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Decision 97-06-090 June 25, 1997

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of Alternative  
Regulatory Frameworks for Local  
Exchange Carriers.

I.87-11-033  
(Filed November 25, 1987)

In the Matter of the Application  
of Pacific Bell (U 1001 C), a  
corporation, for authority to  
increase intrastate rates and  
charges applicable to telephone  
services furnished within the State  
of California.

Application 85-01-034  
(Filed January 22, 1985;  
amended June 17, 1985 and  
May 19, 1986)

Application of General Telephone  
Company of California (U 1002 C), a  
California corporation, for authority  
to increase and/or restructure  
certain intrastate rates and charges  
for telephone services.

Application 87-01-002  
(Filed January 5, 1987)

And Related Matters.

I.85-03-078  
(Filed March 20, 1985)

OII 84  
(Filed December 2, 1980)

Case 86-11-028  
(Filed November 17, 1986)

I.87-02-025  
(Filed February 11, 1987)

Case 87-07-024  
(Filed July 16, 1987)

(See Appendix A for list of appearances.)

# I N D E X

<u>Subject</u>	<u>Page</u>
OPINION .....	2
I. Summary .....	2
II. Procedural Background .....	2
III. Should the Preapproval Requirement be Lifted? .....	5
A. The Preapproval Requirement .....	5
B. Positions of the Parties .....	8
1. GTBC's Position .....	8
2. Pacific's Position .....	9
3. CCTA's Position .....	10
4. CCLTC's Position .....	12
5. DRA's Position .....	13
6. MCI's Position .....	14
7. TURN'S Position .....	15
C. Discussion .....	16
1. What Should be the Focus of Our Inquiry .....	16
2. Why Was the Fiber Preapproval Requirement Adopted? .....	17
3. What Changes Have Occurred Since D.89-10-031 Was Adopted? .....	20
4. Do the Change in Circumstances Warrant Retention of the Fiber Preapproval Requirement? .....	21
a. The Changing NRF Framework .....	21
b. Cost-Effectiveness of Fiber Beyond the Feeder .....	23
c. Technical Issues Related to Fiber Deployment .....	26
d. How Fiber Deployment May Affect Cable Television Providers .....	29
(1) When Should the Fiber Preapproval Requirement be Eliminated? .....	30
(2) Cost Allocation and Cross-Subsidization .....	38
5. CCLTC's Proposed Restatement of the Fiber Preapproval Requirement .....	42
6. Comments to the ALJ's Proposed Decision .....	43
7. Summary .....	45
Findings of Fact .....	46
Conclusions of Law .....	50
ORDER .....	53
APPENDIX A - List of Appearances	

## O P I N I O N

### I. Summary

GTE California Incorporated (GTEC) filed a petition to modify Decision (D.) 89-10-031 (33 CPUC2d 43) on August 4, 1993. GTEC's petition for modification seeks to eliminate the ordering paragraphs in D.89-10-031 which require that fiber optic cable (fiber) deployment beyond the feeder be preapproved by this Commission. Pacific Bell (Pacific) joined in GTEC's petition.

A review of the significant changes that have taken place since the adoption of D.89-10-031 convince us that the fiber preapproval requirement is no longer needed. Therefore, this decision grants GTEC's petition to eliminate the fiber preapproval requirement from D.89-10-031.

### II. Procedural Background

On August 4, 1993, GTEC filed its petition to modify D.89-10-031 (33 CPUC2d 43). GTEC's petition seeks to remove ordering paragraphs 24, 25, and 26 of that decision. (See 33 CPUC2d at 236-237.) Those three ordering paragraphs imposed upon GTEC and Pacific a requirement that they first seek Commission approval before investing in fiber-beyond-the-feeder system.<sup>1</sup> fiber-beyond-the-feeder is sometimes referred to as fiber in the loop or fiber in the distribution network. In the telephone industry, the loop or the distribution portion generally refers to

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<sup>1</sup> For simplicity's sake, we refer to all three fiber preapproval requirements in the singular.

the last mile or so of cable that exists between the feeder portion of the network, and the customer.

Protests to GTEC's petition for modification were filed by the California Committee for Large Telecommunications Consumers (CCLTC),<sup>2</sup> California Cable Television Association (CCTA), MCI Telecommunications Corporation (MCI), and Toward Utility Rate Normalization, which is now known as The Utility Reform Network (TURN).

Shortly before the prehearing conference of December 14, 1993, the Commission issued a Report to the Governor entitled "Enhancing California's Competitive Strength: A Strategy For Telecommunications Infrastructure" (Infrastructure Report). The purpose of the report was to respond to the Governor's request for the Commission to develop a comprehensive strategy to promote the development of an advanced public telecommunications network for California.

At the prehearing conference of December 14, 1993, Pacific joined in GTEC's petition for modification of D.89-10-031. During that prehearing conference, the issues to be addressed in the evidentiary hearing were identified as cross-subsidy, basic-rate impact, shareholder versus ratepayer risk, and economic impact.

On December 24, 1993, CCTA filed a separate petition to modify D.89-10-031. CCTA's petition sought to expand the preapproval requirement to include investments in coaxial cable beyond the feeder system. In D.94-08-029, the Commission denied CCTA's petition to expand the preapproval requirement to include

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<sup>2</sup> Originally, the California Bankers Clearing House and the County of Los Angeles filed the protest to the petition for modification. The members of the California Bankers Clearing House and the County of Los Angeles then joined CCLTC, which is now one of the protestants.

coaxial cable beyond the feeder. The Commission stated, among other things, that it was premature to consider imposing a preapproval requirement for coaxial cable investments beyond the feeder until the pending issue of whether the fiber preapproval requirement should be eliminated was resolved. CCTA's application for rehearing of D.94-08-029 was denied in D.94-12-055.

After several delays, the evidentiary hearings into GTEC's petition for modification of D.89-10-031 began on February 27, 1995, and concluded on March 10, 1995. A number of exhibits were admitted into evidence during the hearings.<sup>3</sup> The matter was submitted upon the filing of concurrent reply briefs on May 9, 1995.

On May 9, 1995, GTEC mailed the assigned Administrative Law Judge (ALJ) a copy of the Federal Communication Commission's (FCC) "Order and Authorization" pertaining to GTEC's video dialtone (VDT) application. That FCC order was adopted on April 28, 1995, and released on May 5, 1995. GTEC requests that official notice be taken of this FCC Order and Authorization. Similarly, on September 1, 1995, CCTA submitted a request to take official notice of the FCC's "Order and Authorization" pertaining to Pacific's four VDT applications. That FCC order was adopted on July 18, 1995, and released on August 15, 1995.

In late 1993 and early 1994, both GTEC and Pacific filed applications with the FCC to construct, operate, and maintain facilities to provide VDT service in selected communities in California. Both of these broadband networks propose the use of a

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<sup>3</sup> Exhibit 72-PC contained Bellcore proprietary information. Admission of that exhibit was deferred until Pacific's counsel confirmed with Bellcore that it had no objection to the exhibit being received into evidence under seal. Pacific subsequently confirmed with Bellcore that it had no objection to the admission of Exhibit 72-PC under seal. Accordingly, Exhibit 72-PC shall be received into evidence.

hybrid fiber-coaxial cable (HFC) architecture. The HFC architecture would utilize fiber from the central office to an optical/electrical node located in the neighborhood. Each node would serve approximately 500 homes. From the node, the signals would then be carried on coaxial cable to the customer's home.

We shall take official notice of both of these FCC orders.<sup>4</sup>

Transcript corrections were submitted by GTEC, Pacific, and CCTA on March 24, 1995. Since no one has objected to any of the proposed corrections, those corrections will be made to the reporter's transcript.

The proposed decision of the assigned ALJ was mailed to the parties on May 13, 1997. Comments to the proposed decision were filed by GTEC, Roseville Telephone Company (Roseville), and TURN. Reply comments were filed by GTEC and Pacific. Their comments are addressed later in this decision.

### III. Should the Preapproval Requirement be Lifted?

#### A. The Preapproval Requirement

In 1989, the Commission adopted a new regulatory framework (NRF) for GTEC and Pacific in D.89-10-031 (33 CPUC2d 43). The NRF decision replaced the traditional cost-of-service regulation that GTEC and Pacific had been formerly regulated under. The NRF, as adopted in 1989, was centered around a price cap indexing mechanism, with a sharing with ratepayers of any excess earnings above a specified benchmark rate-of-return level.

<sup>4</sup> Although Section 302(b)(3) of the Telecommunications Act of 1996 terminated the VDT requirements that the FCC issued in FCC Docket No. 87-266, the act did not terminate any of the VDT systems that were approved before the enactment of this act.

In order to encourage GTEC and Pacific to become more efficient in their operations, adjustment of prices in the price cap mechanism was tied to the Gross National Product Price Index (GNPPI) reduced by a productivity adjustment of 4.5%. The price cap mechanism also included a "Z" factor adjustment which was designed to allow rate adjustments for a limited category of exogenous factors which are neither reflected in the GNPPI nor under management control.<sup>5</sup>

The NRF decision also eliminated Commission preapproval of telephone network investments except for fiber-beyond-the-feeder.<sup>6</sup> In imposing a preapproval requirement for fiber-beyond-the-feeder, the Commission stated in part that:

"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.

". . . 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

<sup>5</sup> Subsequent decisions have modified portions of the formula including the index used to adjust productivity, the level of productivity adjustment and the criteria for "Z" factor adjustment, none of which alter the discussion or conclusions in this decision.

<sup>6</sup> The definition of what is the feeder portion, and the question of which part is the distribution or beyond-the-feeder portion, were addressed in D.91-03-020 and D.91-11-018.

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 directly to the customer service drop." (33 CPUC2d at 204-205.)

The above quoted fiber preapproval discussion was incorporated into ordering paragraphs 24, 25, and 26 of D.89-10-031, which state in pertinent part:

- "24. Pacific and GTEC shall request authority to provide 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 is cost effective in the provision of traditional local exchange carrier services....
- "25. Pacific and GTEC shall file advice letters in accordance with General Order 96-A to request authority before they invest in fiber-beyond-the-feeder system due to unusual physical conditions....
- "26. Pacific and GTEC shall file applications in the Expedited Application Docket to request authority before they invest in fiber-beyond-the-feeder system to provide traditional local exchange carrier services." (33 CPUC2d at 236-237.)

