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ORIGINALDecision No. 92603 JAN 21 1981

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation on the Commission's)
 own motion to provide for a)
 program for the furnishing of)
 tele-communications devices to)
 the deaf and severely hearing)
 impaired to be implemented by)
 each California telephone utility.)

OII No. 70
 (Filed May 6, 1980)

(See Appendix A for appearances.)

O P I N I O N

By its order dated May 6, 1980, the Commission instituted an investigation on its own motion to determine the requirements for telecommunications devices for the deaf and hearing-impaired and to design a program whereby telephone corporations would provide such devices to the certified deaf in accordance with the provisions of Section 2831 of the Public Utilities Code, which reads:

"2831. The commission shall design and implement a program whereby each telephone corporation shall provide a telecommunications device capable of servicing the needs of the deaf or severely hearing impaired, together with a single party line, at no charge additional to the basic exchange rate, to any subscriber who is certified as deaf or severely hearing impaired by a licensed physician, audiologist, or a qualified state agency. The commission shall phase-in this program, on a geographical basis, over a four-year period ending on January 1, 1984. The commission shall establish a rate recovery mechanism to allow telephone corporations to recover costs as they are incurred under this section."
 (SB 597, signed September 28, 1979)

Copies of the order instituting investigation were served upon all respondent telephone corporations and interested parties. Pursuant to the order a prehearing conference was held in San Francisco on June 20, 1980, resulting in an agreed upon procedure whereby the respondents and interested parties would present prepared testimony and exhibits setting forth comments and suggestions for the proposed program; and the staff, after consideration of such comments and suggestions, would later present a recommended program which would be subject to the filing of exceptions by all parties.

Public hearing was held before Administrative Law Judge Daly in San Francisco and the matter was submitted on October 22, 1980.^{1/}
TDD Devices

Before considering the staff's proposal and the exceptions thereto, the background of the development of telecommunication devices for the deaf (TDDs) should be recounted briefly. TDDs were made possible in the early 1960's when Robert Weitbrecht developed a modem (modulator-demodulator) and acoustic coupler that could be used to transmit and receive digital signals through the direct-dial telephone network. It was first applied to teletype-writer equipment using the Baudot Code, which is a 5-level character

^{1/} Respondents and interested parties were heard on August 25, 26, 27, 28, 29 and September 2, 3, 4, and 5, 1980. The staff presented its recommended program on October 6, 7, and 8, 1980 and those wishing to respond to the staff's proposal were heard on October 17 and 22, 1980. Written exceptions to the staff's proposal were filed by October 23, 1980.

code. When a teletypewriter key is hit on the sending TDD, a precise audible beep is sent through the telephone network to the receiving TDD, which translates the tonal beep to the numerical or alphabetical character intended by the sender. It is estimated that there are approximately 40,000 Baudot type TDDs in use throughout the United States.

At approximately the same time that the use of TDDs was expanding, the international standards of data and computer telecommunications were in the process of discarding the older 5-level system using the Baudot Character Code in favor of the more flexible 8-level system that uses the American Standard Code for Information Interchange (ASCII). In 1967 the Bell 103 modem enabled simultaneous communications in both directions by assigning two frequencies to the originator of a call and two frequencies to the recipient. The Weitbrecht modem was designed for half-duplex communication where the parties took turns talking. The new ASCII was primarily designed for the purpose of enabling computer terminals to communicate at a much faster rate than the Baudot system, but it is also compatible with the use of TDDs.

Staff's Proposal

To begin with the staff recommends the establishment of a three-person, industry-administrative committee for the purpose of selecting an organization to establish a trust and thereafter administer the trust in concert with the committee. A monthly charge of 15 cents would be applied to all telephone subscribers in the State

and placed in a trust fund against which all telephone utilities would charge their costs of deaf equipment acquisition and administration. As telephone utilities incur expenses relating to the provision of equipment to the deaf, they would be compensated by payments from the fund as approved by the administrative committee and trustee. The trustee would make regular reports on the status of the fund and would recommend changes in the customer billing surcharge when adjustments to the fund were deemed necessary.

The staff further recommends that each certified deaf user should be furnished with a telecommunications device meeting the following minimum specifications at no charge in addition to the basic telephone rate:

1. Keyboard send.
2. Visual electroluminescent display.
3. Hard-copy printout on 2.25 inch paper tape in lieu of visual display for users who cannot communicate with visual display.
4. Baudot 5-unit code.
5. Acoustical coupler for connection with telephone network.
6. Portable instrument not to exceed 12-pound weight with carrying case.
7. Alternate a.c. power and self-contained battery pack operations.
8. A direct-coupled instrument where required.

In addition the staff recommends that each user should be provided a signaling device containing a relay which will operate a lamp or other device furnished by the user to indicate when the telephone is ringing.

A hard copy printout is necessary for basic use of a TDD by many persons as a result of; (1) slow speed at which communication occurs (about 1/5 as fast as speech), 2) the eye fatigue which accompanies use of many visual displays, and 3) the translation process between the English language and American Sign Language. Sometimes it is necessary to see a larger portion of the thought in English than permitted by the visual display before being able to comprehend it in ASL. Several parties testified that it would be difficult to generalize as to which groups of deaf people would need hard copy.

The staff's proposal is more specifically set forth in attached Appendix B. Attached also as Appendix C is a tariff, which was introduced by the staff more for the purpose of illustrating the form to be followed rather than the rates and charges to be assessed.

Exceptions

The Pacific Telephone and Telegraph Company (Pacific) and General Telephone Company of California (General), the two major telephone utilities serving California, recommend adoption of the staff's proposals, with certain modifications.

