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Decision 91-03-020 March 13, 1991

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Alternative Regulatory Frameworks for Local Exchange Carriers.	I.87-11-033 (Filed November 25, 1997)
And Related Matters.	Application 85-01-034 Application 87-01-002 I.85-03-078 I.87-02-025 Case 87-07-024

OPINION ON DEFINITION OF FEEDER CABLE AS REQUIRED BY D.89-10-031

Summary

This decision modifies the previous industry standard definition of "feeder cable" in recognition of the advances in technology that now allow the use of fiber optic plant to connect local exchange telephone companies' (LECs) central offices, with interfaces, to their metallic (copper) distribution cables. The new definition being adopted in this order includes revisions suggested in the comments and reply comments we received in response to Ordering Paragraph 27 of Decision (D.) 89-10-031 issued October 12, 1989[1] soliciting comments on the proposed definition included in the narrative of that order.[2]

1 See Alternative Regulatory Framework for Local Exchange Carriers, Investigation (I.) 87-11-033 et al. (1989) CPUC 2d 43, 237.

2 Id. at 205.

Introduction

In D.89-10-031, the Commission required that Pacific Bell (Pacific) and GTE California Incorporated (GTEC) obtain further authority to offer new services dependent on a fiber-to-the-customer infrastructure prior to making any investment in fiber beyond the feeder system, other than small-scale trials or fiber which the Commission has found to be cost effective in the provision of traditional local exchange carrier services. In order to avoid later controversy, parties were allowed to file comments on the following proposed definition of "feeder":

> "Generally, local exchange carrier outside plant is divided into feeder cable, distribution cable, and drops. Feeder plant connects a local exchange carrier's central office or remote wire center to a distribution point, such as a remote terminal unit or serving area interface, from which individual circuits are connected to customer service drops delivering service directly to a customer premises. Generally speaking, distribution plant is initially installed at the capacity (number of lines) it is ultimately intended to serve, while feeder plant is periodically reinforced to add capacity as new customers (and their corresponding distribution plant and drops) are added to the network. Feeder plant is usually not connected directly to customer drops."

The following parties filed comments and/or reply comments on the proposed definition:

AT&T Communications of California, Inc. (AT&T)
California Cable Television Association (CCTA)
Division of Ratepayer Advocates (DRA)
GTEC
County of Los Angeles (Los Angeles)
Pacific

DRA and Pacific state that they do not oppose the proposed definition of feeder.

AT&T commented that minor changes in the proposed definition are needed to clarify that customer drops are not

connected to feeder plant and to indicate that outside plant is not limited to cable but may include other investment.

CCTA is concerned that the last sentence in the proposed definition would permit drops directly off the fiber feeder without further Commission review and proposed language to either explicitly prohibit such configurations or to require prior Commission approval.

GTEC stated that the proposed definition of feeder is generally consistent with the way the term is used in the telecommunications industry, particularly with respect to residential areas. However, GTEC explains that in business districts, feeder plant frequently extends directly from the telephone utility's serving wire center to large commercial buildings. As a result, GTEC contends that the definition should be modified to permit placement of fiber facilities directly to large business customers in buildings which have in the past been directly served by feeder cable. As a large user of telecommunications services, Los Angeles had similar concerns and proposed language modifications with comparable effect.

In its reply comments, CCTA supported AT&T's proposed changes and stated that it would not object to the language changes proposed by GTEC or Los Angeles if the exceptions they propose to add to the definition are limited to nonresidential service. GTEC notes that its proposed amendment would address Los Angeles' concerns, and opposes CCTA's modification since it runs counter to GTEC's own proposal. Los Angeles argues similarly that CCTA's proposed language be rejected.

Discussion

After considering the comments and reply comments of the parties and incorporating the modifications and revisions generally agreed to by the parties, the definition of a "feeder from D.89-10-031 could be changed as follows, with additions underlined and deletions shown in brackets:

> "Generally, local exchange carrier outside plant is divided into feeder [cable] plant, distribution [cable] plant, and drops. Feeder plant connects a local exchange carrier's central office or remote wire center to a distribution point, such as a remote terminal unit, a terminal for a business customer's large building, or serving area interface [, from which]. At the distribution point, individual circuits are connected to distribution plant and customer service drops delivering service directly to a customer premise. Generally speaking, distribution is initially installed at the capacity (number of lines) it is ultimately intended to serve, while feeder plant is periodically reinforced to add capacity as new customers (and their corresponding distribution plant and drops) are added to the network. Feeder plant is usually not connected directly to customer drops."

While it is practical to adopt such a definition of a feeder based on the apparent concurrence of the parties, we do not intend to use this definition to impose artificial burdens on the LEC's legitimate use of fiber optic services to commercial enterprises. Accordingly, we will set a reasonable area for a large commercial building as 10,000 square feet of floor space yielding an expectation of an occupancy level requiring at least 50 active telephone stations. Similarly, the definition could be extrapolated to any building size served with a private branch exchange (PBX) with a minimum of five equivalent central office trunks.