In adopting the NRF, the Commission stated that:  
"Because rates will be set in a manner independent of utility actions, the new framework creates a strong profit-driven incentive for the utility to manage its operations in the most efficient manner possible." (33 CPUC2d at 60.) As for the elimination of preapproval for telephone network investments other than fiber-beyond-the-feeder, the Commission said that should "... encourage the local exchange carrier to aggressively pursue new technologies and services to take fuller advantage of the economies of scale and scope inherent in the local exchange network, with benefits accruing to the entire California economy." (*Id.*, at p. 151.)



**B. Positions of the Parties**

**1. GTEC's Position**

GTEC takes the position that the fiber preapproval requirement is inconsistent with both the structure and incentives of the new regulatory framework, as well as the direction in which telecommunications regulation in California is headed. GTEC contends that the technical and cost issues mentioned by the Commission in D.89-10-031 are no longer relevant reasons for imposing the fiber preapproval requirement.

GTEC points out that there have been rapid technological changes in recent years. With respect to fiber technology, GTEC claims that this has led to lower costs. Internal studies by both Pacific and GTEC, as well as other industry studies, show that fiber is, or will soon be, cost effective with copper in the distribution network. GTEC contends that the use of fiber technology has many advantages in different kinds of applications, and that local telephone companies other than GTEC and Pacific, as well as cable companies and other telecommunication companies, are deploying fiber in the distribution network.

GTEC asserts that the protestants' arguments are based on speculation, failure to acknowledge the competitive landscape of telecommunications, the expectation that highly improbable events will occur, and the belief that regulation should not change.

GTEC states that the two key CCTA arguments against lifting the preapproval requirements are: (1) that fiber is not cost effective in most of the distribution network; and (2) that the deployment of fiber raises serious technical issues such as powering and reliability. GTEC believes that the validity of these kinds of arguments are best addressed in the field and the marketplace, and not in the hearing room. GTEC argues that the Commission should not concern itself with the merits of engineering studies, but instead should focus its attention on the broad policy

objectives to be achieved, and the best regulatory ways of achieving those objectives.

GTEC also argues that the existing mechanisms in NRF already protect consumers and competitors against cross-subsidy. According to GTEC, these safeguards include the price cap indexing mechanism, the categories of services which limit how prices can be changed, the establishment of cost floors for competitive services based on long run incremental cost (LRIC); the adoption of the FCC's Part 64 cost allocation mechanism for allocating costs between regulated and nonregulated services; the Commission's approval process for new services; the NRF monitoring program which requires the submission of numerous reports designed to monitor the Commission's NRF goals; service-specific cost tracking in which costs are tracked and assigned to all of GTEC's individual products and services; and the tracking of research, development and deployment costs. With all of the above safeguards, GTEC contends that consumers and competitors are protected from cross subsidization.

## 2. Pacific's Position

Pacific's arguments as to why the fiber preapproval requirement should be eliminated are similar to those of GTEC. Pacific asserts that the preapproval requirement is an unneeded regulatory procedure, and that customers and competitors are already fully protected by safeguards in the NRF structure, the Commission's research, development, and deployment (RD&D) procedures, and by the dramatic changes in technology and growing competition in the telecommunications market. In addition, Pacific contends that retention of the fiber preapproval requirement is contrary to the Commission's technology-neutral infrastructure policy.

According to Pacific, the NRF mechanism provides incentives so that GTEC and Pacific will make prudent, cost-effective investment decisions that benefit both customers and

shareholders. The NRF mechanism also contains monitoring and other requirements which guarantee that the Commission has all the information it needs to ensure that the system is working properly. Pacific also points out that these NRF safeguards can only be changed if the Commission approves, which ensures that customers and the competition will not be harmed by the installation of fiber-beyond-the-feeder.

Pacific also asserts that fiber is becoming cost effective as compared to copper beyond the feeder. In addition, Pacific argues that there are no cost or performance issues related to fiber-beyond-the-feeder that necessitate retention of the fiber preapproval requirement.

Pacific also states that the concerns about cost allocation do not warrant the retention of the preapproval requirement. Pacific asserts that the service-specific reporting requirements, Part 64 cost allocation procedures and the RD&D tracking and reporting requirements for new products all ensure that cost allocation is being done properly, and that, if cost allocations need to be changed in the future, there are procedures in place to capture all of the information needed to redo the cost allocations.

Pacific also asserts, as did the Commission in its Infrastructure Report to the Governor and in D.94-08-029, that the local exchange carriers (LECs) should be free to choose the technologies the LECs will use to bring advanced telecommunications to California.

### 3. CCTA's Position

CCTA is opposed to the elimination of the fiber-beyond-the-feeder preapproval requirement. CCTA asserts that the deployment of fiber-beyond-the-feeder, or coaxial cable beyond the feeder, is only necessary for the provisioning of full motion, competitive, video services. CCTA argues that telephone ratepayers will not realize any improvement in the quality of their telephone

service as a result of such deployment. CCTA believes that GTEC and Pacific are only trying to cross-subsidize their entry into competitive video services.

CCTA argues that the Commission's focus should be on whether fiber capacity is necessary for the provisioning of telephone service, whether fiber is a cost-effective replacement alternative for copper, and whether a fiber architecture is a more reliable technology than a conventional copper architecture. CCTA submits that the answer to all three questions is in the negative.

CCTA contends that the preapproval requirement is an essential element of the NRF protections because this requirement protects captive ratepayers from cross-subsidizing the LECs' entry into competitive services. CCTA argues that the risk of cross-subsidization is great because a monopoly utility entering competitive services has a financial incentive to shift the costs associated with the competitive service to its captive telephone customers. If the preapproval requirement is lifted, the Commission will not have a chance to preview the investment or the assignment of costs prior to placing ratepayers at risk. In addition, CCTA contends that, if the Commission lifts the preapproval requirement before implementing cost allocation rules for video services, the misassignment of costs associated with competitive services will be assured.

CCTA argues that neither GTEC nor Pacific have shown that the circumstances supporting the fiber preapproval requirement have changed since the requirement was originally adopted, and that the reasons for the requirement remain as compelling today as they were when the requirement was first adopted.

CCTA contends that given the substantial investment associated with the deployment of fiber-beyond-the-feeder, and the potential risk that monopoly telephone ratepayers would be subjected to as a result of that investment, the Commission should retain the fiber preapproval requirement so that the Commission has

advance notice of, and the right to decide, whether fiber-beyond-the-feeder should be deployed.

4. CCLTC's Position

CCLTC supports the efforts by GTEC and Pacific to expand and improve their infrastructure within California. CCLTC is concerned, however, with the interrelationships between the telephone services offered by GTEC and Pacific, and their plans to offer video services. CCLTC believes the Commission must ensure that proper cost allocations occur with any fiber-beyond-the-feeder investments so that telephone ratepayers do not subsidize the provisioning of competitive services by GTEC and Pacific.

CCLTC contends that the fiber preapproval requirement was imposed because the Commission recognized that investment in fiber-beyond-the-feeder involved much more money than other utility investments, and because such investments could create all types of potential problems under the NRF structure.

CCLTC argues that this substantial investment could impact the NRF framework by eroding the LECs' realized rate of return, which could then impact shareable earnings. If customers of Category I services are required to pay more for these services as a result of the broadband investment, then a cross-subsidy of the broadband services would result. In addition, if certain portions of the NRF mechanism are eliminated as Pacific has advocated, that will heighten the risk of improper investment or cost allocation.

CCLTC recommends that the fiber preapproval requirement remain in place until the Commission determines that there are competitive alternatives for monopoly telephone services, and that the LECs lack the ability to pass on the costs of deploying the new infrastructure to their monopoly ratepayers. CCLTC also recommends that the preapproval requirement be restated in a technology neutral manner, i.e., the preapproval requirement should be imposed

for any deployment of broadband distribution facilities to the customer premise;

5. DRA's Position

The Division of Ratepayer Advocates (DRA) does not oppose GTEC's petition to remove the fiber preapproval requirement.<sup>7</sup>

However, DRA believes that the Commission must place clearly defined accounting procedures in place so as to prevent the unfair allocation of VDT costs to customers of basic telephone service.

DRA contends that the fiber preapproval requirement is inconsistent with the goals of the NRF. DRA argues that the NRF was intended to create a competitive environment in which a state-of-the-art telecommunications infrastructure would result.

DRA asserts that the services to be provided over broadband facilities are predominantly Category III discretionary services for which the investment risk is placed entirely upon the shareholder. DRA contends that equitable cost allocation procedures must be established, and the potential for cross-subsidy removed. DRA also states that recovery of fiber or coaxial cable investments through the Z factor adjustment, or by any other means, must be prohibited.

DRA believes that the cost allocation issues associated with the deployment of fiber-beyond-the-feeder, or for a fiber/coaxial cable investment, should be deferred to a subsequent proceeding, and should not delay the deployment of a state of the art broadband infrastructure. As an interim measure, DRA recommends that the Commission require the establishment of a

<sup>7</sup> Due to the Commission's recent internal reorganization, most of the activities of DRA have been taken over by the Office of Ratepayer Advocates (ORA). Since this proceeding was submitted before the reorganization took place, we shall refer to DRA instead of ORA.

memorandum account to record the cost of investments in fiber-beyond-the-feeder and coaxial cable beyond the feeder so as to protect ratepayers when the preapproval restriction is lifted.

6. MCI's Position

MCI, a major consumer of access and other LEC services, does not oppose eventual Commission removal of the preapproval requirement. MCI, however, wants to ensure that the LECs are not able to cross-subsidize nontraditional services, such as VDT, with revenues acquired from captive ratepayers who have no need for such services. Regardless of what technology is used, MCI asserts that it is crucial that firm cost assignment and accounting procedures be in place so that the Commission can accurately identify and segregate LEC investments that are utilized to provide nontraditional services.

MCI contends that the NRF mechanism does not assure that telephone ratepayers will be protected from LEC cross-subsidization, and any attempt to modify the NRF mechanism has the potential to financially impact telephone ratepayers.

