

ORIGINAL

Decision No. 78894

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

PHONETELE, INC., a corporation,

Complainant,

vs.

GENERAL TELEPHONE COMPANY OF CALIFORNIA, a corporation,

Defendant.

Case No. 9177
(Filed January 15, 1971)

Robert L. Feiner, for complainant.
A. M. Hart and Donald J. Duckett, Attorneys
at Law, for defendant.

O P I N I O N

Complainant is engaged in manufacturing and marketing a telephone usage restriction device, known as the Phonemaster 1040, usable by telephone subscribers for restricting outgoing telephone calls to selected area codes or exchange prefixes or any combinations of the same. One such device was installed at the plant of Collins Foods International, Inc. (Collins) in Culver City. Collins is a subscriber to the telephone service of defendant.

The complaint herein was generated when defendant notified Collins that telephone service to Collins would be terminated if Collins did not discontinue its use of the Phonemaster 1040 device by 5:00 p.m. on January 15, 1971. The complaint was filed on such date. Defendant extended the time for disconnection of service to Collins to January 19, 1971.

Complainant sought immediate interim relief in the form of a "cease and desist" order which would permit the continued use of the Phonemaster device pending final disposition of the matter. The Commission issued an order to show cause why such a cease and desist order should not be issued (Decision No. 78232, issued January 27, 1971) and hearing thereon was held before Examiner Emerson on February 16, 1971 at Los Angeles. Following this hearing the Commission by Interim Order (Decision No. 78363, issued March 2, 1971) issued a cease and desist order which prevented defendant from interfering with the installation or performance of complainant's Phonemaster restriction unit pending final disposition of this proceeding. Further hearings were held before Examiner Emerson at Los Angeles on March 10 and on March 31, 1971 and, after oral argument and on the receipt of one late-filed exhibit, the matter was submitted on May 25, 1971. It is now ready for decision.

As recited in the Interim Order, the Commission, in viewing the evidence then before it, could not find that complainant's Phonemaster 1040 was in any way detrimental to the telephone system. Nor did it appear that anything beyond the simplest interface between it and the telephone network might be desirable. In view of the now completed record, we are still of the same opinion. Indeed, the evidence received during the two subsequent days of hearing leaves no room for doubt. No different findings of fact relative thereto can, in justice, be made.

The Phonemaster 1040, except for one electro-mechanical relay, is a solid-state electronic device used to impose a restriction on the telephone customer's access to outgoing trunks in accordance with specific office codes (prefixes) programmed in the

device as desired by the telephone customer. In simple terms, it is a toll diverter. That is, it may be programmed to impose a restriction on or a denial to, an outgoing call if that call is to a prefix which the telephone customer desires not be called. It is flexible, in that it will handle almost any number of trunks and various coding arrangements. It may be purchased, rented or leased by the customer and is thus categorized, in the telephone industry, as a COAM device (customer owned and maintained). In dial telephone systems, the device is interposed between selector multiples and the trunk circuit in such a way as to restrict subscribers from outward dialing but not to restrict the PBX operator from the use of the trunk for either outward or inward connections.

The device has built into it an interface arrangement that is designed in two stages. The first stage is a terminal block and a connection switch which in effect allows by-passing of the device. The second stage is a relay card which senses dial pulses, repeats them to the Phonemaster only and from the Phonemaster's internally programmed information either allows the call to be undisturbed or imposes a restriction thereon. Under restriction, the dialing telephone station has an alternating, pulsating tone imposed upon it which thereby notifies the dialer that the call is restricted. The equipment within the Phonemaster assures that the tone appears only on the relay contacts toward the calling station and does not enter the telephone system network. The amplitude of the tone is limited by means of back-to-back diodes within the Phonemaster. The design of the interface stages is such that the entire device is passive to the telephone network until restriction is imposed. At no time does it control or interfere with telephone system or network signalling.

Electrically, the device is attached to the telephone lines through two 100,000 ohm resistors; thus, a total short or grounding within the Phonemaster will not impose less than a 200,000 ohm impedance across the telephone line nor less than a 100,000 ohm impedance from either ring or tip to ground. The Phonemaster operates at a nominal d.c. power supply voltage of 26 volts as contrasted with the nominal 100 volts (plus and minus 50 volts) normally used by defendant's telephone system. There can not be more than five milliamperes of current drawn in either direction from the sensing unit within the Phonemaster to defendant's outgoing trunk. In the remote possibility of malfunctioning or for purposes of testing or for deliberate removal of all restriction, the device can be completely by-passed and made inoperative by either operating the by-pass switch provided for such purpose or by "pulling the plug" as with any appliance.

The evidence is clear, and we trust that the foregoing somewhat abbreviated description of the device is sufficiently clear to indicate, that the Phonemaster 1040 is not in any way detrimental to the telephone network as respects network signalling, harmful voltages or noise (the tone) and cross-talk, three of the basic criteria which defendant as well as the whole telephone industry must consider in evaluating the attachment of COAM equipment to the telephone network. ✓

Defendant's original position in this matter is that connection of the Phonemaster 1040 to defendant's telephone network must be by means of a coupler which shall be provided only by defendant (as a tariff item). Defendant's chief engineer, who apparently sets defendant's policy by making recommendations to

defendant's top management, adamantly maintained on the last day of hearing that no customer-provided equipment could be attached to the telephone network without a company owned and maintained interface.^{1/} The record is clear that defendant does in fact make connections to COAM equipment without company-supplied interfaces and this policy witness, albeit somewhat reluctantly, admitted the same. His testimony appears to have been an attempt to subordinate the Phonetele complaint by indirectly seeking Commission approval of a company policy which may or may not be reasonable. We shall stay within the bounds of the complaint herein, the basic issue of which, at this point, is whether or not the existing temporary injunction against interfering with the Phonemaster 1040 shall be made permanent.^{2/}

