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Decision 90-11-029 November 9, 1990

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of AT&T Communications)
of California, Inc. (U 5002 C) under)
Rule 18 for a Certificate of Public)
Convenience and Necessity for)
Authority to Provide Intrastate)
InterLATA AT&T MEGACOM® and AT&T)
MEGACOM 800 Service.)

ORIGINAL

Application 88-07-020
(Filed July 15, 1988)

Application of AT&T Communications)
of California, Inc. (U 5002 C) under)
Rule 18 for a Certificate of Public)
Convenience and Necessity for)
Authority to Provide AT&T PROSM)
WATS California.)

Application 88-08-051
(Filed August 24, 1988)

Application of AT&T Communications)
of California, Inc. (U 5002 C) for)
Authority to Provide Intrastate)
AT&T 800 READYLINE® Service.)

Application 89-03-046
(Filed March 29, 1989)

(Appearances are listed in Appendix A.)

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O P I N I O N

I. Summary

This decision makes permanent the rates and charges, previously authorized on an interim basis, for AT&T Communications of California's (AT&T-C) intrastate interLATA:

1. AT&T MEGACON[®] and AT&T MEGACOM 800 service by Decision (D.) 88-11-053 on November 23, 1988, (except for reconfiguration of rates, services, and other changes set forth in Exhibit (Exh.) 103) which were made provisionally effective on January 1, 1990 by AT&T-C under Advice Letter 152.
2. AT&T PROSM WATS California service by D.89-06-050 on June 21, 1989, and
3. AT&T 800 READYLINE[®] service by D.90-04-023 on April 11, 1990.

It also authorizes AT&T-C to establish limited regulatory rate flexibility bands for these services thereby allowing increases of up to 5% and decreases up to 15% from the permanent rates, and conditionally adopts AT&T-C's Transport Incremental Cost Model (TICM) to determine the long-run incremental costs (LRIC) associated with certain of these and other new services to be introduced in California by AT&T-C in the future. In addition, AT&T-C is authorized to file rate increases and decreases, within the flexibility bands, on 30 days and 5 days' notice respectively, prior to their effectiveness.

Lastly, this decision implements a further safeguard against predatory pricing which precludes AT&T-C from filing, by Advice Letter, a rate for any competitive service which is priced lower than the rate of its lowest priced competitor for the similar competing service.

D.88-12-091 then concluded that "no rate band changes more than 15% in either direction" should be adopted "except when necessary to round to the nearest penny for billing purposes." In so doing, D.88-12-091 recognized that many of AT&T-C's proposed rate bands were in the 5% to 10% range, and that it was unreasonable to adjust all bands to $\pm 15\%$. Accordingly, the rate bands adopted by the Commission in D.88-12-091 varied asymmetrically around the rates and charges earlier adopted by the Commission in D.88-12-084 in connection with AT&T-C's last general rate proceeding.

D.88-12-091 also granted AT&T-C the authority to introduce new services with flexible rate bands by advice letter on 40 days' notice using a standard costing methodology after that costing standard is formally approved by the Commission. Specifically, Ordering Paragraph 1, Subparagraph f. and g. stated:

"f. The advice letter process approved today for new services shall not take effect until AT&T-C has filed a new service application where uniform costing methodology shall be established, the new services definition shall be refined and all parties shall be allowed to effectively participate.

"g. After uniform costing methodology is established in the first new service application, future new service filings shall be handled through the advice letter process under General Order 96-A."
(D.88-12-091, mimeo. p. 93.)

D.88-12-091 also directed AT&T-C to not use its PRO California application to develop the uniform costing standard for new services.

On March 29, 1989 AT&T-C filed its first new service application (A.89-03-046) requesting that the Commission issue a certificate of public convenience and necessity (CPCN) for

1. Can compensation by AT&T-C to the local exchange telephone companies provide sufficient protection of universal telephone service to allow AT&T to market READYLINE now?
2. Is there any harm to Pacific Bell and the other local exchange telephone companies should AT&T-C be successful in marketing READYLINE to approximately 11,000 customers in this first year, when and if competition comes to the intraLATA market?

The second issue was framed with an understanding that AT&T-C will likely provide good service to its READYLINE customers and those customers would then likely remain with AT&T-C and not return to the local exchange company (LEC), if intraLATA competition were authorized.

Following 12 days of hearing held in September through October 4, 1989 with testimony and exhibits presented by 12 witnesses, five for AT&T-C, two for Pacific Bell, one each for GTEC, Citizens, and Roseville, and two for DRA.³ AT&T-C's request for interim authority was to be submitted upon receipt of concurrent opening and reply briefs on October 30 and November 10, 1989, respectively. The November 10 date for reply briefs was later extended for all parties to November 13 then to November 22, 1989, and finally was suspended at the request of applicant's (AT&T-C) counsel, pending action on the proposed settlement agreement.

