any conduit and substructures necessary to serve the development, including reimbursement to the Utility of the cost of such necessary conduits and substructures which the Utility had installed at its own expense in conjunction with a previous extension, in anticipation of the current extension. Substructures shall include such items as switchgear vaults and concrete encasement of conduit, where required.
 - c. Deed to the Utility such conduit and substructures, except conduits and enclosures that are on, within, or a part of a building or structure.
2. The Utility will complete at its expense:
 - a. The installation of the underground distribution system within the commercial or industrial development, including fences or boxes required by the Utility to protect pad-mounted transformers, except that the Utility will install only those facilities that, in its judgment, will be used within a reasonable time to serve permanent bona fide loads within the development.
 - b. Any portion of the supply circuit which may extend beyond the boundaries of the development to the Utility's existing supply facilities that, including any riser needed to bring underground lines up to existing overhead line level, is not in excess of 200 feet. Measurements will be based upon the Utility's nearest supply facilities, irrespective of whether that point of connection actually is used or not.
 - c. Any conduit and substructures not needed for the current extension but included in the Utility's plans in anticipation of future extensions.
3. Any required extension from the Utility's existing supply facilities to the boundary of the commercial development that is in excess of 200 feet will be made either overhead or underground in accordance with Rule No. 15#.

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4. Underground services will be installed and maintained as provided in Rule No. 16#.
5. Street lights and appurtenant facilities will be installed in accordance with the appropriate tariff schedule.
6. Any distribution facilities installed as herein provided will be owned, operated, and maintained by the Utility (except for conduits and enclosures that are on, within, or a part of a building or structure).

C. Refunds to Developer

1. As used herein the following terms have the following meanings:
 - a. The "amount subject to refund" is the Utility's estimate of the installed cost of the conduit and other substructures installed and deeded to the Utility in accordance with B.l., exclusive of excavating, backfilling, and vaults or enclosures designed to accommodate transformers that will supply three-phase service.
 - b. The "total cost" is the Utility's estimate of the installed cost of the facilities to be owned by it excluding transformers, meters, and services. It does not include the cost of excavating and backfilling.
 - c. The "completion date" is the date on which the Utility is first ready to render service from the extension.
 - d. "Revenue" is the Utility's recorded revenue from sales to customers within the development connected to the extension.
2. Refunds to developers will be made on the following basis:
 - a. The billed revenue for the first 12-month billing period following completion date of the installation shall be compared with the total cost, as a percentage. This percentage, applied to the amount subject to refund, shall determine the amount of refund to be paid promptly to the developer, without interest, except that no refund will be made if revenue is less than 25 percent of cost.
 - b. Billed revenues for each of the second and third 12-month billing periods shall similarly be compared with the total cost and additional refunds made if and to the extent that the total refund then due exceeds the amount already refunded.

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3. No payment will be made by the Utility in excess of the amount subject to refund nor after the final refund based upon the third 12-month period.

D. Special Conditions

1. Developers requesting an underground extension within a commercial or industrial development in advance of applications for service will be required to execute written contracts in the form on file with the Public Utilities Commission.

2. Rules Previously in Effect

Amounts advanced under the conditions established by a rule previously in effect will be refunded in accordance with the requirements of such rule.

3. Exceptional Cases

In unusual circumstances, when the application of this rule appears impractical or unjust to either party, the Utility or the developer may refer the matter to the Public Utilities Commission for special ruling, or for the approval of special conditions which may be mutually agreed upon prior to commencing construction.

E. Definitions

1. Commercial developments consist of two or more enterprises engaged in trade or the furnishing of services, e.g., shopping centers, sales enterprises, business offices, professional offices, and educational or governmental complexes.
2. Industrial developments consist of two or more enterprises engaged in a process which creates a product or changes materials into another form or product.

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TELEPHONE UTILITIES

RULE NO. __ #, LINE EXTENSION

DEFINITIONS

Subdivision:

Improved or unimproved land under a definite plan of development wherein it can be shown that there are reasonable prospects within the next three years for five or more non-temporary main telephones or PBX trunk line terminations at a density of at least one per acre.

Applicant:

An individual or concern making application to the Utility for telephone service or installation of facilities.