General suggests that the equipment be owned by the trust and not recorded in the plant accounts because as an exempt organization, the trust would not be subject to state and federal income taxes or property taxes. These expenses would otherwise be incurred if the equipment were owned by the utilities and would be recoverable from the trust as administrative costs.

Pacific suggests that:

- (a) Members of the administrative committee should be employees of the participating telephone companies rather than individuals designated by the companies, which would eliminate the possibility of designating consultants at a higher cost to the fund;
- (b) The utilities should be able to subtract related expenditures from surcharge revenues before depositing monies in the fund, which would result in the net going to the fund;
- (c) Pacific should be allowed to apply the \$12 million, which was awarded in Decision No. 90919 (See Appendix B, Paragraph E) toward the expenditure of this program without physically transferring the money to the fund;
- (d) The committee and the trustee should be allowed to evaluate the need for an adjustment to the surcharge, and, during the first two years of the trust, the committee and trustee should have the discretion to require the filing of quarterly reports to assist them in determining whether adjustments to the surcharge are necessary to prevent under- or over-accruals of the fund;

- (e) The minimum standards should clearly indicate that an applicant is entitled to either a visual, electroluminescent display or a paper tape machine, but not both and that T adapters and cords should be included as basic equipment where required;
- (f) Because of limited space available on the bill face, the surcharge should be identified by an abbreviation, i.e. SB 597;
- (g) Special Condition 2 (See Appendix C) of the illustrative tariff should be modified to allow two TDDs per subscriber when more than one certified individual reside in the same household.

The staff witness, upon cross-examination by both counsel for General and Pacific, indicated that the staff would have no objection to these suggested changes.

Pacific also suggested that the surcharge be reduced from 15 cents to 10 cents. The staff's proposal of 15 cents (See Appendix B, Paragraph K) was based upon an estimate of 90,000 TDD units distributed throughout the State as a result of this program. According to the staff witness the 90,000 figure was a compromise between two

estimates of record. The first estimate of 43,500 was introduced by Pacific and was taken from a study prepared by Firing & Associates in January 1980, at the instance of Pacific. The second estimate of 220,000 was taken from a study prepared by Schein and Delk.

The Firing & Associates study estimates that the total hearing-impaired population in California is 1,665,000.^{2/} According to the study approximately one half (843,000) suffer bilateral hearing impairments. Of this number approximately one half can hear some speech and would not be considered as telephone limited. Of the remaining 377,000, only 43,500 would not be able to use the telephone without the use of a TDD. The remainder, the study concludes, could be assisted by use of hearing aids or by additional telephone amplifications.

Dr. Jerome D. Schein, Professor of Deafness Rehabilitation, New York University and co-author of the book, "The Deaf Population of the United States," testified that the Schein-Delk study incorporated its questions into the sample used by the National Center for Health Statistics, which contacts 42,000 households annually. By combining the national data with specific data relating to the region, it was estimated that in 1971-72 there were between 200,000 and 220,000 persons in California who could not hear or understand speech.

^{2/} The figures were taken from Exhibit 2 and rounded.

For a ninety-day period commencing July 31, 1980, Pacific conducted a field test in Fremont for the distribution of TDD units. According to Pacific the participation rate for the area was approximately 30%, which Pacific believes would be a realistic participation rate for the program as a whole. Applying this percentage to the 200,000 estimate of the Schein-Delk study results in approximately 60,000 units being distributed. For this reason Pacific suggests that the staff's surcharge formula be modified by substituting 60,000 units for the staff's 90,000 and 10 cents for the staff's surcharge of 15 cents.

The staff witness admitted no particular preference for the 90,000 figure, but was of the opinion that a 15-cent surcharge would provide sufficient funds to meet the initial needs of the fund without producing an extreme excess or shortage.

This Commission is fully aware that the number of TDD units required under this program would be extremely difficult to determine without expensive and detailed studies. Based upon this record, we are in no position to refine the differences between the two studies. We are of the opinion that the staff has taken a well-considered and pragmatic approach to the problem. We find that the 90,000 figure is a conservative compromise that will provide sufficient funds to initiate the program and that the 15-cent surcharge can readily be adjusted in accordance with demonstrated needs after a reasonable trial period.

The main issue raised in this proceeding is whether this Commission should mandate dual-capacity devices capable of using both ASCII/Bell 103 and Baudot/Weitbrecht modes. Many of the deaf organizations, the California Department of Rehabilitation, and various manufacturers of telecommunication devices support the position that the Commission should require dual-mode (Baudot/ASCII) capability as a basic requirement.

The ASCII terminal market has experienced a phenomenal growth in the past few years. It is expected that there will be approximately six million installed terminals by 1985. By 1990 it is anticipated that there will be over four million terminals in homes throughout the United States, and all will be ASCII or a superset of ASCII. On the other hand, long-range surveys indicate that the Baudot equipment will remain static or even decline from its present level. Although TDD sets equipped with Baudot/ASCII capabilities are not presently available in the market, it is anticipated that the rapid advancement in TDD technology will make it a reality within a very short time. One company, Novation, Inc., has been working for the past seven years toward the goal of merging the current TDD network with the modern communications network. According to its president, it has developed a set with dual-mode capability that can be in full production by the second quarter of 1981 at a quantity price of \$325

per unit. The proponents of dual-mode capability argue that the use of the Baudot system alone would constitute another form of isolation for the deaf and would not be responsive to their full needs. They believe that ASCII capability will not only allow for computer communications but would encourage more businesses with ASCII type interface to communicate with the deaf.

The staff did not include ASCII capability as a basic requirement because, in its opinion that ASCII capability is not required for communications and would be more of an optional feature.