In the event the Commission deletes the fiber preapproval requirement, MCI contends that the Commission must establish a memorandum account. MCI also recommends that the Commission establish an accurate cost causation and cost allocation methodology. That is, the cost of deploying interactive broadband networks should be assigned to those services which cause the new investment and additional expenses. Also, all LEC investment in fiber-beyond-the-feeder must be treated below the line for cost allocation purposes.

MCI also suggests that if the Commission determines that any LEC investment in fiber-beyond-the-feeder should be recorded above the line, and therefore partially funded by ratepayers, a total service LRIC (TSLRIC) cost methodology should be applied to determine the appropriate price floors to establish for regulated services utilizing the new investment, and to determine what the

ratepayer contribution to funding such service, if any, should be. According to MCI, the TSLRIC studies would allow the Commission to detect any cross-subsidy associated with the LECs' broadband investment.

7. TURN's Position

TURN opposes the request by GTEC and Pacific to eliminate the fiber preapproval requirement. TURN contends that the fiber preapproval requirement is an important consumer safeguard that can help ensure that broadband costs are properly allocated for ratemaking purposes, and that the shareholders of GTEC and Pacific bear the risks of large-scale investments in fiber-beyond-the-feeder. According to TURN, the preapproval requirement allows the Commission the opportunity to scrutinize the cost allocations associated with the proposed investment for California ratemaking purposes, and to make clear to the LECs that the Commission will not permit broadband costs to affect the rates for voice telephone service. Preapproval also gives the Commission the ability to examine the technical issue of network reliability.

TURN asserts that if the preapproval requirement is eliminated, and fiber investment takes place but customer demand for broadband services does not materialize, GTEC and Pacific would have a strong incentive to shift the investment costs to captive ratepayers. TURN contends that GTEC and Pacific would either increase rates to customers of existing services that are not subject to effective competition, or they will try to change the regulatory framework to deny those customers decreases that might be due to them under the NRF framework.

TURN also contends that, if the preapproval requirement is eliminated, the FCC cost-allocation rules and the NRF cost tracking will not protect ratepayers. TURN argues that, if the Commission relies on Part 64 to allocate the costs of fiber-beyond-the-feeder, it is likely that voice telephone customers will end up improperly paying the majority of the broadband investment costs



because Part 64 allocates costs on the basis of relative use. If fiber to the home is installed, most of the minutes of use in the early years will be for traditional voice services. Thus, telephone ratepayers would be allocated most of the cost for broadband investment until a market developed for broadband services. TURN asserts that this concern with the FCC rules caused state regulators to ask the FCC to revise its rules. TURN argues that the cost allocation issue must be resolved before the fiber preapproval requirement is lifted.

C. Discussion

1. What Should be the Focus of Our Inquiry?

The advantage of fiber optic cable is its virtually unlimited capacity, and its ability to carry broadband signals. That capacity is limited solely by the capacity of the electronics. It is this ability for high capacity that makes fiber deployment beyond the feeder such a controversial issue. One of the reasons why parties are opposed to the elimination of the fiber preapproval requirement is because they do not want telephone ratepayers to end up subsidizing fiber capacity that can be used to carry services other than voice and data.

CCTA argues that the Commission's focus should be on the cost effectiveness of deploying fiber-beyond-the-feeder. GTEC asserts that, in light of the competitive reality of the marketplace, the fiber preapproval requirement should be eliminated. Pacific argues that the fiber preapproval issue should be viewed in the context of the Commission's infrastructure goals, the NRF safeguards, the rapid technological changes, and emerging competition.

We do not agree with CCTA that the singular focus should be on the cost effectiveness of placing fiber in the distribution portion of the network. Instead, the cost effectiveness of fiber is just one of many items that we should examine. We also need to have a clear understanding of why the fiber preapproval requirement

was adopted, and whether the circumstances have changed which might cause us to reconsider the fiber preapproval requirement. All of these things should be analyzed before deciding whether the fiber preapproval requirement should be eliminated.

We note at the outset that, shortly after GTEC filed its petition to modify the fiber preapproval requirement, the Commission issued its Infrastructure Report in which a series of specific recommendations were made. The Infrastructure Report envisioned that various proceedings would be established to address the recommendations made in the Infrastructure Report.

(Infrastructure Report, p. 47.) Among the Infrastructure Report's recommendations was the following:

"Promote a technology-neutral telecommunications infrastructure policy. Allow telecommunications providers in California to make their own investment decisions, including the type of technology employed. The Commission should reconsider its ban on fiber optic deployment beyond the feeder for local telephone companies." (Id., at p. 52.)

Due to the timing of GTEC's petition for modification of the fiber preapproval requirement, and the issuance of the Infrastructure Report recommending that the Commission reconsider the requirement, this proceeding is the appropriate place to reconsider the fiber-beyond-the-feeder preapproval requirement. Since all of the parties addressed the Infrastructure Report's recommendation in their testimony, there is no need to initiate a separate proceeding to review this issue again.

2. Why Was the Fiber Preapproval Requirement Adopted?

In order to gain an understanding of why the fiber preapproval requirement was adopted, the reasoning behind the adoption of the NRF must be understood as well.

A review of the NRF decision reveals that the NRF mechanisms were adopted in recognition of the tremendous changes

that had occurred in previous years in the telecommunications industry, the California marketplace, technology, and state and federal regulations. (33 CPUC2d 61, 92.) Among the regulatory goals of the NRF were the following: economic efficiency; the encouragement of technological advances; financial and rate stability; full utilization of the local exchange network; avoidance of cross-subsidies and anticompetitive behavior; low-cost, efficient regulation; and fairness. (33 CPUC2d 92-115.)

The Commission recognized that the regulatory mechanisms adopted created sufficient incentives for Pacific and GTEC to make prudent investment decisions, protect ratepayers from poor choices, and protect competitors from cross-subsidy and predatory pricing activities. The NRF decision therefore concluded that Commission preapproval of network investments was not needed. (33 CPUC2d 149, 219.)

However, the NRF decision imposed the fiber preapproval requirement. At 33 CPUC2d at 150, the Commission rejected Pacific's proposal to perform a fiber-to-the-home field trial, and to begin deployment of fiber in the feeder infrastructure. In rejecting Pacific's proposal, the Commission stated:

"While such deployment may well be a wise investment, we do not wish to preapprove it. Pacific may choose to make such investments at its own expense and risk. As discussed in Section XI, Pacific will be required to receive Commission authorization prior to making any investments in fiber-beyond-the-feeder system (other than small trials)."

The Commission then went on to state in Section XI of the NRF decision that:

"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 trial), 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." (33 CPUC2d 204-205.)

Further evidence of what the Commission's intentions were at the time it adopted the fiber preapproval requirement are found in D.90-12-116 (39 CPUC2d 16), a decision approving depreciation accounting changes for GTEC and Pacific as part of the NRF process. In that decision, the Commission stated:

"We included this [fiber preapproval] provision in D.89-10-031 at the urging of CCTA, which represented that this protection would meet its legitimate concerns regarding an opportunity to review investment decisions that might directly affect their industry. This requirement applies whether or not the other legal restrictions now barring telephone utilities from providing cable television service are lifted." (39 CPUC2d 29.)

Although the reasoning for imposing the fiber preapproval was not expounded upon in the NRF decision, it is clear that the Commission had three principal concerns when the NRF decision was adopted. The first concern was the cost of deploying fiber-beyond-the-feeder. The second concern was the "technical issues" associated with such deployment. The third concern was how deployment of fiber-beyond-the-feeder may affect cable television companies.

3. What Changes Have Occurred Since  
D.89-10-031 Was Adopted?

Since the adoption of the NRF decision in October 1989, numerous changes have taken place that affect the telecommunications industry. Even the parties opposed to this petition for modification acknowledge that there have been changes relative to the environment in which the LECs operate,

The NRF decision itself has been modified several times since its adoption. Some of the more notable changes include elimination of the requirement that GTEC return 50% of the earnings between the benchmark rate of return and the ceiling rate of return to ratepayers (50 CPUC2d 684 (D.93-09-038)), and that Pacific's rate will not be adjusted by a productivity factor for three years beginning in 1996, and GTEC's rate will not be adjusted by a productivity factor for two years beginning in 1997. (D.95-12-052, pp. 49-50.) NRF monitoring requirements have also been adopted in D.91-07-056. (41 CPUC2d 89.)

In addition, both GTEC and Pacific are now faced with competition for intraLATA toll customers as authorized in D.94-09-065. More recently, in D.95-07-054, D.95-12-057 and D.96-02-072, the Commission authorized competition in the local exchange market. Cable companies and telephone companies have also taken an active interest in entering each other's markets, as well as seeking strategic alliances with each other. Entry into the long distance market by the regional Bell operating companies (RBOCs) has been made possible by the Federal Telecommunications Act of 1996. (47 U.S.C. § 151 et seq.) Section 302 of the Telecommunications Act of 1996 also grants broad flexibility to the telephone companies as to how they can offer video programming services.

Even earlier, back in November 1993, the Commission had issued its Infrastructure Report. That report made a series of recommendations, including the following: open all

telecommunications services in the state to competition; streamline regulation so as to encourage innovation, eliminate the unnecessary costs of doing business in this state; and promote a technology-neutral infrastructure policy to the maximum extent possible, including a reconsideration of the ban on fiber deployment beyond the feeder system.

Advancements in technology have also affected the telephone industry. Advances in electronics have driven down the cost of deploying fiber relative to the cost of deploying copper. Other methods of compressing and transmitting more data through existing copper wires have also been utilized. In addition, wireless technology offers providers an alternative to placing wires or cables into the ground.

4. Do the Change in Circumstances  
Warrant Retention of the Fiber  
Preapproval Requirement?

a. The Changing NRF Framework

Our next step is to analyze how all of these recent changes have affected the reasons for imposing the fiber preapproval requirement, and how they have affected the NRF goals.

