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Decision No. 81339

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

TELEPHONIC EQUIPMENT CORPORATION, a corporation,

Complainant,

vs.

PACIFIC TELEPHONE and TELEGRAPH COMPANY, a corporation,

Defendant.

Case No. 9271
(Filed September 17, 1971; amended October 14, 1971)

August J. Goebel, Attorney at Law, for Telephonic Equipment Corporation, complainant.
Milton J. Morris, Attorney at Law, for The Pacific Telephone and Telegraph Company, defendant.
Donn E. Cassity, Attorney at Law, for Communication Certification Laboratory (CCL), intervenor.
Janice E. Kerr, Attorney at Law, Tibor I. Toczauer, and Paul Popenoe, Jr. for the Commission staff.

O P I N I O N

Complainant manufactures and sells, in California, communications equipment including a device intended to be attached to the telephone network, the KTS-500. One of these devices was delivered to Advance Telephone & Electronics (Advance) in Oakland, and directly connected to the telephone network. Defendant, on becoming aware of this connection, disconnected telephone service to Advance until such time as a protective coupler, required by defendant's Tariff 135-T, was obtained from defendant.

The complaint is based on allegations that the KTS-500 produces no hazard to the telephone network, or to defendant's employees or subscribers, and seeks relief from the coupler requirement. The answer generally denies the significant allegations of the complaint. As new matter, the answer contends that the complaint

alleges no violation of law or Commission order; that the question of interconnection is exclusively a matter of federal jurisdiction; or alternatively, that there is a need for a congruent federal and state policy on such questions; and finally that the tariff requirements for couplers for foreign attachments are reasonably necessary to protect the integrity and reliability of telephone service. Communications Certification Laboratory petitioned to intervene on representations that it could present factual data to assist the Commission in determining the issue herein.

Prehearing conference was held before Examiner Gilman in Los Angeles on January 10, 1972, at which time issues were clarified. The participation of the intervenor was authorized and the matter was set down for hearing on January 28. Defendant filed a Petition to Modify which expanded on the jurisdictional contentions made in its answer and asked that hearing on this complaint be indefinitely stayed until a permanent interconnection policy can be devised.

The Commission refrained from acting on the motion, and hearings were held before Examiner Gilman on February 7, 8, 9, 23, and 24, and March 6 and 7, whereupon the matter was submitted on briefs.

The Device

The KTS-500 in conjunction with a key instrument[1/] permits a telephone subscriber to "bridge" or patch calls. For instance, if an incoming call is for a person who is not at the instrument location, the KTS-500 attendant places the incoming call on hold and then uses another line to dial the outside number at which the person sought can be reached. Once the second call is completed, the KTS-500 permits the two lines to be inductively coupled together. The person operating the key instrument may then remain on the line or may hang up without breaking either incoming or outgoing call.

1/ A key instrument is the familiar telephone incorporating five lighted line buttons and a hold button.

In a similar fashion, the inductive coupling feature of the KTS-500 permits a conference call between several parties - up to five.

The control panel on the KTS-500 is designed to indicate which of the lines available on the key instrument are coupled. In normal operation there is a colored light and audible signal which warns the person operating the KTS-500 when any coupled party hangs up.

The KTS-500 can be purchased outright for $395, plus tax. It can also be rented from Telephonic Equipment Corporation (TEC) for $13.50 per month for a set capable of connecting three lines, and $2.50 per month for each additional line up to a total of five. There is also a $35 installation charge.

The Pacific Telephone and Telegraph Company (Pacific) will permit one of its subscribers to use a KTS-500 on condition that Pacific install a protective coupler which requires an installation charge by Pacific of $55 and a continuing monthly charge of $1.25 per line. Pacific asserts that the functions of its coupler are to protect the system, its other subscribers and its employees from the introduction of hazardous voltages into the system, to preserve longitudinal balance, and to protect the network control and signaling functions. The interface device creates a .8 dB transmission loss for each line in use on a call. Patching through the KTS-500 also causes transmission losses. The first patch creates a 1.8 dB to 2 dB loss which increases at the same rate for each additional line involved.