Pacific is presently evaluating a number of TDD devices and will continue to do so until it goes to bid once the minimum requirements have been established. The telephone companies should be required to purchase equipment meeting the ASCII-Bell 103 Standard and/or a device with dual mode capability such as ASCII-Bell 103 and Baudot-Weitbrecht capability as they become available and cost-competitive with equipment developed earlier. Deaf personnel desiring dual-mode capability although it is not cost-competitive should be allowed to pay the price differential. 3/

The Bay Area Center for Law and the Deaf (Center) cite two major disadvantages to the current TDD network: amount of time it takes to transmit a message and the lack of TDDs with which to communicate. Given the present state of technology, the Center feels it would be impossible to provide the deaf with equal or equivalent

3/ Several parties of record, including SRI International Telecommunications Sciences Center and Novation, expect machines with dual-mode capability to be cost competitive with Baudot machines when the former are produced in quantity in the near future.

access to the system. It along with the California State Department of Rehabilitation recommends that the Commission adopt a standard which includes ASCII capability. Adoption of this standard would make it easier to develop and maintain contact with the hearing community. This would encourage greater communication between the deaf community and business, and other private and public agencies. In addition, more TDD compatible machines will be sold to hearing persons as they are more likely to buy equipment which can also be used for computer access, electronic mail systems or similar services than to spend several hundred dollars on equipment with a single function only.

Major advantages of a standard which includes ASCII capability include: 1) expected lower production costs since ASCII is becoming a national standard in data communication machines and machines with this capability are made by many manufacturers with potential applications for the deaf as well as the hearing community, 2) potential for integrating the deaf into the larger hearing community, and 3) potential for transmitting messages at higher speed (and thus reduced cost) than Baudot.

Other suggested modifications to the staff proposal can be considered in the following categories:

Area

Certain areas along the California border are served by telephone utilities operating under the laws of adjoining states. With the approval of this Commission telephone service to these areas is

furnished at rates and conditions applicable in neighboring states. According to the staff it would not be feasible to include customers within such areas as part of the program.

In addition certain rural areas served by small telephone utilities are provided with party-line service only and the use of TDDs on these lines would result in delays and problems for the other parties.

As desirable as it may be, it may not be possible to extend the program to all areas of the State. It is possible, however, that those out-of-state utilities serving borderline areas of California may voluntarily participate in the program and that a program may eventually be established for the reasonable phasing in of single-line service in party-line areas.

Training Program

The staff made no recommendations for the training of deaf individuals in the use of TDDs. It recommends that this be left entirely to each telephone utility. Pacific proposes to establish training centers throughout the State similar to the one used in its Fremont field test. In accordance with its plan, TDDs would be distributed from the centers by employees conversant in American Sign Language and skilled in the use of the equipment. For those deaf individuals who have never used a TDD before, distribution and training would take place at the centers. For those who are experienced in their use, distribution could be made directly to their

homes. At least one party of record suggested that deaf persons themselves would be most effective at training other deaf in the use of the equipment.

Liability Statements

The staff proposes that deaf subscribers be required to sign a liability statement agreeing to reimburse the telephone companies if the TDD is not returned when service to the subscriber is terminated. Although Pacific indicated that the statement would be used only in the event the subscriber were at fault in the loss or damage of the machine, several of the deaf organizations, as well as the Department of Rehabilitation, believe that inasmuch as hearing people are not required to sign such statements for the receipt of their basic telephone service, no requirement should be made of the deaf.

Since there is no requirement for liability statements in the issue of standard telephone sets, such a statement is not required for TDDs at this time. The portability and relatively higher value of TDDs may warrant further examination of this issue at a future date.

Amplifiers

The Department of Rehabilitation suggests that high gain amplifiers as required by hearing-impaired persons should be provided by the fund. We are of the opinion, and so find, that the intent of this program is to provide for that group of hard of hearing that has no other alternative. Amplified telephone sets have been available for many years at a modest additional cost.

Blind-Deaf

Although the staff recommended that those with speech impairments be included in the program, it made no provision for those who are blind and deaf because the record failed to demonstrate that TDDs equipped with braille-type readout units are presently available. We are of the opinion, and so find, that such equipment should be made part of the program if now available, or when it becomes available.

Relay Services

Two organizations, presently providing relay telecommunication service for the hearing-and voice-impaired, request that allocations from the fund be made to support such services. Deaf Informal Communications Resources Center, Inc. is located in Fremont and Tel-Link, Inc. is located in Los Angeles. Each operates TDD-equipped centers with which users of TDDs can communicate and have their messages relayed by way of voice telephone to the hearing community. These organizations contend that the proposed program is too limited because it restricts telecommunications exclusively to users of TDDs. The relay service, they argue, would provide a link with the hearing community.

There is no doubt that this is a highly meritorious and desirable service, but it is, and we so find, clearly beyond the scope of SB 597, which limits the program to the provision of a "telecommunications device capable of serving the needs of the deaf or severely hearing impaired." We believe that this is a matter to which the legislature should give further consideration.

Hard-copy Printout

It was suggested that the staff's recommendation providing hard-copy printout to users who cannot communicate adequately with visual display be subject to certification that the user needs hard copy, the argument being that the combined features of digital display and hard-copy readout would constitute an undue burden upon the fund. Since the staff's specifications, as modified, provide for these features in the alternative, they cannot be combined in the same unit unless as an added feature within the 5 percent limitation or unless paid for by the user. We are of the opinion, and so find, that such certification is not necessary.

Time to Commence Program

The staff recommends that the telephone utilities should be required to file their plans and commence distribution within 30 days after the effective date of this order. Neither Pacific nor General believes that they would be able to comply with the provisions of such an order within the time specified. Pacific suggests a period of 90 days and General suggests 180 days. Pacific claims that it would not be able to make product selections until after receipt of the order setting forth the specifications. Other matters requiring additional time would involve the signing of contracts, detailed cost studies, and tariff filings.