One of the arguments that Pacific and GTEC make is that the fiber preapproval requirement is inconsistent with the NRF structure and incentive mechanisms. To the extent that the LECs are arguing that the fiber preapproval requirement should never have been adopted, or that the requirement was inconsistent with the NRF at the time it was adopted, we do not agree. At the time the fiber preapproval requirement was adopted, such a requirement was consistent with the Commission's outlook during that time period. In 1989, the Commission had concerns about GTEC and Pacific making investments in fiber-beyond-the-feeder system. One must remember that in 1989, intraLATA toll and local exchange competition had not yet been authorized and was only on the planning horizon.

However, as changes have occurred, the Commission has responded to them by adjusting the NRF mechanism. The NRF framework has not remained static. When the NRF decision was first adopted, the Commission included a provision for a formal periodic review. The Commission viewed the review as "... an opportunity to evaluate the effectiveness of the chosen details and balance in the adopted regulatory framework, and to make any mid-course corrections that may be needed." (33 CPUC2d 203.) GTEC and Pacific were invited to address the extent to which the NRF had met each of the Commission's regulatory goals as stated in the NRF decision. (*Id.*, at p. 204.) In addition, the NRF decision recognized that, as the intraLATA market becomes more competitive, there will be an eventual migration of highly regulated services (Category I) to less regulated categories of service (Categories II and III). (*Id.*, at 127.)

In the first review of NRF, the Commission evaluated the effectiveness of the NRF mechanisms and safeguards. Certain adjustments were made to the NRF, including adjustment of Pacific's productivity factor, as well as adjustments to Pacific's rate of return as used in the NRF mechanism. In addition, the GNPPI was replaced with the Gross Domestic Product Price Index, and the Z factor guidelines were clarified. (55 CPUC2d 1, 61-63 [D.94-06-011].)

Subsequent to the submission of this proceeding, the Commission had a second opportunity to review the NRF decision. In D.95-12-052, the Commission suspended the application of the productivity factor for Pacific and GTEC until the next triennial review.<sup>8</sup> In altering the NRF framework, the Commission

<sup>8</sup> By suspending the productivity factor, the Commission set the productivity factor equal to the inflation factor. As noted earlier, the suspension of the productivity factor for GTEC does not begin until calendar year 1997.

acknowledged that the record was "adequate to change certain aspects of current NRF policies to conform with the changing market." The suspension of the productivity factor was in response to changes and developments in the telecommunications industry, and to reflect future long-term changes. (D.95-12-052, pp. 41, 51.)

As competition grows in the local exchange, there may come a day when the entire NRF framework will no longer apply to GTEC and Pacific. (See D.95-12-052, p. 41.)<sup>9</sup> The Commission has initiated that trend by opening up the intraLATA toll market and the local exchange market to competition. As markets are opened up and competition starts to develop, further adjustments to the NRF structure may be needed as well. (See D.96-03-020, pp. 53-59.) Part of that adjustment process includes a review of whether the fiber preapproval requirement is still required.

b. Cost-Effectiveness of Fiber  
Beyond the Feeder

At the time the fiber preapproval requirement was adopted, one of the Commission's concerns was the magnitude of investment needed to deploy fiber-beyond-the-feeder. Although the cost effectiveness of fiber-beyond-the-feeder is something which we need to consider before deciding whether the preapproval requirement should be lifted, we do not believe this should be our exclusive focus.

CCTA argues that the most important issue that the Commission faces in deciding whether to remove the fiber preapproval requirement is whether it is cost effective for GTEC and Pacific to replace the existing copper plant with fiber. CCTA asserts that contrary to what GTEC and Pacific would have the

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<sup>9</sup> CCTA apparently recognizes that all LEC services could become fully competitive, in which case the NRF price cap mechanism would no longer have to apply. (See D.95-12-052 at 32-33.)



Commission believe, fiber-beyond-the-feeder will not be cost effective anytime soon.

CCTA points out that the cost studies of GTEC and Pacific are misleading because they only apply to new build areas where no facilities currently exist. Under a new construction scenario, an investment must be made regardless of what technology is used. CCTA points out that new builds and rebuilds account for only 2% of all lines. If the remaining 98% copper network were to be rebuilt using fiber-beyond-the-feeder, the replacement of that usable network would not be economically justified, according to CCTA.

CCTA also asserts that the cost studies performed by GTEC and Pacific contain numerous errors. For example, in GTEC's second study, CCTA asserts that GTEC used the wrong number for the fiber distribution cabling costs for the single family subdivisions. CCTA's examples of Pacific's errors include Pacific's use of an inconsistent number of living units per optical network unit, and the use of an incorrect fiber-feeder-cable size in its assumptions. CCTA asserts that corrections of these two errors demonstrate that fiber-to-the-curb costs, as compared to conventional fiber/copper technology costs, will not cross over in the foreseeable future.

GTEC argues that under NRF, the Commission created incentives for the LECs to operate in a more cost-effective manner. Thus, an in depth review of the cost effectiveness of fiber is unnecessary.

GTEC also asserts that the technical issues raised by CCTA are not relevant to the outcome of this case. GTEC points out that the other protestants did not address these concerns in their testimony or in their briefs, and that CCTA's attempt to poke holes in the cost studies assume a level of micromanagement which is inconsistent with the Commission's stated regulatory goals. GTEC contends that various other studies, besides GTEC's, show that

fiber to the curb is, or will shortly be, cost competitive with copper. Over time, GTEC also expects other fiber architectures to drop in price to a level comparable to copper architecture. CCTA has also ignored the experience of its own membership, which is installing fiber at a rapid rate.

Pacific contends that CCTA's criticisms of its study have no merit. As for the different number of optical network units used in 1991 and in 1993, Pacific says that fiber-to-the-curb systems have changed over time, and that Pacific used the most effective design for the 1993 study. As for CCTA's criticism that the study used the cost of a 144-strand-fiber cable instead of the cost of a 36-strand-fiber cable in its 1993 study, Pacific asserts that the 1991 study was modeled for a field trial and did not include additional growth in the feeder network. The 1993 study was designed as a standard feeder installation, and therefore included future growth.

Pacific contends that its studies show that the cost of fiber-beyond-the-feeder systems is steadily declining, and that fiber to the curb will be cost effective as early as 1996. Pacific believes that fiber to the home will become cost effective sometime around the year 2000. Pacific asserts that various industry sources support Pacific's conclusions.

DRA points out that under the price cap regulation that governs GTEC, the cost effectiveness of fiber-beyond-the-feeder becomes irrelevant. Instead, the NRF permits GTEC and Pacific to take risks and develop new services. DRA also asserts that the prevailing industry opinion is that fiber-beyond-the-feeder already is, or is going to be in a year or so, cost effective.

Despite CCTA's criticisms of the cost-effectiveness studies of GTEC and Pacific, it is apparent that fiber to the curb, especially in a new build scenario, is increasingly cost effective. Advances in fiber electronics have led to increases in system

capacities and decreases in costs. These decreases in equipment costs are expected to continue. As the Commission previously noted in D.94-10-033 at page 13, fiber is already competitive with copper for many distribution plant uses, and declining cost trends will likely make it universally competitive in the future.

We agree with GTEC and DRA that the issue of cost effectiveness takes on less importance as the competitive environment changes. For all investments other than fiber-beyond-the-feeder, the Commission expressed an intent in the NRF decision not to conduct prudence or reasonableness reviews. The NRF was envisioned as a mechanism that created sufficient incentives for GTEC and Pacific to make prudent investment decisions. (33 CPUC2d at p. 149.) As the Infrastructure Report noted, the Commission should not get tied up in examining the details of whether a particular technology is cost effective to deploy or not. This is especially true when the LECs' competitors are free to invest in whatever technology they want to utilize. Furthermore, with the opening of all telecommunications markets to competition, GTEC and Pacific will probably be precluded from increasing their telephone rates to pay for fiber-beyond-the-feeder investments.

The cost effectiveness of fiber-beyond-the-feeder is only one of several other factors to consider in deciding whether the fiber preapproval requirement should be eliminated or not. We examine those other factors in the sections which follow.

c. Technical Issues Related to Fiber Deployment

At the time the fiber preapproval requirement was adopted, the Commission also mentioned a concern about the technical issues associated with deploying fiber-beyond-the-feeder.

CCTA argues that the placement of fiber raises several technical issues of concern. The first is that fiber systems require power to run the networks associated electronic components. Those network components are located out in the field.

In order to power the fiber network, a copper wire must be placed with the fiber cable. CCTA asserts that this will increase costs because of the costs and maintenance associated with parallel and separate fiber and copper cables. In addition, CCTA points out that, to ensure against loss of service from power outages, the electronic components must be backed up with DC batteries. Due to short battery life, CCTA contends that standby generators at each site are also required. In the alternative, there must be a sufficient number of generators available for deployment in case of an extended power outage.

A second issue that is raised as a result of the powering issue is the reliability of a fiber system. Fiber in the loop is dependent upon the copper wire for power. If the copper wire fails, there will be no power except for the backup sources of power. Since numerous electronic components are also needed for a fiber system, CCTA contends that there are a number of other components that can fail as well.

CCTA contends that a third issue with deployment of fiber is that a voice telephone customer will not notice any distinguishable upgrade in the quality of service. CCTA also points out that other methods of transmitting high-speed data are available, and that those methods have a comparable level of quality and are cheaper than deploying a fiber network.

According to CCTA, a fourth problem with a fiber to the curb architecture is that testing the entire loop will be more difficult and/or expensive because in that kind of architecture there is a copper drop to the customer's premise. CCTA asserts that because there are two different transmission mediums involved between the home and the central office, different kinds of tests are needed to test the fiber portion and the copper portion.

With regard to the powering and reliability issue, Pacific asserts that CCTA fails to appreciate that Pacific's reputation is built on service quality and reliability. Pacific

points out that each remote location will receive power from an alternative source if commercial power is lost. The backup power will come initially from batteries, and then from portable generators.

GTEC points out that its method of powering a fiber network is the same that is used for copper cable and remote switches. The number of remote powering sites required for a fiber network are also comparable to the existing copper network. Since the two types of network are similar in those respects, GTEC asserts that a fiber network is just as reliable as a copper-based network. GTEC also points out that this type of powering and backup design proved reliable during the Northridge earthquake and recent fires in Southern California.