Continental and General Telephone Companies both hold themselves out to furnish the KTS-500 to their customers under tariff. Since an attachment offered under tariff is by definition not customer-owned and maintained, subscribers in Continental and General territory may receive the benefits of KTS-500 capabilities

without having to pay for a coupler, even though both companies have a tariff item similar to Pacific's Tariff 135-T.[2/]

The KTS-500 ties together two or more circuits inductively. In order to assuredly maintain the connection on what is in effect a pair of telephone calls, the KTS-500 in conjunction with the key instrument must provide an artificial "off-the-hook" indication on its end of all circuits in use on a conversation.

One of the auxiliary functions of the KTS-500 is to provide an audible and visible signal when one party hangs up. On receipt of this signal the KTS-500 operator is expected to manually cancel the artificial off-the-hook signal, thus assuredly terminating the call. The KTS-500 must sense a spike voltage to initiate the hang-up signal. Such a spike is generated whenever an instrument is hung up or the button depressed. The spike is transmitted clearly on conventional telephone circuits. Defendant's carrier circuits[3/] do not transmit the spike. This spike is an accidental rather than an intended result of telephone design, and no normal function of the telephone system relies on its presence or transmission.

Continental and General use their own equipment to furnish power for utility-owned KTS-500's in the same manner as for other utility devices, including the key instrument itself. Defendant does not supply power for customer-owned devices, so complainant, when selling in defendant's territory, must furnish a separate power supply device which transforms 110 volt a.c. into the lower voltage d.c. needed to operate the KTS-500.

Position of the Parties

Complainant seeks to have Pacific ordered to supply the KTS-500 to the public under its tariffs; failing that, it seeks a determination that the KTS-500 be declared non-hazardous so that

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2/ A Continental or General customer who chose to acquire the KTS-500 directly from TEC would presumably be required to have a coupler.

3/ Carrier messages are transmitted by modulating a high frequency signal imposed on a wire pair; this technique permits multiple use of a wire pair.

persons who acquire the KTS-500 can attach it to the telephone system without the service degradation and substantial expense associated with the protective coupler upon which defendant now insists.

Defendant claims its tariff reasonably requires a hazard-protective coupler between privately owned KTS-500's and the network. It resists offering the device in its tariff on the grounds of operational and design defects and lack of public need.

Staff and Communication Certification Laboratory (CCL) both contend that the Commission's present practice of determining on a case-by-case basis whether and how foreign attachments should be made available to the public is insufficient. Both contend that complainant and all others similarly situated should submit their device to a private certification agency, which, on the basis of laboratory tests and analysis, would determine whether the design and associated service and maintenance systems are compatible with the network and thus should be certificated for direct connection to the network.

Under the staff proposal, a certification agency would be selected by agreement between manufacturer and affected utilities; essentially the certification agency would function as an arbitrator. Its compensation would be arranged by private contract.

CCL is a private for-profit corporation. It represents itself as willing and able to take on all the administrative and technical tasks associated with the operation of a certification program.[3] CCL proposes that it be selected by this Commission as the sole certification agency. CCL concedes that if it has such a monopoly its rates and services should be subject to regulation.[4]

3/ It has also intervened in Com-u-Trol v General Telephone Co., Case No. 9323, and in the Phone-Tele cases (Cases Nos. 9177 and 9265).

4/ Subsequent to the close of hearings CCL filed an application for a certificate of public convenience and necessity as a telephone corporation (Application No. 53293). This matter is now set for hearing to determine, among other issues, whether CCL fits within the definitions set forth in Sections 216 and 234 of the Public Utilities Code.

Complainant does not oppose certification per se, but takes the position that such a new procedure should not be applied retroactively in this proceeding. Defendant, while not squarely supporting a certification program, takes the position that a uniform nationwide policy must be applied to interconnection problems, and that uniform requirements for hazard-preventing couplers, or a certification program, are the only viable alternatives. Defendant, however, opposes the Commission's practice of entertaining on the merits individual complaints seeking interconnection without a coupler.

Regulatory Background

Originally, telephone utilities had claimed the right to select, own, install and maintain all devices connected to the network. This practice allowed regulatory agencies and the public to attribute the responsibility for any service or other difficulties to one source.