We believe, and so find, that 90 days after the effective date of the ensuing order would be a reasonable period within which to comply with the provisions thereof.

Findings of Fact

1. Telecommunication devices for the deaf (TDDs) are undergoing rapid technological changes. The large potential (and existing) market for machines with ASCII capability in data communications and compatibility with TDDs make it reasonable to expect greater economies of scale with TDD equipment incorporating ASCII capability.

2. Estimates of the number of deaf or severely hearing-impaired in California vary greatly and it would be extremely difficult to determine the actual number without expensive and detailed studies.

3. For purposes of determining an initial surcharge, staff has assumed that 90,000 TDDs will be distributed. This represents a conservative compromise that will provide enough funds to start the program.

4. Based on a distribution of 90,000 TDDs, a 15-cent surcharge will be assessed telephone users. This figure can be readily adjusted after a reasonable trial period to reflect demand for the TDDs.

5. A three-person industry administrative committee will select an organization to establish a trust fund to be administered jointly by the organization and committee.

6. The administrative committee and trustee would approve payments to the utilities for expenses relating to the provision of equipment to the deaf.

7. The trustee would make regular reports on status of funds and recommend changes in the customer billing surcharge when adjustments to the fund are required.

8. Basic TDD equipment under this program includes provision of either a visual electroluminescent display or a hard-copy printout on 2.25 inch paper tape for users who cannot communicate with visual display.

9. Telephone corporations should purchase TDDs meeting the ASCII-Bell 103 standard or having dual mode capability as they become available and cost-competitive with TDDs developed earlier. Purchases by the telephone corporations should stimulate the development of this technology and market and result in economies of scale.

10. In the event dual mode (ASCII/Baudot) capability is not cost competitive, deaf persons should have the option of paying the cost differential.

11. Out-of-state telephone companies serving California should be encouraged to provide TDD equipment to their customers.

12. Operations of TDDs require single-line service since the TDD results in delays and problems for other customers where only party-line service is available.

13. In areas where party-line service only is available, the reasonableness of phasing in single-line services should be examined.

14. Certification of customers requesting TDDs with hard-copy printout is not necessary.

15. Since no liability statement is required of users of standard telephone sets, no such statement should be required of TDD users at this time.

Conclusions of Law

1. Senate Bill 597 (1979) adds Section 2831 to the Public Utilities Code. This section requires the Commission to design and implement a program wherein each telephone corporation shall provide a telecommunications device at no additional charge from the basic exchange rate to any certified deaf or severely hearing impaired subscriber.
2. It is not reasonable to require a liability statement from deaf subscribers of TDD service at this time since one is not required of other standard set telephone users.
3. The Section 2831 program is designed for that group of hard of hearing that has no other alternative; the funding of amplified sets for the hearing impaired would constitute an undue burden on the fund. Such amplified telephone sets have been available for many years at a modest additional cost.
4. The blind and deaf should be included in the Section 2831 program when TDDs equipped with braille-type readout units become available.
5. Relay services are beyond the scope of Section 2831.
6. The surcharge should be set initially at 15 cents. After a reasonable trial period it can be readily adjusted in accordance with the demonstrated needs of the program.
7. Each monthly bill should state that the surcharge is required by law. It should be referenced on the bill as required by Public Utilities Code Section 2831.

8. Telephone companies should purchase TDDs with ASCII or dual mode capability as they become cost-competitive. Such purchases should result in creation of a greater market and economies of scale. These machines will help link the deaf with other members of the deaf community as well as the hearing community, which should create greater opportunities for social and economic interaction.

O R D E R

IT IS ORDERED that:

1. Within ninety days after the effective date hereof respondent telephone utilities shall file with this Commission a program consistent with that proposed by the staff as set forth in Appendix B and as modified by this Commission's findings herein, for the distribution of communications devices for the deaf to all those needing them within respondents' respective service areas by January 1, 1984.

2. Prior to distribution respondent telephone utilities shall inform all customers within their service areas, by way of bill inserts, that such devices are available. In addition respondent telephone utilities shall make such information known to all deaf organizations and agencies dealing with problems of the deaf within such service areas. The public generally shall be informed by way of appropriate media publicity and within thirty days of publication a copy of each item shall be submitted to the Commission's Communications Division.

3. Concurrent with the filing required by Ordering Paragraph 1 hereof, respondent telephone utilities shall file a tariff in the form illustrated in Appendix C and consistent with the findings herein.

4. Respondent telephone utilities shall identify the surcharge on each monthly bill as required by law, by referencing the surcharge as follows: ~~Required Pursuant to Public Utilities Code Section 2831.~~ *state law (Communications Division for the Deaf)*

5. Respondent telephone utilities shall file a quarterly report on the status of the program, including information on the prices and availability of TDD machines with ASCII and dual-mode (ASCII/Baudot) capability at various quantity purchase rates. The first quarterly status report shall be filed within 90 days after the effective date of this order. Utilities should also detail the nature of their programs to train the deaf to use this equipment.

6. An annual report of the trust fund's operations shall be filed with the Commission's Revenue Requirements Division on or before March 31st of the following year, or such other date as the Commission may designate. This annual report shall be audited by an independent certified public accountant and the CPA certification shall accompany said annual report.

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

Dated JAN 21 1981, at San Francisco, California.

John E. Burns

President
Richard D. ...

...