LINE EXTENSION RULE

I. General

- A. The Utility will construct, own and maintain line extensions along dedicated streets and acceptable easements which can be obtained without charge or condemnation.
- B. Where the applicant requests a route or type of construction which is feasible but differs from that determined by the Utility, he will be required to pay the estimated additional cost involved.
- C. In lieu of all or part of the above payment, the applicant may furnish such materials or perform such work as may be mutually agreed between the Utility and the applicant. Upon acceptance by the Utility, ownership of any materials so furnished shall vest in the Utility.
- D. In suburban areas, charges for line extensions apply as set forth in Schedule Cal. P.U.C. No. __ #.
- E. Line extensions to serve temporary or speculative projects are subject to the provisions of Rule No. __ #.
- F. Where its own operating conditions warrant, the Utility will extend and maintain its facilities underground at its expense.

Utility to insert appropriate number.

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- G. Only underground line extensions will be constructed within a new single-family and/or multi-family residential real estate development of five or more lots and in a new residential development consisting of five or more dwelling units in two or more buildings located on a single parcel of land unless a master plan, preliminary map or tentative map has been filed for the real estate development with the appropriate local authorities pursuant to the Subdivision Map Act on or prior to May 5, 1970, and where an agreement has been entered into with the electric utility for service prior to May 5, 1972.
- H. If an applicant can and does elect to be served by aerial electrical facilities, the Utility is not obligated to construct underground.
- I. In exceptional circumstances, when the application of these rules appears impractical or unjust, the Utility or the applicant may refer the matter to the Public Utilities Commission for special ruling or for approval of mutually agreed upon special conditions prior to commencing construction.

II. Aerial Line Extensions

Aerial line extensions will be constructed at the Utility's expense subject to the general provisions in I. above.

III. Underground Line Extensions

- A. Line extensions for new subdivisions in their entirety (for line extensions to individual applicants see III.C.):
 - 1. Within subdivisions where all requirements will be for residential service or where buried cable is to be used for line extension facilities:
 - a. The utility will provide and construct an underground extension without charge, subject to the Utility's being able to occupy trenches jointly, where economy dictates, upon payment by the Utility of its pro-rata cost thereof, and
 - b. The applicant will perform or pay for any pavement cutting and repaving, and for clearing the route and grading it to within six inches of final subgrade, all in time to give the Utility a reasonable construction period.

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2. Within subdivisions where there will be a requirement for business service and the Utility determines an underground supporting structure is needed:
 - a. The Utility will provide the conduit material, and metallic manhole covers where specified, or, where mutually agreeable, the applicant may provide the conduit material to the Utility's specifications and the Utility will reimburse the applicant at the Utility's current cost for that type of conduit.
 - b. The applicant will construct to the Utility's specifications and deed to the Utility the complete underground supporting structure.
 - c. If the specifications (in b. above) include transiting conduit to serve parcels outside the subdivision, the Utility will provide all conduit material and reimburse the applicant his incremental cost attributable to transiting conduits over and above a total of four local and transiting conduits in any section of the underground supporting structure. The applicant and the Utility shall agree upon the amount of such reimbursement before construction begins.
 - d. The Utility will complete the line extension at its expense, subject to the provisions of 1. above where buried cable is to be used.
 - e. The applicant shall be responsible for loss, unreasonable breakage and any liability in connection with the conduit material or manhole covers provided to the applicant by the Utility.
 3. That portion of the line extension which may extend from the boundary of a subdivision to the Utility's distribution facilities will be constructed underground for a maximum of 200 feet; responsibilities for this construction will be the same as those within the subdivision as determined by 1. or 2. above. Any extension beyond such 200 feet will be constructed as provided in II. or III.C.
- B. Line extensions for new real estate developments in their entirety (for line extensions to individual applicants see III.C.), which do not satisfy the density requirement for a subdivision, will be constructed in the manner determined in A. above, provided:
1. The applicant, in addition to any labor or material to be furnished by him, will pay in advance the estimated total cost of the Utility's construction. Any difference between the amount advanced and the actual cost shall be advanced or refunded, as the case may be, within 60 days after completion of the Utility's construction.

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2. When, within the first three-year period after completion of construction, the subdivision density requirement has been met, the Utility will refund the advance in 1. above. If, at the end of the three-year period the subdivision density requirement has not been met, the Utility will refund that portion of the advance proportional to the ratio of the then permanent main telephone and PBX trunk line terminations density to the subdivision density requirement. No interest will be paid on such advances.

C. All other underground line extensions.

In cases other than those included in III.A. and B. above, if the applicant requests or is required to have underground line extensions he will pay in advance three-fourths of the estimated difference in cost between underground and equivalent aerial facilities.