A review of the evidence leads us to conclude that there is not a significant difference between the powering and backup design for conventional copper networks and fiber networks. There is no concrete evidence to suggest that the power systems for fiber networks will be less reliable than existing power systems for copper networks. Regardless of whether there is a traditional copper network or a fiber network in place, if power is lost for an extended period of time, neither network design will allow calls to be completed since those designs do not have redundant or duplicate facilities beyond the feeder.

We are also not persuaded by CCTA's argument that because, a fiber network requires more electronics, a copper network is more reliable because there are fewer components to malfunction. Both GTEC and Pacific point out that the electronics in a fiber-beyond-the-feeder system allows the utilities to use automatic monitoring procedures to run tests so that potential problems can be identified and corrected before system performance deteriorates or fails. Pacific also mentions that the electronics used in a fiber-to-the-curb network are the same type of reliable

components that are being used today in the fiber interoffice and fiber feeder networks.

CCTA's reliability arguments also ignore the responsibility that each public utility has. Under Public Utilities Code § 451, "Every public utility shall furnish and maintain such adequate, efficient, just, and reasonable service, ... equipment, and facilities, ... as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public." We remain committed to ensuring that telephone customers are provided reliable service, regardless of the technology that is employed.

As for CCTA's argument that there are cheaper ways of upgrading the copper network instead of replacing it with fiber, GTEC points out that the broadband services of the future will require more bandwidth than can be supplied by the technologies that CCTA advocates be used. Pacific also points out that one of the technologies that CCTA recommends be used, Asymmetrical Digital Subscriber Line (ADSL), is ineffective as the distance from the central office increases. In addition, ADSL has limited capability for two-way communications.

The issue of whether the existing copper network should be upgraded, or if it should be replaced with fiber, raises the question of whether the Commission's policies should remain technology neutral. That issue is addressed later in this decision.

d. How Fiber Deployment May Affect  
Cable Television Providers

As mentioned earlier, another concern of the Commission was how the deployment of fiber-beyond-the-feeder could affect cable television companies. Cable television companies are affected because the deployment by GTEC and Pacific of fiber-beyond-the-feeder enables the latter to carry video programming into their customers' homes. The cable companies and the other

protestants do not want telephone customers subsidizing the cost of an improvement that is likely to be used to offer video programming. The potential for cross-subsidization raises several issues: (1) at what point in time should the fiber preapproval requirement be lifted; and (2) are there cost allocation rules in place so as to detect any cross-subsidization taking place.

(1) When Should the Fiber Preapproval Requirement be Eliminated?

Some of the protestants argue that the fiber preapproval requirement should remain in place until other events occur or certain rules are put in place. For example, TURN contends that the preapproval requirement should remain in place until the FCC resolves how it will handle the jurisdictional separations issues associated with video dialtone. Others argue that the preapproval requirement should not be eliminated until there is effective competition in the marketplace.

We first address the issue of whether the preapproval requirement is dependent upon the FCC clarifying its jurisdictional separations requirements beforehand.

TURN contends that the fiber preapproval requirement should not be lifted until the FCC resolves the issue of how to allocate the costs of plant that is used to provide both telephone and broadband services, such as VDT. TURN points out that in this Commission's February 8, 1994, comments to the FCC in Pacific's VDT application, we requested clarification of the FCC's jurisdictional separations requirements, and how the assignment of joint and common costs of video and nonvideo uses would be split between the federal and state jurisdictions.

GTEC recognizes the jurisdictional-allocation issues that TURN has raised, but points out that these concerns apply to fiber in the feeder portion, in which GTEC does not need preapproval, as well as to fiber-beyond-the-feeder.

Pacific contends that retention of the fiber preapproval requirement and the cost allocation of video are two separate issues, and do not have to be resolved together. Pacific asserts that the preapproval requirement should be eliminated because it is inconsistent with the Commission's Infrastructure Report which recognized the rapid pace of technological changes and the growth of competition in the California telecommunications market.

It is important to note that the purpose of the fiber preapproval requirement is to allow the Commission and interested parties an opportunity to review the plans of GTEC and Pacific to deploy fiber-beyond-the-feeder before they do so. The purpose of the FCC's jurisdictional separations requirements, on the other hand, is to decide how costs will be apportioned between the federal and state jurisdictions. Although we believe that the allocation of costs between video dialtone and telephone service is of utmost importance, as discussed later in this decision, the preapproval requirement is not dependent on how the FCC allocates these costs.<sup>10</sup> If we wait until the FCC resolves the various jurisdictional separations issues before deciding whether the fiber preapproval requirement should be eliminated, that may unnecessarily delay any plans that GTEC and Pacific have of improving the infrastructure.

Another important point to keep in mind is that, except for some limited trials, VDT and other services that use a broadband network have not been offered to the general public. At the time GTEC or Pacific seek authority to offer such services, the Commission will have the opportunity to determine how the costs

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<sup>10</sup> The FCC is examining cost allocation issues associated with a LEC's provisioning of video programming services in FCC Docket No. 96-112.



associated with the new services should be treated. If improper cost allocations were made, then corrective steps may be taken so that no cross-subsidization results.

Accordingly, consideration of whether the preapproval requirement should be eliminated may be taken up before the FCC resolves the jurisdictional-separation issues.

The protestants also argue that the fiber preapproval requirement should not be lifted until there is effective competition in the marketplace.

CCTA contends that in a truly competitive environment, CCTA would have no problem with eliminating the preapproval requirement because rates would be set by the marketplace, and not by a price cap formula. Since no truly competitive environment exists yet, CCTA maintains that the fiber preapproval requirement must be retained. CCTA asserts that removing the preapproval requirement before true competition is reached will subject captive ratepayers to cross-subsidies.

CCLTC asserts the issues of fiber deployment and VDT service are of critical importance so long as GTEC and Pacific maintain large shares of the local telephone market. CCLTC argues that, until there is effective local competition, there will be a need to oversee the risk of improper cost allocation to captive ratepayers. CCLTC concedes that, once effective local competition is in place, the issue will be less significant, however, until then, the Commission has a continuing obligation to the state's ratepayers.

TURN contends that, given the current situation in the local-exchange telecommunications market, the preapproval requirement is necessary to promote competitively neutral infrastructure development. TURN argues that it will take some time before there is effective and robust competition for all local exchange-service customers and, until there is, Pacific and GTEC will have the incentive to persuade the FCC and this Commission

that the costs of broadband services should be borne by customers of telephone services.

GTEC and Pacific argue that the protestants ignore how toll and local exchange competition will prohibit significant increases to basic rates because so-called captive ratepayers will soon be presented with a variety of telecommunications options. With full competition scheduled for January 1997, GTEC and Pacific assert that basic economic theory provides that price subsidies will no longer be sustainable. Instead, with competition, the result is that there will be tremendous downward pressure on the basic rates of GTEC and Pacific.

We believe the development of competition will operate as a safeguard that may prevent GTEC and Pacific from raising their basic telephone rates in order to subsidize the building of a fiber network capable of offering broadband services. As local competition intensifies, the LECs will be forced to offer competitive rates for all services or face losing customers. If GTEC and Pacific decide to make investments in fiber-beyond-the-feeder, and they attempt to pass on those investment costs to their customers, it is likely that a new provider will enter the market and offer telephone service at a lower rate than that of GTEC or Pacific.

Hence, we do not wish to wait until there is effective competition in the toll and local exchange markets before eliminating the fiber preapproval requirement. By waiting, all we are doing is imposing a preapproval requirement on GTEC and Pacific, while their competitors are free to invest in whatever technology they feel is appropriate. Therefore, elimination of the preapproval requirement should not be delayed until there is effective competition in the marketplace.

Another argument of the protestants as to why the preapproval requirement should not be eliminated is that the

preapproval requirement is part of the NRF protections. They contend that the preapproval requirement should remain in place until the protections are no longer needed. For example, CCTA contends that the NRF is a carefully balanced framework, and that part of the balance is the fiber preapproval requirement. Although there have been changes since the NRF decision was adopted, CCTA maintains that the changes are not sufficient enough to have the Commission rescind the preapproval requirement.

However, this argument does ignore the significant changes that have taken place since the fiber preapproval requirement was adopted. At the time NRF was adopted, competition by other providers for toll and local calls was only being talked about. Recent changes have altered those discussions, and turned them into actual opportunities. CCTA's own witness conceded during the hearings that the competitive environment has changed since 1989.

The protestants also claim that the attempts by GTEC and Pacific to modify the NRF framework are for the purpose of enabling them to obtain monies to invest in fiber-beyond-the-feeder. They fear that any changes to the NRF will be to the detriment of telephone ratepayers. Unless the fiber preapproval requirement remains in place, there will be no opportunity to challenge the LECs' recovery of monies used for imprudent fiber investments. As an example, the protestants argue that, if investment in fiber-beyond-the-feeder is not profitable, earnings may drop below the earnings floor. If this occurs for two years in a row, the LEC may then seek to increase its rates under the NRF structure.

We do not believe that changes to the NRF framework, or the unprofitable offering of broadband services, will cause the rates of telephone customers to increase. As we noted earlier, GTEC and Pacific will face increasing competitive pressures to keep their telephone rates low. If they attempt to

raise their prices to recover the cost of unprofitable investments, more efficient providers of telephone service may price below GTEC and Pacific, and take away their customers.

Another safeguard against an increase in rates is that the Commission must approve any proposed rate increase, or change to the NRF framework. This approval process will afford interested parties an opportunity to challenge any proposed rate increase or change to the NRF framework. The Commission has previously noted that a proposed increase in rates will be subject to scrutiny. In D.90-12-116 (39 CPUC2d 16), the Commission cautioned that it would hesitate to approve a request for an increase in rates if there was evidence that "imprudent investment or improper cross subsidies were a substantial cause of the low earnings." (39 CPUC2d at 28.)

In addition if the fiber preapproval requirement remains in place, GTEC and Pacific will be at a disadvantage when they try to react to future opportunities. As noted in the Infrastructure Report, micromanagement should be eliminated, and a technology-neutral policy should be pursued. A technology-neutral policy is favored because the rapid advances in technology make it very difficult for companies to take time while deciding what type of technology should be deployed. As the Commission noted in the Infrastructure Report at page 26:

"[the] telecommunications infrastructure is a hostile environment for conventional public planning. The astounding rate, vast scope and unpredictable nature of technological innovation strongly suggest that any public strategy which is preoccupied with direct technology planning faces a high probability of failure."