Commissioners

APPENDIX A

LIST OF APPEARANCES

Respondents: John N. Howarth and Margaret DeB. Brown, Attorneys at Law, for The Pacific Telephone and Telegraph Company; Susan E. Amerson and David L. Moring, Attorneys at Law, for General Telephone Company of California; Robert W. Winchester and Marc A. Stone, for Continental Telephone Company of California; Alvin H. Pelavin, Attorney at Law, for The Siskiyou Telephone Company, Livingston Telephone Company, Evans Telephone Company, Foresthill Telephone Company, Volcano Telephone Company, Ponderosa Telephone Company, Capay Valley Telephone Company, Kerman Telephone Company, Dorris Telephone Company, Hornitos Telephone Company, Happy Valley Telephone Company, Calaveras Telephone Company, Ducor Telephone Company, Sierra Telephone Company, and Mariposa Telephone Company; and Charles A. Nutter, for Citizens Utilities Company of California.

Interested Parties: Judy Tingley, for the California Department of Rehabilitation; Therese M. Wandling, Attorney at Law, for Deaf Counseling Advocacy and Referral Agency and Bay Area Center for Law and the Deaf; Harry J. Reed, Attorney at Law, for Deaf Informed Communication Organization; William L. Knecht, Attorney at Law, for Plantronics, Inc.; Warren L. Palmer and Michael F. Willoughby, Attorney at Law, for Krown Research, Inc.; Marshall G. Berol, Attorney at Law, and Philip S. Sindler, for Specialized Systems, Inc.; Martha A. Reed, for Deaf Informed Communications; William Taylor, Attorney at Law, for Novation, Inc.; Ronald Fischbach, for Tel-Link, Inc.; Matthew D. Lynall, for Northern Telecom Limited; Gary Upchurch, for Northern Communications; John Galvan, for California Association of the Deaf; Robert A. Ringman, for California Independent Telephone Association; Jack Hawkinson, for American Communication Corporation; David Jon Flystra, and Kenneth L. Harrenstein, for SRI International; C. J. Stephens, Attorney at Law, for Basic Telecommunications Corp.; Roberta M. Trutt, for Quadrinetics International Technology; George Forbes, for Community Service Department, San Bernardino; and Bob Neves, for himself.

Commission Staff: Robert Cagen, Attorney at Law, and Paul Popenoe, Jr.

APPENDIX B

O.I.I. No. 70

Exhibit No. 49

Witness: *[Signature]*Date: 10-6-80
[Signature]

California Public Utilities Commission
 Communications Division
 Deaf Equipment Acquisition Fund
 and
 Rate Recovery Mechanism

A. Legislation

In 1979, the California Legislature enacted SB 597 (signed by the Governor on September 28, 1979), which included among other provisions a new Section 2831 of the Public Utilities Code providing for a program to furnish deaf and severely hearing impaired telephone subscribers with a device for communications. Section 2831, which became effective on January 1, 1980, reads as follows:

2831. The commission shall design and implement a program whereby each telephone corporation shall provide a telecommunications device capable of servicing the needs of the deaf or severely hearing impaired, together with a single party line, at no charge additional to the basic exchange rate, to any subscriber who is certified as deaf or severely hearing impaired by a licensed physician, audiologist, or a qualified state agency. The commission shall phase-in this program, on a geographical basis, over a four-year period ending on January 1, 1984. The commission shall establish a rate recovery mechanism to allow telephone corporations to recover costs as they are incurred under this section.

B. Purpose of Deaf Equipment Acquisition Fund

The purpose of the Deaf Equipment Acquisition Fund (Fund) is to provide a rate recovery mechanism, as provided by Public Utilities Code Section 2831, which will allow telephone utilities to furnish fully adequate devices for deaf communications at the lowest cost to the general public. Since cost of financing the Fund is ultimately a burden on the general ratepayer it is important that financing be accomplished at the lowest cost. In establishing a rate recovery mechanism for this program the statute provides that telephone corporations be allowed to recover costs as they are incurred. Accordingly, this plan provides for charges against telephone subscribers to provide a "pay-as-you-go" financing for the provision of communications devices for the deaf and severely hearing impaired. Uniform charges applied to all telephone subscribers in the state will be placed in a trust fund against which all utilities will charge their costs of deaf equipment acquisition and administration.

C. Industry Administrative Committee

For purposes of entering into an agreement with a trust organization to handle moneys collected by the Fund, and thereafter to administer the Fund, there shall be established an industry administrative committee, hereafter referred to as the Committee. The Committee shall consist of three members, one designated by The Pacific Telephone and Telegraph Company (Pacific), one designated by General Telephone Company of California (General) and one representing the remainder of the independent telephone companies in California. The latter member shall be designated by the California Independent Telephone Association (CITA).

D. Deaf Equipment Trust

The Committee shall secure the services of an attorney, not employed by a telephone company, for such legal services as are necessary for the entering into an agreement with a fiduciary institution for the establishment of a Deaf Equipment Trust (Trust) which will handle the deposit and disbursement of moneys associated with the Fund. Under the Trust each California telephone company will be a trustor, the fiduciary will be trustee, and telephone subscribers who are deaf or have severely impaired hearing will be the beneficiaries. The purpose of the Trust is to receive, invest and disburse all funds collected from telephone subscribers as surcharges approved by the Public Utilities Commission pursuant to Section 2631 of the Public Utilities Code. All funds collected will be deposited in the Trust and invested by the trustee in short term investments.

The Committee will be responsible for directing the trustee regarding all disbursements from the fund for the purpose of purchasing, installing and maintaining communications devices for the beneficiaries. The Committee will have the responsibility for examining documents and approving claims for reimbursable expenses. The trustee will have the right to rely on the Committee's directions.

If there is a dispute between the trustors and the Committee or the Committee and the trustee it shall be referred to the Public Utilities Commission. Provisions shall be made for periodic audits, the cost of which will be borne by the fund, to be reported to the Public Utilities Commission.