The beginning of the end for this nationwide policy came when the court in Hush-A-Phone v U.S. (1956) 238 F 2d 266, declared that tariff provisions intended to enforce this right were an "...unwarranted interference with the telephone subscriber's right reasonably to use his telephone in ways which are privately beneficial without being publicly detrimental" (238 F 2d at 269).

In Doctors General Hospital v PT&T (1965) 64 PUC 462, 59 PUR 3d 297, this Commission generally followed the spirit of the Hush-A-Phone court in ordering Pacific to accept interconnection of customer-owned handsets (the Ericofon).

The Federal Communications Commission in the Carterfone decision, (1968) 13 FCC 2d 420, held that the vice of a prohibitive tariff "...is that it prohibits the use of harmless as well as harmful devices" (13 FCC 2d at 423). The telephone companies thereupon abandoned their policy of noninterconnection in favor of unlimited interconnection, requiring, however, that most classes of customer-owned equipment be connected to the system only through utility-provided devices intended to protect the network against any conceivable harm.

Inter-Utility Discrimination

Complainant asserts that the difference in its treatment by Continental and General and by defendant is a violation of the

defendant's duty not to discriminate (Section 532, Pub. Util. Code.). However, it has long been settled that inter-utility differences cannot be a basis for a charge of discrimination. (Bowker v United L., F. & P. Co. (1915) 8 CRC 393, and California Central Airlines v PSA (1953) 52 PUC 509.)

Competition

Complainant and defendant both take the position that there is no competition between them. However, on this issue we are not bound by the contentions of the parties. When competitive factors are potentially determinative in Commission proceedings, we have a responsibility to make and utilize appropriate findings, sua sponte, Northern California Power Association v Public Utilities Commission (1971) 5 C 3d 370.

Defendant's affiliates are now developing a device which provides many of the same functions as the KTS-500. When connected to a key instrument it will provide a means to patch two calls. As a conference call device, a total of three parties, including the one located at the key telephone, could be interconnected. No supervision mechanisms will be provided in this device. The device is designed so that the key instrument must actually remain off hook to maintain the connection to the other parties. Defendant assumes that the device's attendant will continually monitor the conversation, even though not actually a participant. The device would be furnished by defendant under tariff. Since defendant would own and maintain the device, no coupler would be required.

The coupler required of KTS-500 purchasers would tend to give defendant's device significant competitive advantages. Without this coupler requirement, defendant's charges for its device would necessarily reflect the consumer's view of the relative value of the two devices. The relatively high charge for the coupler, however, would give defendant freedom from market discipline, allowing it an artificial price advantage.

Further, we could not realistically ignore the fact that defendant's Bell System affiliates have the resources and ability to design and manufacture a device which is capable of performing all of the functions of the KTS-500. If such a Western Electric device were to be marketed, defendant would, in the normal course of business, furnish it under tariff without coupler. The coupler requirement thus tends to preserve a part of the total market for any potential Western Electric offering in the same market.

There is another competitive aspect which cannot be ignored. We take official notice that defendant presently offers a conference call service under its tariffs. Widespread use of complainant's device would certainly reduce the demand for defendant's conference call service.

Thus, there are two countervailing policies potentially at work here. Defendant has a responsibility to protect the network and its service, its employees, and subscribers from hazards arising from the use of customer-owned and maintained (COAM) devices (Carterfone, supra). On the other hand, the means of protection must not place an unreasonable handicap on the marketability of foreign attachments.

Incompatibility Between KTS-500 and the Network

As indicated, the spike necessary to activate the supervisory functions of the KTS-500 will not be transmitted over defendant's carrier circuits. A party to a KTS-500 conference or patch would not be adversely affected thereby if he is the calling party in calling-party-controlled territory. Such person will disconnect and terminate billing, if any, to his phone as soon as he hangs up. The same would be true of a called party in called-party controlled areas.