If we retain the fiber preapproval requirement, what that will mean is, if either GTEC or Pacific decides to place fiber in the distribution portion of their networks, they will have to go through the regulatory procedure of applying for the change. This regulatory review process is likely to take some time and resources. We believe this effort would be wasteful. Due to the many changes that have occurred since the NRF decision was adopted, elimination of the fiber preapproval requirement at this time would be consistent with the NRF's goal of low cost, efficient regulatory review. In a fast-moving industry such as telecommunications, regulatory delays should not unnecessarily impede the timely business decisions that competitors must make to stay ahead.

CCTA next argues that many of the advanced telecommunications services that GTEC and Pacific seek to provide can be performed over the existing copper network or with minimal upgrades to the existing network. CCTA contends that the current network can provide such advanced services as telemedicine, home communication, interactive shopping by telephone, and video services at studio quality. In addition, CCTA contends that several technologies, such as ISDN and ADSL, allow an increased amount of data to be transmitted over conventional copper lines.

CCTA's argument runs counter to a technology-neutral policy. It should be left to the providers to decide which technology should be used to offer telecommunications services in the future. As the Commission noted in D.94-10-033 at pages 12 to 13 (56 CPUC2d 598, 605), it would be unwise for a LEC to rely on upgrading existing networks with enhanced older technology in light of the pace of technological evolution. By retaining the preapproval requirement for fiber, we would be expressing a preference for other technologies that do not require preapproval. However, those technologies may not be the means of choice to meet future telecommunications needs. The fiber preapproval requirement also hampers the ability of GTEC and Pacific to respond quickly to

new market opportunities, while their competitors are not faced with the same constraints. Instead of imposing regulatory hurdles, we should let technology and the newly competitive markets decide what type of telecommunications infrastructure should be built.

This technology-neutral policy also finds support in the Telecommunications Act of 1996. Section 706(a) of Title VII of the Act provides that each state with regulatory jurisdiction over telecommunications services shall encourage deployment of advanced telecommunications capability on a reasonable and timely basis. Deployment can be encouraged by using "measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment." The term "advanced telecommunications capability" is defined in Section 706(c)(1) as follows:

"The term 'advanced telecommunications capability' is defined, without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphic, and video telecommunications using any technology." (Emphasis added.)

We reaffirm our commitment toward a technology-neutral telecommunications infrastructure policy as expressed in the Infrastructure Report, and in D.94-08-029 at pages 12 and 13.<sup>11</sup> Such a policy leaves it up to telecommunication providers to make their own investment decisions, including the type of technology they should employ. As a result of such a policy, the investment decisions should lead to a state-of-the-art telecommunications infrastructure.

<sup>11</sup> In D.94-08-029, the Commission denied CCTA's petition to modify D.89-10-031 to include a new preapproval requirement for the deployment of coaxial cable beyond the feeder.

In making these investment decisions, GTEC and Pacific should also fully bear the risks and rewards of such investments. (See Infrastructure Report, p. 28.) We caution GTEC and Pacific that this technology-neutral policy is not meant to allow improper cost allocation of their investment decisions. Nor will cross-subsidy of nonregulated services be paid for by the customers of regulated telecommunication services. We intend to closely scrutinize how costs should be allocated when new broadband services, such as VDT service, are offered to the public by GTEC and Pacific.

(2) Cost Allocation and Cross-Subsidization

CCTA recommends that, for all fiber deployment beyond the feeder, the total cost of such deployment should be recorded below the line. In the alternative, a memorandum or deferred account should be set up to book the deployment costs until it is determined that fiber-deployment costs are being charged properly to regulated operations. CCTA also recommends that GTEC and Pacific file a monitoring report for the current year, and a three-year projection, of their fiber deployment plans. CCTA recommends that the report contain the following: how much fiber the incumbent LEC plans to deploy; the cost of the fiber; where it intends to deploy the fiber; and when it anticipates deploying the fiber.

MCI argues that the Commission should establish firm cost-assignment and accounting procedures before the deployment of interactive broadband networks takes place.

GTEC argues that the recommendations of CCTA should be disregarded. GTEC contends that the recommendations are contrary to the intent of D.89-10-031 to eliminate regulatory review of investments, and would allow cable television companies to gain competitive information.

Pacific argues that CCTA's recommendations are essentially the same recommendations that CCTA made in the 1992 NRF

review, which were rejected by the Commission. (See D.94-06-011 at pp. 94, 100.) Instead of adopting CCTA's recommendations, the Commission adopted a procedure recommended by DRA and Pacific in a settlement. Pacific asserts that CCTA's recommendation was rejected in D.94-06-011 because of a concern that below-the-line treatment of all RD&D expenditures could chill GTEC's and Pacific's incentives to develop new products and services.

DRA contends that the Commission does not need to resolve the cost-allocation issues associated with the deployment of broadband networks in this proceeding. When VDT offerings are proposed, DRA states that it plans to review any allocation scheme that would unfairly allocate VDT costs to basic telephone service.

We believe that appropriate measures are in place to ensure the proper tracking of fiber-beyond-the-feeder costs, and the proper allocation of such costs so that there will be no cross subsidization of competitive services by regulated services.

In adopting the NRF mechanism, the Commission also continued and expanded the monitoring and reporting requirements of GTEC and Pacific. One of the reasons for these requirements is to ensure that the Commission has the necessary information to detect cross-subsidies and anticompetitive behavior. (See 33 CPUC2d at pp. 194-199.) Service-specific cost-tracking procedures, and monitoring reports, were developed in D.91-07-056 (41 CPUC2d 89). In addition, in D.92-07-076 (45 CPUC2d 158), the Commission approved a settlement which requires Pacific to track expenditures related to RD&D of all new products and services. That settlement agreement was further refined in a settlement adopted in D.94-06-011 at pp. 94-100 (55 CPUC2d). Similar RD&D reporting requirements were imposed on GTEC in a settlement approved in D.94-06-011. (D.94-06-011, pp. 100-102, App. C (55 CPUC2d).)



The service-specific cost-tracking procedures adopted in D.91-07-056 allow the Commission staff to analyze a particular service's profitability and help evaluate the potential for anticompetitive behavior by tracking the revenues and costs associated with the various service offerings. The cost tracking follows the FCC Part 64 cost-attribution hierarchy. With this type of cost information, the Commission expects ORA, the successor to DRA, to closely monitor the NRF framework, cost tracking and cost allocation, and to investigate areas of concern. (41 CPUC2d at 96.)

The monitoring reports adopted in D.91-07-056 include reporting of research and development (R&D) budgets, as well as information pertaining to network planning, operations, and engineering studies. The Commission commented that information accompanying the R&D budgets "may be useful if a problem concerning cross-subsidy arises, or if we need to determine the rationale for earnings that fall below the lower level threshold, currently 8.25% rate of return." (41 CPUC2d at 111.) With regard to the network planning, operations, and engineering studies, the monitoring information includes reporting of fiber investments in both the feeder portion and in the distribution portion of the network. In addition, a listing of fiber development projects is to be supplied.

Pacific's RD&D reporting requirements obligate Pacific to track the investment and direct expenses for all new products, and to provide an annual report on product-development activities. The tracking is to start no later than the feasibility analysis stage. (45 CPUC2d at p. 163.) In D.94-06-011, the Commission agreed to a procedure whereby Pacific and DRA agree to a preliminary categorization of potential products. If DRA does not agree to Pacific's preliminary categorization, then Pacific will book it on a below-the-line basis, subject to later Commission review. At the time the product is formally categorized, if the

Commission determines that the product should be booked below the line, but it had been recorded above the line, then Pacific would refund to ratepayers the costs associated with that product on a retroactive basis. Conversely, if the Commission determines that the product should be categorized above the line, instead of below the line, Pacific would be entitled to seek cost recovery of the sharable-earnings impact. (D.94-06-011, p. 98; 45 CPUC2d at p. 164.)

Similar RD&D reporting requirements for GTEC are included as part of GTEC's service-specific cost-tracking report. (D.94-06-011, pp. 100-102, App. C.)

There are also other monitoring reports which Pacific and GTEC must supply to the Commission. For example, Pacific has to supply the following reports: a capital-budget summary; construction-expenditures retirement; forecast of investment & usage; actual use of investment; and the federal cost allocation manual. (41 CPUC2d at pp. 104-105, App. A.) In addition, Pacific is obligated to provide current-year data on technology deployment, plus a three-year projected schedule of future technology deployment. (D.94-06-011, pp. 107-109.) GTEC is obligated to provide, among other reports, its intrastate results of operation, and separated results of operations. (41 CPUC2d at pp. 104-105, App. B.) In addition, D.94-06-011 requires GTEC to provide data on technology deployment as well. (D.94-06-011 at pp. 109-111, App. B, Att. 2.)

The FCC, in establishing a framework for open video systems, stated that the risk of a misallocation of costs resulting from a bundled offering of telephone and video services will be safeguarded against by the FCC's Part 64 cost-allocation rules and any amendments to those rules. (FCC 96-249, par. 248.)

Since no VDT service offerings are imminent, we do not have to resolve the issue of how the costs of broadband services should be allocated. We believe, however, that the

tracking and monitoring reports, and the other procedures described above are sufficient to allow us to track the expenses associated with fiber deployment to properly allocate the costs, monitor any possible cross-subsidization, monitor fiber deployment plans, and determine possible effects on the NRF. (See D.94-08-029, p. 13.) With these protections in place, cost-allocation issues of VDT or other broadband service offerings can be handled when the Commission categorizes the service offering as an above-the-line or below-the-line service. As CCTA's witness acknowledged, if the proper reporting of details is done, the Commission can derive how the service is being offered, and can determine the costs associated with the new service. We are confident that the staff of the Commission, as well as other interested parties, will closely examine the cost allocation of VDT when that service offering is made. For the above-stated reasons, we decline to adopt CCTA's recommendations to require that all costs be recorded below-the-line, or that a separate memorandum account be set up, for fiber-beyond-the-feeder deployment.