The trustor telephone companies will be responsible for remitting monthly, (or at some other convenient interval) to the trustee all funds collected by them pursuant to the surcharge. If funds are not received by the trustee in a timely manner, it will have the responsibility to so inform the Public Utilities Commission.

The Trust shall be revocable only by the Public Utilities Commission and may be terminated only on order of the Commission. Distribution of the Trust's assets on revocation or termination shall be determined by the Commission.

The trustee shall provide a monthly accounting to each trustor telephone company and the Public Utilities Commission. The accounting shall show:

1. Receipt of surcharge funds from each company, describing the period covered and any other pertinent information.
2. Disbursement of funds to each company describing the purpose of each payment and any other pertinent information.
3. Purchase, sale, redemption or exchange of all securities.
4. Receipt of all interest or other income on invested assets.
5. Other disbursements.
6. Asset list showing market values, cost and approximate annual income of all holdings.

Expenses of establishing and administering the Trust shall be paid out of the Fund. A copy of the trust agreement shall be filed with the Public Utilities Commission.

E. Credits to the Fund

Each respondent utility shall collect and remit to the Trust all moneys collected for the Deaf Equipment Acquisition Fund. The program is funded by a surcharge on all telephone customers in the state other than for customers served from an adjacent state. The surcharge shall be applied as a fixed dollar amount to each main station or equivalent main station. Equivalent main stations include each PBX trunk and each centrex trunk equivalent.

In Decision No. 90919, dated October 10, 1979, Pacific Telephone was authorized \$12 million in rates to be used for provision of communications equipment to certified handicapped persons at reduced rates and to finance the operation of handicapped centralized assistance points (HCAP's). Since a part of this allowance in rates was to be used for provision of communications devices for the deaf at reduced rates, the unencumbered portion of the allowance shall be credited to the Deaf Equipment Acquisition Fund. Pacific shall periodically compute the unencumbered balance of the \$12 million allowance adjusted to current levels and transfer such balance to the Fund. In addition, any funds designated for handicapped equipment as a result of a decision in Case No. 10066 (Clam vs. PT&T) shall be included in the Deaf Equipment Acquisition Fund unless otherwise provided by terms of the order in that proceeding.

Any provision for a special fund for the handicapped which may be ordered by the Commission in Application No. 59132 of General Telephone Company of California shall be handled in a manner similar to the provision of the similar fund for Pacific Telephone unless otherwise ordered.

F. Charges to the Fund

- It is intended that all costs incurred in connection with provision of basic communications devices to the certified deaf and severely hearing impaired provided without additional charge be charged to the Deaf Equipment Acquisition Fund. The following listed items are specifically included among the items to be charged to the Fund:

1. Provision of basic telecommunications devices including sales tax, shipping, warehousing, handling costs and accounting.
2. Installation of equipment and customer instruction in its use.
3. On-going maintenance of equipment.
4. Losses of equipment unrecovered from customer deposits or insurance.
5. Other expenses associated with service to the deaf including operator services and deaf services of handicapped assistance points.
6. Administration of fund.

Each telephone company which provides telecommunications devices for the deaf shall file a tariff with the Commission setting forth the charges to be made to the Fund for each device furnished to certified deaf persons without additional charge beyond the basic exchange rate. The tariff shall separately state the capital costs and the operating costs of such equipment. Capital costs shall be stated as a one time charge which will be debited to the Fund and credited to the utility's plant account. Operating costs shall be stated as a monthly charge which shall be billed to the Fund on a monthly basis.

Accurate records shall be kept of the number of units of each type in service. Such records and the charges to the Fund shall be submitted to the Committee for approval after which they will be forwarded to trustee for payment. Charges for optional equipment and features beyond the basic equipment provided to the certified deaf shall be billed directly to the user.

In addition to charges for equipment as specified in tariffs, telephone companies are entitled to bill to the Fund all reasonable expenses incurred in connection with this program to the extent that such expenses are not included in the determination of equipment charges as set forth in the tariff. The Industry Administrative Committee shall develop appropriate rules for the preparation and submission of bills by utilities. A copy of such rules shall be filed with the Public Utilities Commission.

G. Periodic Adjustments to the Fund

Each utility maintaining a Deaf Equipment Acquisition Fund shall make an annual review of the debits and credits to the Fund for the previous year. The requirements for expenditures from the Fund and credits to the Fund shall be estimated for the forthcoming year. The results of this review shall be reported to the trustee by February 1 of each year. Based upon these reviews the trustee shall adjust the amount of surcharge to a level sufficient to meet the requirements of the forthcoming period. Where estimates of the credits to the Fund indicate that the Fund will have in excess of 20% above anticipated requirements, the surcharge shall be reduced to provide that the Fund at the end of the period does not exceed 20% above the on-going requirements. The trustee shall report any requirement for a change in the amount of surcharge to the Public Utilities Commission and to each participating telephone company by February 15. Each telephone company shall file an appropriate tariff by March 1. Where the annual review indicates a reduction in surcharge is to be made, the utility shall file tariffs for the reduced charge to become effective April 1. If an increased charge is indicated, tariffs shall be filed subject to Commission authorization by resolution.

H. Basic Equipment Chargable to Fund

Each certified deaf user shall be furnished with a telecommunications device meeting the following minimum specifications:

1. Keyboard send.
2. Visual electroluminescent display.
3. Hard-copy printout on 2.25 inch paper tape in lieu of visual display for users who cannot communicate adequately with visual display.
4. Baudot 5-unit code.
5. Acoustical coupler for connection with telephone network.
6. Portable instrument not to exceed 12 pounds weight with carrying case.
7. Alternate a.c. power line and self-contained battery pack operation.
8. A direct-coupled, non-portable instrument in lieu of portable, battery-operated, acoustically-coupled instrument where required for oral transmission and visual reception.