Even if the person hanging up is not in control, a central office time-out will, after a delay,[5/] return his phone to service and terminate billing. However, where by coincidence a party, not

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5/ The delay in some central offices may be as long as 4 minutes, however.

in control and served by a central office not having a time-out, is connected to a KTS-500 via a carrier line, he cannot himself effectively hang up or signal the KTS-500 to terminate his call. Until the call is terminated such party will not be able to use his telephone to initiate another call. If there are time charges for the call, billing would continue until the KTS-500 is used to terminate that call. If the supervisory circuits do not function, the KTS-500 attendant would normally not recognize the need to terminate the connection to a caller who hangs up early until all of the other parties have also hung up.

If we were to rely solely on the record, we would have no basis for estimating the probability that a call to or from a KTS-500 would be routed over a call path which included a carrier circuit and did not include a time-out feature. Consequently, we must rely on our expertise to cure this record deficiency. We recognize that carrier circuits are more likely to be encountered on intercentral office calls; however, virtually all of such calls are governed by time-outs. On the other hand, intracentral office calls in many areas are not time-out controlled; but carrier circuits are rarely encountered on such calls and then usually on temporary installations. Consequently, it is highly improbable that any call to or from a KTS-500 would be routed through a call path which interferes with spike reception. Furthermore, even if there were a significant probability of establishing such a call path, this factor would not support defendant's insistence on using a coupler which does nothing to improve spike reception; on the contrary, to the extent that the coupler is capable of degrading a spike which has been transmitted through the remaining portion of defendant's system, the coupler itself may constitute a hazard to reliable service.

Power Supply Hazard

Pacific contended that the power supply device furnished with the KTS-500 was electrically unsafe and that its coupler was thus required to isolate the network from hazardous voltages. Its evidence on this issue was not based on experiments or on testing of the KTS-500 but was limited solely to expert analysis of the design of the KTS-500 and the power supply.

The record shows that the KTS-500 and its associated power supply would introduce hazardous voltages into the network only when both devices fail in a highly unusual manner. Further, neither device would be expected to fail at all except as the result of an extraordinary power surge in the 110 volt a.c. power line. No attempt was made to establish the probability that all three of these unlikely events would occur simultaneously.

Pacific and other telephone companies routinely use similar power supply devices in connection with telephone instruments. Pacific has not shown that the KTS-500 in combination with the power supply is any more hazardous than its own, presumably safe, powered instruments. Without evidence to support a finding that direct interconnection of a foreign attachment increases network hazard, we cannot ratify an anticompetitive requirement for a protective coupler. No telephone utility can reasonably require a foreign attachment owner to meet safety standards higher than those applicable to its own equipment.

Other Hazards

We presume that both Continental and General are presently complying with their duty to provide adequate service to their subscribers. Consequently, lack of any evidence to indicate any adverse experiences with direct interconnections of the KTS-500 on those utilities' systems supports a finding that the coupler supplied by defendant serves no useful function.

Tariffing

Complainant seeks to have Pacific compelled against its will to purchase KTS-500's and offer them under tariff. Such an order would have undesirable consequences. Presumably, any other manufacturer of a network-safe conference call device would have a right to similar relief. Pacific could, as a result of such an order, potentially be required to train its personnel to install and repair dozens of different brands of call diverters. That difficulty would be multiplied if the same principle were applied to other classes of foreign attachments.

Even if the Commission could lawfully limit tariffing to one or a few brands out of each class of equipment, the Commission would be undertaking a burdensome new regulatory role in deciding which of competing brands best suits consumer needs. Northern California Power Association (supra) suggests that public policy favors the resolution of such issues in the market place rather than in the hearing room. Consequently, we will not order defendant to offer the KTS-500 in its tariff.

Certification

A case involving one telephone company and one manufacturer of one type of foreign attachment is not the proper vehicle to consider a certification program potentially applicable to all types of attachments and all California telephone companies.

In this regard, however, we take note of our recent decision in a parallel proceeding involving a customer owned call diverter (Decision No. 80972 dated January 23, 1973 in the complaint of Com-U-Trol Corporation v General Telephone Company of California, Case No. 9323). In that decision we noted as follows:

> "A foreign attachment certification program would necessarily have to provide a means of dealing with both repair and installation problems as well as design. However, it does not appear that a certification program will be established and functioning in the near-term future. Since the coupler tariff is not acceptable and certification not presently available,

> it is the Commission's responsibility to devise a workable interim protection scheme which avoids undue anti-competitive impact and unnecessary burdens on Divert-a-call owners while giving the general public adequate protection against the above-described problems."