5. CCLTC's Proposed Restatement of the  
Fiber Preapproval Requirement

CCLTC requests that the Commission restate the fiber preapproval requirement so that it applies to the deployment of any kind of broadband distribution facility that goes to the customer's premises.

GTEC claims that CCLTC's proposed restatement of the preapproval requirement is even more anticompetitive and restrictive on LEC operations than the existing fiber preapproval requirement. It would be cumbersome, and would clearly cover situations which are not subject to preapproval today. Pacific says that CCLTC's desire to expand the preapproval requirement is inconsistent with the Commission's technology-neutral infrastructure policy. Such a broadening would not let the LECs make their own decisions about what type of technology to employ,

and is inconsistent with the Commission's technology-neutral infrastructure policy.

CCLTC's request runs counter to what this Commission is trying to achieve. The Infrastructure Report favors a technology-neutral approach. By enlarging the preapproval requirement to cover any kind of broadband technology, we would place those technologies at a distinct disadvantage since they would be subject to approval before investments in them could be made. In D.94-08-029 at page 13, the Commission specifically rejected CCTA's request to expand the preapproval requirement to coaxial cable beyond the feeder. The Commission stated in that decision that a technology-neutral path allows telephone companies and cable television companies to make their own investment decisions as to the type of technology they should employ. Accordingly, CCLTC's request to restate the preapproval requirement so that it covers any deployment of broadband distribution facilities to the customer premises is denied.

6. Comments to the ALJ's Proposed Decision

Roseville's comments support the outcome in the ALJ's proposed decision. However, Roseville believes that the proposed decision should be clarified to state that the preapproval requirement established in D.89-10-031 is eliminated for all LECs who are subject to the NRF. Roseville points out that after the fiber-beyond-the-feeder issue was submitted, the Commission adopted decisions to regulate Citizens Telecommunications Company of California and Roseville under the NRF. (See D.95-11-024 and D.96-12-074.) Roseville contends that although ORA unsuccessfully argued in Roseville's rate case that the fiber preapproval requirement should apply, Roseville remains concerned that ORA or others could use the language in the ALJ's proposed decision to argue that the NRF LECs other than Pacific and GTEC should be subject to the preapproval requirement. To avoid such an argument, Roseville recommends that ordering paragraph 2 of the ALJ's

proposed decision be clarified to exclude the other NRF regulated LECs from the requirements of ordering paragraphs 24, 25, and 26 of D.89-10-031.

We decline to modify ordering paragraph 2 of this decision as suggested by Roseville. We specifically noted in Roseville's last general rate case that the fiber-beyond-the-feeder requirements contained in D.89-10-031 applied only to GTEC and Pacific, not Roseville. (D.96-12-074, p. 74.) This is readily apparent by reading ordering paragraphs 24, 25, and 26 of D.89-10-031. It is therefore unnecessary to expand ordering paragraph 2 of this decision to explicitly state that the fiber preapproval requirements contained in D.89-10-031 do not apply to the other NRF regulated LECs as well.

TURN's comments argue that there is no evidence to support the ALJ's proposed decision that the presence of competition will protect ratepayers from rate increases which are likely to result from the deployment of fiber beyond the feeder. In addition, TURN contends that the changes to the NRF framework to which the ALJ's proposed decision refers to, took effect after the record in this proceeding was closed. TURN also contends that the Commission should adopt MCI's recommendation that tracking mechanisms be adopted to ensure that broadband costs are not subsidized by regulated telecommunication services.

Both GTEC and Pacific contend that none of TURN's arguments have merit, and therefore its comments should be disregarded. GTEC and Pacific point out that the proposed decision relied on numerous other factors aside from the impact of competition to justify elimination of the preapproval requirement. GTEC and Pacific also argue that many of the modifications to the NRF occurred before the close of hearings in this matter, and that the Commission correctly considered those changes, as well as the subsequent changes to Commission decisions and the passage of the Telecommunications Act of 1996.

We have reviewed the comments of TURN and the reply comments by GTEC and Pacific. We agree with GTEC and Pacific that TURN's comments should not alter the result recommended in the ALJ's proposed decision.

7. Summary

The fiber-beyond-the-feeder preapproval requirement was appropriate at the time when it was adopted, but circumstances have changed. Since the adoption of the NRF decision in 1989, the Commission has opened toll markets and local markets to competition. In addition, the RBOCs will be allowed to compete in the long distance markets once certain conditions are met. Cable television companies are also planning to enter these telephone markets, while GTEC and Pacific, and others, may offer television programming.

One of the goals behind the NRF was to encourage investments by GTEC and Pacific. The Infrastructure Report also expressed a desire to develop an advanced telecommunications infrastructure through competitive entry. To achieve this, the Commission recommended to the Governor that unnecessary regulatory burdens that restrict innovation, be eliminated, including a reconsideration of the fiber preapproval requirement. The report also favored a technology-neutral approach in our policies.

Our review of why the preapproval requirement was adopted in the first place, the changes that have taken place in the competitive environment since then, and technology convince us that the fiber-beyond-the-feeder preapproval requirement should be eliminated. As for the cost-allocation and cross-subsidization issues that the protestants have raised, we believe that sufficient tracking and monitoring reports and procedures are in place to enable us to make a just determination of how much of the broadband costs should be allocated to telephone ratepayers. However, resolution of cost-allocation issues should be deferred until either GTEC or Pacific offers VDT services or other broadband

services to the public. Accordingly, GTEC's petition for modification of D.89-10-031, and Pacific's joinder in that petition, are granted.

Findings of Fact

1. On August 4, 1993, GTEC filed its petition to modify D.89-10-031 (33 CPUC2d 43).

2. GTEC's petition seeks to remove ordering paragraphs 24, 25, and 26 of that decision.

3. Those ordering paragraphs imposed upon GTEC and Pacific the requirement that they first seek Commission approval before investing in fiber optic cable-beyond-the-feeder systems.

4. Protests to GTEC's petition for modification were filed by CCLTC, CCTA, MCI, and TURN.

5. In late 1993, the Commission issued its Infrastructure Report.

6. At the prehearing conference of December 14, 1993, Pacific joined in GTEC's petition to modify D.89-10-031.

7. On December 24, 1993, CCTA filed a separate petition to modify D.89-10-031.

8. CCTA's petition for modification sought to expand the preapproval requirement to include investments in coaxial cable beyond the feeder system.

9. D.94-08-029 denied CCTA's petition to expand the preapproval requirement to include coaxial cable beyond the feeder system.

10. Evidentiary hearings into GTEC's instant petition for modification of D.89-10-031 were held from February 27, 1995, through March 10, 1995.

11. This matter was submitted upon the filing of concurrent reply briefs on May 9, 1995.

12. In D.89-10-031, the Commission replaced the traditional cost-of-service regulation under which GTEC and Pacific had been formerly regulated with a new regulatory framework.

13. D.89-10-031 eliminated Commission preapproval of telephone-network investments, except for fiber optic cable-beyond the-feeder systems.

14. In imposing the fiber preapproval requirement, the Commission stated that the reasons for doing so were the magnitude of investment needed to offer new services and possible technical issues.

15. D.89-10-031 also stated that the NRF creates a strong profit-driven incentive for the utility to manage its operations in the most efficient manner possible, and that the elimination of preapproval for telephone-network investments should encourage the LECs to aggressively pursue new technologies and services.

16. An advantage of deploying fiber optic cable is its virtually unlimited capacity, and its ability to carry broadband signals.

17. One of the reasons why parties are opposed to the elimination of the fiber preapproval requirement is because they do not want telephone ratepayers to end up subsidizing fiber capacity that can be used to carry services other than voice and data service.

18. The NRF mechanism was adopted in D.89-10-031 because of the tremendous changes that had occurred in previous years in the telecommunications industry, the California marketplace, technology, and state and federal regulations.

19. The regulatory goals of the NRF include the following: economic efficiency; the encouragement of technological advances; financial and rate stability; full utilization of the local exchange network; avoidance of cross-subsidies and anticompetitive behavior; low cost, efficient regulation; and fairness.

20. D.90-12-116 stated that the fiber preapproval requirement was adopted at CCTA's request, which represented that this requirement would meet CCTA's concerns regarding an opportunity to



review investment decisions that might directly affect the cable TV industry.

21. The parties opposed to the petition for modification acknowledge that, since the adoption of D.89-10-031, there have been changes to the environment in which the LECs operate.

22. D.89-10-031 has been modified several times since its adoption.

23. GTEC and Pacific now face competition for intraLATA toll customers, as well as in the local exchange market.

24. Cable companies and telephone companies have taken an active interest in entering each other's markets, as well as seeking strategic alliances with each other.

25. As a result of the Telecommunications Act of 1996, the long distance market will be opened to competition by the RBOCs in the future.

26. The Infrastructure Report made a series of recommendations, including the following: open all telecommunications services in the state to competition; streamline regulation so as to encourage innovation and eliminate unnecessary costs of doing business in California; and promote a technology neutral infrastructure policy to the maximum extent possible, including a reconsideration of the ban on fiber optic deployment beyond the feeder system.

27. Advancements in technology have also affected the telephone industry.

28. At the time the fiber preapproval requirement was adopted, that requirement was consistent with the Commission's outlook.

29. In 1989, intraLATA toll and local exchange competition had not been authorized.

30. D.89-10-031 included a provision to review the details and balance in the NRF, and make any mid-course corrections that might be needed.

31. When the Commission suspended the application of the productivity factor in D.95-12-052, the Commission stated that the record was adequate to change certain aspects of the NRF policies to conform to the evolving market.

32. Advances in fiber electronics have led to increases in system capacity and decreases in costs.

33. Decreases in fiber equipment costs are expected to continue.

34. There is not a significant difference between the powering and backup design for conventional copper networks and fiber networks.

35. There is no evidence to suggest that the power systems for fiber networks will be less reliable than existing power systems for copper networks.

36. We are not persuaded by CCTA's argument that because a fiber network requires more electronics than a copper network, the fiber network is less reliable.

37. The introduction of competition, and competitive forces, may prevent GTEC and Pacific from raising regulated telephone rates in order to subsidize the building of a broadband fiber network.