Each telephone company shall make available to certified deaf users equipment meeting the foregoing minimum specifications at no charge in addition to the basic telephone rate. There shall also be provided to each user a non-portable signaling device containing a relay which will operate

a lamp or other device furnished by the user to indicate when the telephone is ringing. The cost of providing such minimum equipment shall be charged to the fund. Other optional features or devices shall be charged to the user at rates which reflect the incremental fully-allocated cost of providing such features. Revenues and expenses associated with such optional equipment shall be treated as normal utility revenues and expenses. An initial set of batteries and roll of paper tape, where required, shall be provided with each device furnished to the certified deaf. Rechargeable batteries may be furnished where appropriate. Provision of additional batteries and paper shall be the responsibility of the user.

Where there is available to telephone companies equipment features or combinations of features beyond the minimum features above, and where those features are available at substantially no greater cost to the utility (within 5%) of the cost for a minimum package, equipment incorporating such features may be furnished as a basic device at no additional charge to the certified deaf. In any event, charges to be made both to users of equipment and to the Fund shall be specified in tariffs filed with the Public Utilities Commission.

The California Public Utilities Commission does not endorse any particular product. Telephone Companies may purchase any equipment which meets the foregoing minimum standards and which is acceptable to the utility in terms of quality and price.

I. Equipment for Speech Impaired Persons

To the extent that equipment of the type furnished to the deaf is suitable for meeting the needs of speech impaired persons, such equipment shall be furnished to certified speech impaired persons on the same terms as furnished to the certified deaf. Certification as to disability and need shall be made by a licensed physician, a California licensed speech pathologist or a qualified state agency.

J. Distribution Program

Each telephone company subject to this order shall establish a program which will result in the distribution of communications devices for the deaf to all those needing them in all geographical areas of the company by January 1, 1984. At the time of distribution each telephone company shall publicize the availability of such devices through a bill insert to all customers in the area, through contacting all known organizations of the deaf and all agencies dealing with problems of the deaf in the area, and through appropriate media publicity. Each telephone company's program shall be filed with the Commission within 60 days of its preparation. A copy of each item of publicity on this program shall be filed with the Commission within 30 days of its publication.

X. Initial Surcharge

In order to start the program for the Deaf Equipment Acquisition Fund, an initial surcharge of 15c per month per main station and equivalent main station will be applied. This initial surcharge is based upon preliminary estimate of a requirement for 90,000 devices for the certified deaf by the end of 1983. The Commission staff has developed the initial rate based upon the following computation:

Computation of Monthly Telephone Surcharge
for
Deaf Equipment Acquisition Fund
1981 - 1983

<u>Line</u>	<u>Item</u>	<u>Estimated Quantity</u>
(1)	Number of devices for certified deaf, end 1983	90,000.00
(2)	Cost per device	\$800.00
(3)	Total cost of devices (1) x (2)	\$72,000,000.00
(4)	Statewide number of main telephones	13,200,000.00
(5)	Dollars required per telephone (3) ÷ (4)	\$ 5.45
(6)	Dollars per year (5) ÷ 3 years	1.82
(7)	Dollars per month (6) ÷ 12 months	.15
(8)	Monthly surcharge per main or equivalent main station	.15

L. Billing of Surcharge

Each participating utility shall bill the specified surcharge monthly to each main station or equivalent main station that it serves. Surcharges shall be placed on foreign exchange services by the utility normally rendering the bill to such services. The surcharge is to be identified separately on the bill as Deaf Equipment Acquisition Fund surcharge. At the time a surcharge is first billed, a statement shall be included with the bill explaining the Commission's program to carry out terms of Section 2831 of the Public Utilities Code and how the surcharge is applied.

M. Refunds

While it is the intent of this plan to maintain the Deaf Equipment Acquisition Fund at a constant level to meet requirements during any particular period, there may become a time when the Fund is overaccrued with respect to requirements during a forthcoming period. The Fund will be deemed to be overaccrued if at the end of the period it will exceed 20% above requirements with a zero surcharge during the period. At such time, and subject to Commission

approval, refunds shall be made at an equal amount per main station or equivalent main station to all main stations in service as of a specified date when refunds are computed.

N. Term of Program

The Deaf Equipment Acquisition Fund shall be continued until further order of the Commission. It is intended that the Fund be maintained to provide for continuing needs for communications devices for the deaf after the full program is in effect at the end of 1983. Such continuation of the Fund will provide for additional requirements, replacements, maintenance, and operation of equipment and services for the deaf and severely hearing impaired.

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California Public Utilities Commission
Communications Division

ILLUSTRATIVE TARIFF
FOR
PROVISION OF TELECOMMUNICATIONS DEVICES FOR THE DEAF
AND
APPLICATION OF CUSTOMER BILLING SURCHARGE

San Francisco, California
September 25, 1980

Schedule No. _____
TELECOMMUNICATIONS DEVICES FOR THE DEAF AND SPEECH IMPAIRED

APPLICABILITY

Applicable to telecommunications devices furnished to the deaf pursuant to Section 2831 of the Public Utilities Code and to the speech impaired. Provides for a surcharge on all subscribers' bills to recover the costs of providing such equipment.

TERRITORY

Throughout the service area of the company except that the initial distribution of telecommunications devices for the certified deaf shall be phased-in on a geographical basis in accord with a plan filed with the California Public Utilities Commission.