If service is by a means other than a customer-provided PBX, the 10,000-square-foot size building, or the 50 active stations would prevail, based on a design criteria of one PBX trunk normally being required for every 10 active stations.

Under this definition, the LECs are precluded from extending a fiber "feeder" to serve a large residential building without first seeking further authority from this Commission. This limitation was also contemplated in the narrative of D.89-10-031 as follows:[3]

> "The possibility that the local exchange carriers might begin construction of fiber facilities to residential customer premises engendered much controversy in Phase II. While Pacific limited its request for approval to install fiber in the local loop primarily to the feeder infrastructure (with only a small fiber-to-the-home field trail), CCTA fears that this is merely the first step in construction of monopoly ratepayer-funded fiber facilities capable of delivering cable television service. Because of the magnitude of investment needed to offer new services dependent on a fiber-to-the-customer infrastructure, as well as possible technical issues, we require the local exchange carriers to file applications for authority to offer such services prior to making any investment in fiber beyond the feeder system, other than small-scale trials or fiber which the Commission has found to be cost effective in the provision of traditional local exchange carrier services.
>
> "A local exchange carrier may request such a cost-effectiveness determination through the Expedited Application Docket procedure. No cost-effectiveness determination is required for a local exchange carrier's provision of fiber optic facilities to a specific business property where the customer bears the full cost of the installation. Also excepted from this application requirement are truly exceptional circumstances where unusual physical conditions such as a high water table or isolated rural facilities with very long distribution circuits make the use of fiber clearly more practical and efficient than the alternatives, so long as the deployment of fiber does not connect

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3 See footnote 1, Id. 204 and 205.

> directly to the customer service drop. In such cases the local exchange carrier will be required to notify the Commission through an advice letter under the terms of General Order 96-A, served on all parties in I.87-11-033. If substantive protests arise, we may require that such requests be examined further in an Expedited Application Docket."

Because of the above concerns and considerations, and GTEC's objections to the limitations, it appears important to emphasize that it is not our intent to stifle technological improvements to the LECS' plant facilities and their state-of-the art planning for legitimate utility services. Therefore, we will welcome their applications for the use of cost-effective fiber optic technologies to large residential complexes where such facilities are not being installed for the provision of cable television service. With these understandings we will adopt the new definition of a feeder discussed above.

Findings of Fact

1. Generally local exchange carrier outside plant is divided into feeder plant, distribution plant, and service drops.

2. Feeder plant connects an LEC's central office or remote wire center to a distribution point where individual circuits are derived and connected to distribution plant used to connect to customer service drops to the customers' premises service block or subscriber network interface.

3. Feeder plant is not normally connected directly to customer service drops.

4. The parties to this proceeding do not object to the LEC's cost-effective use of fiber optic feeder plant to connect their central offices and wire centers to specific business properties where the customer bears the full cost of the installation.

5. There is no consensus among the parties to allow the LEC's to use fiber optic feeder plant to connect their central offices and wire centers directly to the premises of any residential customers absent further authority by this Commission as contemplated by Ordering Paragraph 26 of D.89-10-031.

6. The Commission's past policy has been to welcome cost-effective technological improvements to LECs' communications facilities and plant. Accordingly, the application process is intended to allow the LECs to seek the additional authority needed prior to the use of fiber optic feeder plant to connect central offices and wire centers directly to large residential complexes.

Conclusions of Law

1. There is concurrence among the commenting parties that "Feeder" Plant should be better defined to the extent set forth in the following order.

2. D.89-10-031 authorizes the use of applications filed under the Expedited Action Docket process to seek authority for expanded use of the fiber optic plant beyond the feeder as defined herein. That process should continue to be used by any LEC seeking such expanded authority.

O R D E R

IT IS ORDERED that the definition of local exchange telephone utilities' "Feeder" facilities shall hereafter be as follows:

> "Generally, local exchange carrier outside plant is divided into feeder plant, distribution plant and drops. Feeder plant connects a local exchange carrier's central office or remote wire center to a distribution point, such as a remote terminal unit, a terminal for a business customer's large building, or serving area interface. At the distribution point, individual circuits are connected to distribution plant and customer service drops delivering service directly to a customer

premise. Generally speaking, distribution is initially installed at the capacity (number of lines) it is ultimately intended to serve, while feeder plant is periodically reinforced to add capacity as new customers (and their corresponding distribution plant and drops) are added to the network. Feeder plant is usually not connected directly to customer drops."

A business customer's large building as included in the above definition shall be further defined as a commercial building with a minimum of 10,000 square feet of floor space, or any size building served with a private branch exchange (PBX) with a minimum of five active central office trunks. Where service is provided by equipment other than a PBX, the 10,000-square-foot size of building or 50 active telephone stations will prevail.

This order is effective today.

Dated March 13, 1991, at San Francisco, California.

PATRICIA M. ECKERT
President
G. MITCHELL WILK
JOHN B. OHANIAN
DANIEL WM. FESSLER
NORMAN D. SHUMWAY
Commissioners

I CERTIFY THAT THIS DECISION WAS APPROVED BY THE ABOVE COMMISSIONERS TODAY

NEAL J. SHULMAN, Executive Director