38. In D.90-12-116, the Commission stated that it would hesitate to approve a request for an increase in rates if there was evidence that imprudent investment or improper cross-subsidies were a substantial cause of the low earnings.

39. It should be left to the providers to decide which type of technology should be used to provide telecommunications services in the future.

40. We reaffirm our commitment toward a technology-neutral telecommunications infrastructure policy as expressed in the Infrastructure Report, and in D.94-08-029.

41. GTEC and Pacific should fully bear the risks and rewards of their investment-making decisions.

42. A technology-neutral policy does not mean that improper cost allocation should be the result, nor should nonregulated services be cross-subsidized by customers of regulated telecommunication services.

43. In adopting the NRF mechanism, the Commission also continued and expanded the monitoring and reporting requirements of GTEC and Pacific.

44. One of the reasons for the monitoring and reporting requirements is to ensure that the Commission has the necessary information to detect cross-subsidies and anticompetitive behavior.

45. Service-specific cost-tracking procedures and monitoring reports were developed in D.91-07-056.

46. The Commission requires Pacific and GTEC to track expenditures related to RD&D of all new products and services.

47. The Commission expects ORA to closely monitor the NRF framework, cost tracking and cost allocation, and to investigate areas of concern.

48. Since no VDT service offerings are imminent, we do not have to resolve the issue of how the costs of broadband services should be allocated.

49. Cost-allocation issues of VDT or other broadband service offerings can be handled when the Commission categorizes such service offerings as above-the-line or below-the-line.

50. CCLTC's proposed restatement of the fiber preapproval requirement runs counter to a technology-neutral-infrastructure policy.

#### Conclusions of Law

1. Exhibit 72-PC shall be received into evidence under seal.
2. Official notice shall be taken of the FCC Order and Authorization pertaining to GTEC's VDT application, which was released on May 5, 1995.

3. Official notice shall be taken of the FCC Order and Authorization pertaining to Pacific's VDT application, which was released on August 15, 1995.

4. Since no one has objected to any of the proposed transcript corrections, those corrections will be made to the reporter's transcript.

5. The cost effectiveness of deploying fiber-beyond-the-feeder should not be the sole determinant in deciding whether the fiber preapproval requirement should be eliminated.

6. As markets are opened up, and competition starts to develop, further adjustments to the NRF structure may be needed, including a review of whether the fiber preapproval requirement is still required.

7. The issue of cost effectiveness takes on less importance as the competitive environment changes.

8. Regardless of the technology employed, every public utility has the obligation to furnish and maintain adequate, efficient, just, and reasonable service.

9. The purpose of the fiber preapproval requirement is to allow the Commission and interested parties an opportunity to review the plans of GTEC and Pacific to deploy fiber-beyond-the-feeder before the latter do so.

10. The purpose of the FCC's jurisdictional separations requirements is to decide how costs will be apportioned between the federal and state jurisdictions.

11. The fiber preapproval requirement is not dependent on how the FCC provides for jurisdictional separations.

12. At the time GTEC or Pacific seek authority to offer VDT or other broadband services, the Commission will have the opportunity to determine how the costs associated with the new service should be treated, and, if improper cost allocations were made, to order corrective steps so that no cross-subsidization results.

13. Consideration of whether the fiber preapproval requirement should be eliminated may be taken up before the FCC resolves the jurisdictional-separation issues.

14. The Commission should not wait until there is effective competition in the marketplace before eliminating the fiber preapproval requirement.

15. Any proposed rate increase or proposal to change the NRF framework, must be approved by the Commission, which will afford interested parties an opportunity to challenge any such changes.

16. Due to the many changes that have occurred since the NRF decision was adopted, elimination of the fiber preapproval requirement at this time would be consistent with the NRF's goal of low cost, efficient regulatory review.

17. At this juncture, retaining the preapproval requirement for fiber-beyond-the-feeder expresses an unreasonable preference for other technologies that do not require preapproval.

18. The fiber preapproval requirement hampers the ability of GTEC and Pacific to respond quickly to new market opportunities, while their competitors are not faced with the same constraints.

19. The pursuit of a technology-neutral policy finds support in the Telecommunications Act of 1996.

20. Appropriate measures are in place to ensure the proper tracking of fiber-beyond-the-feeder costs and allocation of costs in order to monitor any possible cross-subsidization, monitor fiber deployment plans, and determine possible effects on the NRF.

21. CCTA's recommendations to require that all costs related to fiber deployment beyond the feeder be recorded below-the-line, or in a separate memorandum account should be denied.

22. CCLTC's recommendation to restate the fiber preapproval requirement should be denied.

23. GTEC's petition to eliminate the fiber-beyond-the-feeder preapproval requirement contained in D.89-10-031, and Pacific's joinder in that petition, should be granted.

O R D E R

IT IS ORDERED that:

1. GTE California Incorporated's (GTEC) petition to modify Decision (D.) 89-10-031 by eliminating ordering paragraphs 24, 25, and 26, and Pacific Bell's (Pacific) joinder in that petition, is granted.
2. The requirements of ordering paragraphs 24, 25, and 26 of D.89-10-031 (33 CPUC2d 43) shall be removed from D.89-10-031, and shall no longer be imposed on GTEC or Pacific.
3. The Cable Cable Television Association's recommended accounting treatment for fiber-beyond-the-feeder is rejected.
4. The California Committee for Large Telecommunications Consumers' request to expand the fiber preapproval requirement is denied.

This order becomes effective 30 days from today.

Dated June 25, 1997, at San Francisco, California.

P. GREGORY CONLON  
President  
JESSIE J. KNIGHT, JR.  
HENRY M. DUQUE  
JOSIAH L. NEEPER  
RICHARD A. BILAS  
Commissioners

I will file a written concurring opinion.

/s/ JESSIE J. KNIGHT, JR.  
Commissioner

APPENDIX A  
List of Appearances

Petitioners: Judith A. Endejan, and Elaine M. Lustig, for GTE California Inc.; and Gregory L. Castle, and Robert Mazique, for Pacific Bell.

Protestants: Lee Burdick, Carrington F. Philip, and Jennifer Johns, for California Cable Television Association; Joseph S. Faber for California Committee for Large Telecommunications Consumers; Mark E. Brown for MCI Telecommunications Corporation; and Thomas Long, and Regina Costa, for The Utility Reform Network, formerly known as Toward Utility Rate Normalization

Interested Parties: Randolph W. Deutsch, and Karen Potkul, for AT&T Communications of California, Inc.; Jeffrey F. Beck, and Jillisa Bronfman for CP National, Evans Telephone Company, GTE West Coast Inc., Kerman Telephone Company, Pinnacles Telephone Company, The Siskiyou Telephone Company, Tuolumne Telephone Company, and The Volcano Telephone Company; Ellen S. Deutsch for Citizens Utilities Company of California; E. Garth Black, and Mark P. Schreiber, for Cooper, White & Cooper; Rufus G. Thayer, and Ramesh Joshi, for the Office of Ratepayer Advocates, formerly known as the Division of Ratepayer Advocates; Ed Perez, and Preston Mike, for the City of Los Angeles.

Commission Advisory and Compliance Division: John Guiterrez, and Karen Jones.

(END OF APPENDIX A)

COMMISSIONER JESSIE J. KNIGHT JR., CONCURRING

I wholeheartedly support the removal of the restriction on investment in fiber-optic technology beyond the feeder contained in D.89-10-031 (33 CPUC 2d at 236-237). I do not support the removal of this restriction because of a desire or bias to see widespread deployment of fiber optics, but rather because this restriction is unnecessary and runs counter to this Commission's well articulated policies on infrastructure development, as outlined in our 1993 Infrastructure Report to the Governor, entitled *Enhancing California's Competitive Strength: A Strategy for Telecommunications Infrastructure*.

Given the current state of the market and current regulatory mechanisms, market forces will dictate the cost-effective roll-out of all technologies, including fiber-optic technologies. If the marketplace determines that deployment of fiber optics is economic, then such investment should take place and be welcomed by its attendant market niche. On the other hand, if the marketplace determines that extensive investment in fiber optics is not economic, then investment dollars should migrate to where more cost-effective projects reside. Only through a system of free markets can we realize a truly efficient allocation of society's resources.

In our 1993 Infrastructure Report, California eschewed command and control regulation as our strategy to bring the benefits of advanced telecommunications to the state. At that historic point in time, the Commission committed California to reliance on free market principles to spur the appropriate development process to deploy our telecommunications infrastructure. This restriction on fiber-optic deployment in the 1989 New Regulatory Framework decision (D.89-10-031) is an anachronistic throwback to command and control, cost-of-service regulation.

The powerful combination of an incentive-based price-cap regulatory framework for our larger local telephone companies and the opening of the local telecommunications market to competition, render the restriction on deployment of fiber-beyond-the-feeder unnecessary. Today's performance-based regulation and market conditions create incentives that are far better protections against uneconomic investment than any bureaucratic cost-effective test this regulatory agency would oversee.

Should Pacific Bell and GTEC make uneconomic decisions, as businesses sometimes do, these same market forces and regulatory structures will ensure that they will bear the consequences of those decisions.

This decision by the California Public Utilities Commission continues our implementation of California's telecommunications infrastructure strategy and helps to assure that the heavy hand of regulation does not pick winners and losers in the marketplace, regardless whether it involves fiber optics, wireless, satellite, or any other new technological variant that is on the telecommunications horizon.

/s/ Jessie J. Knight, Jr.  
Jessie J. Knight, Jr.  
Commissioner

San Francisco, California  
June 25, 1997



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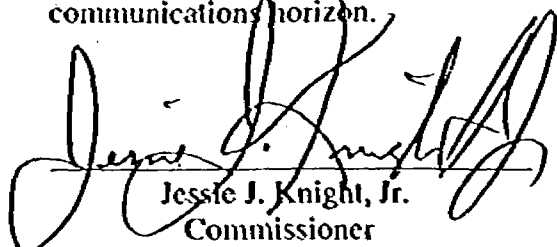
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Jessie J. Knight, Jr.  
Commissioner

San Francisco, California  
June 25, 1997