RATES

- 1. Deaf Equipment Acquisition Fund Billing Surcharge - See Special Condition No. 1

<u>Service</u>	<u>Charge Per Month</u>
Each individual or party line residence service	\$0.15
Each individual or party line business service	.15
Each foreign exchange service	.15
Each PBX trunk line	.15
Each semi-public service	.15
Each Centrex station line	.015
Each Airport Intercommunication Systems station line	.015

(To be inserted by utility)

Issued by

(To be inserted by Cal. P.U.C.)

Advice Letter No. _____

Date Filed _____

Decision No. _____

Effective _____

Resolution No. _____

U.S. 10,000 201(02)-10,000

Schedule No. _____
TELECOMMUNICATIONS DEVICES FOR THE DEAF AND SPEECH IMPAIRED

RATES - Continued

2. Equipment furnished to Certified Deaf or Speech Impaired

A. Telecommunications Terminal Devices

NRC* MR*

Suitable for transmission of signals at speed up to 60 words per minute. Arranged for Keyboard send and receive operation, includes carrying case, integrated terminal data set, etc.

Illustrative

(1) Display Type Terminal (with a 32 character display field)			
- For certified subscriber, one only	\$ -	\$ -	
- Charge to DEAF Trust*	600.00	7.00	
(2) Printer Type Terminal (with 2.25 inch paper)			
- For certified subscriber, one only	-	-	
- Charge to DEAF Trust*	800.00	12.00	
(3) Printer Type Terminal (with 6 inch paper)			
- For certified subscriber, one only	40.00	8.00	
- Charge to DEAF Trust*	800.00	12.00	

B. Supplemental Equipment

(1) Relay switch, baseboard mounted, to permit control of a customer-provided 5 ampere noninductive commercial power device during ringing signal periods.			
- For certified subscriber, one only	-	-	
- Charge to DEAF Trust*	50.00	1.40	

*See Special Condition No. 2
(To be inserted by utility)

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Schedule No. _____
TELECOMMUNICATIONS DEVICES FOR THE DEAF AND SPEECH IMPAIRED

SPECIAL CONDITIONS

1. Pursuant to order of the California Public Utilities Commission and the provisions of Section No. 2831 of the California Public Utilities Code there is established a Deaf Equipment Acquisition Fund to recover the costs of providing telecommunications device capable of servicing the needs of the deaf or severely hearing impaired, together with a single party line, at no charge additional to the basic exchange rate, to any subscriber who is certified as deaf or severely hearing impaired by a licensed physician, audiologist, or a qualified state agency. The program is funded by a surcharge on all telephone customers in the state. The surcharge will be applied as a fixed dollar amount to each main station or equivalent main station. Equivalent main stations include each PBX trunk and each centrex trunk equivalent. The utility will bill the specified surcharge monthly to each main station or equivalent main station that it serves. Surcharges will be placed on foreign exchange services by the utility normally rendering the bill to such services. The surcharge will be identified separately on the bill as Deaf Equipment Acquisition Fund surcharge.

2. Each certified deaf, severely hearing impaired, or speech impaired subscriber requiring a visual means of communication over the telephone system will be furnished a basic minimum telecommunications device and a signal unit at no charge in addition to the basic charge for a telephone line and station instrument in accord with the provisions of this tariff. The cost of providing such minimum basic equipment features will be charged to the Deaf Equipment Acquisition Fund Trust. Other optional features or devices shall be charged to the user at rates which reflect the incremental fully allocated cost of providing such additional features as set forth in the tariffs. An initial set of batteries and roll of paper tape, where required, will be provided with each device furnished to the certified deaf. Provision of replacement batteries and paper will be the responsibility of the user. Equipment in excess of one unit per certified subscriber will be furnished at the regular rate.

Charges to the DEAF Trust are divided into a nonrecurring charge (NRC) which represents the capital investment portion of the cost and a monthly rate (MR) which represents the recurring operating costs associated with the service.

3. For subscribers who are certified deaf or speech impaired, and such certification in writing is furnished to the Utility, the "certified subscriber" rate for the terminal will be applicable. Eligibility and certification are determined as follows:

(To be inserted by utility)

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Resolution No. _____

NAME

TITLE

Schedule No. _____

TELECOMMUNICATIONS DEVICES FOR THE DEAF AND SPEECH IMPAIRED

SPECIAL CONDITIONS - Continued

A hearing or speech disability requiring use of visual transmission or reception of communications must be determined and certified by a competent authority. A competent authority is defined as:

- (1) A physician and surgeon who is California licensed, or exempt from such licensing, in accordance with Division 2, Chapter 5, Article 3 of the California Business and Professions Code.
 - (2) A California licensed speech pathologist or audiologist, acting within the scope of his license.
 - (3) An authorized representative of agencies approved by the California Public Utilities Commission.
4. The Utility may, at its discretion, conduct an investigation to determine the validity of the completed certification form. If the Utility determines that the certification is invalid, the subscriber will be required to pay for the difference between the rates paid under this schedule and the full rates under other applicable schedules.
 5. Where business service is involved, the eligibility for the certified user rate is limited to the proprietor of the business or a partner.
 6. The subscriber will be responsible for returning terminals and supplemental equipment to the designated Utility location coincident with the discontinuance of service. A signed liability statement is necessary before provision of this service.
 7. The subscribers will be advised of the designated utility repair locations for the portable terminals for the deaf.
 8. The terminals for the deaf require a modular telephone jack installation and individual line service. The charges and rates for the individual line service also apply. A service order charge will not apply for customers requesting this special offering. These terminals do not have internal signaling or dialing capacity and must be used in conjunction with a telephone instrument incorporating such capacity.
 9. The utility will make available at designated locations replacement batteries and paper for the equipment set forth in this tariff for purchase by the users of such equipment.

(To be inserted by utility)

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TITLE _____

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