Consistent with the foregoing we will order direct interconnection of complainant's KTS-500 equipment but impose conditions which require complainant to temporarily assume the function of certifying installation and repair. As we provided in the Com-U-Trol case, we will here establish an effective date of our order to allow negotiation and, if necessary, further hearings on such subjects.

The order which follows will require direct connection through a simple nonprotective interface (e.g., a plug and jack arrangement) rather than by interwiring of foreign or utility equipment. This will provide a clear dividing line between utility and nonutility responsibility and provide for quick disconnection in the event of a malfunction. The costs of such a device are expected to be minimal, and without significant competitive impact.

Findings

1. The KTS-500 and its attendant power supply can be directly connected to the telephone network without hazard to network performance or to employees or subscribers.

2. Defendant and complainant are in competition in a market composed of telephone subscribers needing patching and/or conference call service.

3. Defendant's coupler charges artificially and unnecessarily inflate the total costs of owning and using a KTS-500 and inhibit complainant's ability to market its product.

4. Defendant has not shown that the KTS-500 and its power supply are less electrically safe than defendant's own powered devices.

5. There have been no reported instances in which a directly connected KTS-500 significantly impaired longitudinal balance, or interfered with network control and signaling functions.

6. It is highly improbable that any call to or from a KTS-500 would be routed through a call path which interferes with spike reception and lacks a time-out feature.

7. It is highly improbable that a party to a KTS-500 conference call would be unable to clear his own telephone line by simply hanging up.

8. It has not been shown that Pacific will be able to repair and service all competitive conferencer/patchers.

9. It has not been shown that the KTS-500 should be tariffed to the exclusion of other brands of conferencer/patchers.

10. It is not unreasonably burdensome or anti-competitive to require complainant to provide reasonable assurance that proper installation and repair procedures are uniformly followed.

Conclusions

1. Defendant's coupler requirement is anti-competitive in effect.

2. Defendant cannot lawfully charge for a coupler to be interposed between a foreign attachment and the telephone network except insofar as is reasonably necessary to protect the overriding public interest in network serviceability and in employee and customer safety.

3. Defendant should not be ordered to provide the KTS-500 under tariff.

4. The public interest requires that direct interconnection of the KTS-500 be permitted only to the extent that the public can reasonably be assured that the devices are properly installed and maintained.

O R D E R

IT IS ORDERED that:

1. The Pacific Telephone and Telegraph Company shall permit the electrical connection of KTS-500 to the telephone network subject to Ordering Paragraph 2 and subject to the condition that complainant shall provide reasonable assurances that quality control, installation, and repair procedures herein or hereafter found necessary for the preservation of network integrity and safety will be uniformly followed.

2. Pacific shall offer an interface device, without protective features, to directly connect the KTS-500 to the network. Pacific shall serve complainant with a copy of any advice letter intended to establish rates and charges for the furnishing of such interface.

3. If Pacific and complainant have not, before the effective date of this order, been able to agree upon a plan to achieve compliance with the conditions stated in Ordering Paragraph 1, they or either of them shall so inform the Commission in writing with notice to all parties herein and, upon filing of such notice with the Commission, Ordering Paragraph 1 above shall be stayed, and this proceeding reopened for the taking of further evidence.

4. Pacific shall immediately disconnect or terminate service to any directly connected KTS-500 whenever it has reasonable grounds to believe that such device has become hazardous to network operations or to the safety of utility employees or subscribers.

5. Complainant is hereby authorized until further order of the Commission to include in its advertising matter a statement approved for form and content by the Secretary of this Commission

indicating that the KTS-500 has been conditionally approved for direct interconnection to the telephone system of The Pacific Telephone and Telegraph Company.

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

Dated at San Francisco, California, this 8th day of MAY, 1973.

President

Commissioners

Commissioner J. P. Vukasin, Jr., being necessarily absent, did not participate in the disposition of this proceeding.