Defendant, in its answer to the complaint, indicated that it would have a suitable coupler (or interface) by March 15, 1971. Defendant had an interfacing device in the hearing room on the second day of hearing and it was viewed by all present. It was of considerable size and weight and reputedly would be costly. Apparently, criticism of it engendered its revision by defendant, for

1/ Questioning elicited the following (TR. 164, lines 10-18):

"Examiner: And you don't differentiate one customer from another, is that correct?

A. One customer?

Q. You said 'no customer'. You mean no customer at all?

A. That's right.

Q. No customer-provided equipment?

A. That is right.

Q. I see.

A. I am not talking just Phonetele."

2/ Defendant's attorney agrees as to this issue (TR. 233, lines 18-22).

testimony at the subsequent day of hearing revealed that several design changes had been made by which its bulk had been reduced, a number of its redundant components had been eliminated and a resistor connection between tip and ring had been added so as to provide for direct electrical connection of the Phonemaster 1040 to the telephone company lines. Analysis of this interface by complainant's expert produced testimony to the effect that defendant's coupler would provide no protection not already provided by the interface within the Phonemaster but it would adversely affect the reliability of the Phonemaster. The initial coupler used only relays and repeated all dial pulses, thus inherently being subject to possible misinterpretation of dial pulses. The second version would duplicate both the sensing functions and the transfer functions of the Phonemaster, thus reducing overall system reliability.

Revealed for the first time on the last day of hearing was a third coupler (not quite completed) developed by defendant. This device measured about 4 x 5 x 1-1/2 inches in size overall, a size comparable to that of the Phonemaster interface card. According to defendant's witness the major reasons for designing this coupler are to prevent excessive noise levels and to prevent noise transients through or from the power supply from entering the telephone company lines. Insofar as PBX systems are concerned, the device is intended to be placed between the trunk circuit and the central office (as contrasted with the Phonemaster installation between the selector and the trunk circuit). Any malfunction would thus adversely affect both the outgoing and incoming trunk usage. Unlike the Phonemaster interface, no provision has been provided for by-passing of the coupler.^{3/} The evidence respecting this latest interface proposal of defendant is not convincing that it would in any way be superior

^{3/} The witness testified: "I had not given it any thought" (TR. 213, lines 16-17).

to that provided by the Phonemaster 1040 alone and of itself. Indeed, its use would introduce additional points of possible failure into the telephone system, thereby reducing the factor of overall reliability of service. A simple terminal block should suffice for interconnecting the Phonemaster 1040 to defendant's lines.

Defendant's final witness testified respecting the tariff aspects of interconnection. He stated that defendant had on February 10, 1971, filed revised tariffs which permit and authorize the connection of COAM equipment to defendant's lines. They became effective on March 15, 1971. They set forth the connecting arrangements, the technical limitations and the charges for connection and COAM devices. The provisions of these revised tariffs contain no reference to devices such as the Phonemaster, nor did the tariffs in effect at the time of the filing of this complaint. It will be necessary for defendant to further revise its tariffs in order to accommodate the Phonemaster 1040. Its tariff charges for such device should be no greater than a nominal charge for installation of a terminal block and a minimal monthly charge to cover the maintenance thereof.

This opinion and order should in no way be interpreted as being in the nature of a "landmark" decision applicable in general terms to the connection of customer-owned-and-maintained equipment to telephone utility lines. It is intended to be applicable solely to the specifics of this proceeding. Our only general observation, in view of the proliferation of COAM devices now being marketed, is that protection of the public's interest in having an adequate and reliable telephone service requires that the reasonable standards of the telephone industry shall be met. In the instant case, we are

convinced, they will be met without the necessity for any protective interface device additional or external to that provided within the Phonemaster 1040.

In view of the evidence, the more important elements of which are discussed above, the Commission makes the following findings of fact:

1. The Phonemaster 1040, as currently manufactured (with internal protective features) and marketed by Phonetele, Inc., complainant herein, is in no way detrimental to defendant's telephone network.

2. Connection of the Phonemaster 1040 to defendant's telephone lines or network may appropriately be made through, or by means of, a terminal block and without any protective interface other than that provided within said Phonemaster 1040.

The Commission concludes that:

1. The temporary restraint heretofore issued by Decision No. 78363 should now be made permanent, and

2. Defendant should be directed to provide, by means of an appropriate terminal block, a point of connection for the hereinabove described Phonemaster 1040 to defendant's telephone network.

O R D E R

IT IS ORDERED that:

1. General Telephone Company of California (General) shall cease and desist and hereafter refrain from interfering with the installation and performance of complainant's Phonemaster 1040.

2. General shall provide, as a point of connection of said Phonemaster 1040 to General's telephone network, a suitable terminal block and shall locate said terminal block in a position mutually acceptable to it and to complainant.

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

Dated at San Francisco, California, this 13th day of JULY, 1971.

Chairman
William J. ...
...
Vernon L. Sturgeon

Commissioners

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

Commissioner D. W. Holmes, being necessarily absent, did not participate in the disposition of this proceeding.