On January 5, 1990 AT&T-C filed a joint motion with Pacific Bell for approval of a stipulation and settlement agreement. Meanwhile, this READYLINE proceeding had been consolidated with A.88-07-020 and A.88-08-051 to deal with the main

³ Further details regarding these hearings are contained in D.90-04-023, dated April 11, 1990.

proposed decision for timely comments as provided for under California Public Utilities (PU) Code § 311, with a reduced comment period of 15 days to allow the Commission to consider adoption of the order on April 11, 1990.

On April 11, 1990 the Commission issued D.90-04-023 conditionally granting AT&T-C's request for interim authority to offer intrastate 800 READYLINE service in California, substantially in accordance with the terms and conditions of the February 20, 1990 "READYLINE STIPULATION AND SETTLEMENT AGREEMENT."

However the Commission by D.90-04-023 imposed the following conditions for the interim offering of 800 READYLINE service:

- "a. The terms and words 'DRA, and the CACD,' shall be stricken from the second full sentence on page 2 of the agreement.
- "b. AT&T-C shall not have rate flexibility for the offering of its READYLINE service until further order of this Commission in this proceeding (A.89-03-046).
- "c. AT&T-C shall not be relieved of the restriction against 'holding-out' the offering of intraLATA READYLINE service until further order of this Commission in I.87-11-033 or alternatively, in A.89-03-046.
- "d. AT&T-C shall not offer the availability of calling parties' telephone numbers on a-real-time-basis in the offering of its READYLINE service in California."

A. Issues Remaining to be Resolved

While D.90-04-023 resolved many issues and allows AT&T-C to offer its 800 READYLINE service on an intrastate basis in California, it deferred the following matters to this main phase.

1. The development of a standard for costing and pricing new services similar to "READYLINE," "AT&T MEGACOM and AT&T MEGACOM 800," and "AT&T PRO WATS California" services.

An even more extensive record was developed in this main phase with 20 days of hearing spanning over 2,902 pages of transcript. Testimony was given by 13 witnesses, four for AT&T-C, one for GTEC, and two each for DRA, MCI, Pacific Bell, and US Sprint. Twenty-two public exhibits were identified and received in the public record. Fifteen proprietary exhibits were also identified and received in evidence and then were placed under seal.

The greater part of this record was devoted to two issues centering on the reasonableness of AT&T-C's proposed use of its Transport Incremental Cost Model (TICM) to determine long-run incremental costs (LRIC) for AT&T-C's California intrastate switched services, and what inputs and assumptions should be applied when using the TICM model.

Hearings in this main phase of the consolidated proceeding were concluded on May 11, 1990 and this matter was then submitted on receipt of concurrent opening and closing briefs on June 18 and July 2, 1990, respectively.

B. Description of Proposed Service

AT&T-C 800 READYLINE Service is an optional usage sensitive inward calling service designed to meet the needs of customers with low-volumes of incoming traffic, without the need for them to purchase any additional equipment or special access lines to obtain the service. The customer's existing local exchange telephone lines and instruments are used to originate and terminate local and long-distance calls, and to receive READYLINE calls as well.

Customers can maintain their regular current local telephone number, and also receive READYLINE service calling on a READYLINE number on the same instruments. This allows customers to use READYLINE service to offer toll-free calling to anyone they have provided their 800 READYLINE number to. READYLINE toll-free calling may be restricted to preselected geographic areas (down to

as US Sprint or MCI unless they agree to change their 800 telephone number.

Regular AT&T-C 800 service is also available to READYLINE customers without a number change if their calling volume increases to a point where the toll-free inward calling service should logically be terminated on a dedicated line. (A more comprehensive definition of AT&T-C's 800 READYLINE service and its number portability features is contained in D.90-04-023, pp. 6-10 mimeo.)

C. Historical Precedent for Use of a Standard Costing Method

The use of a standardized method of computing rates and charges for telephone products and services, employing a prescribed computation form, is not a new idea to this Commission or to the California LECs.

In his prepared testimony and through a series of questions from the ALJ, John Sumpter, District Manager for AT&T-C's Market Plans Implementation Division, testified that he had earlier in his career, worked for The Pacific Telephone and Telegraph Company (TPT&T)⁶ and as part of that work during the 1970s he performed service cost studies and taught "Cost of Service" classes for the "Bell System Center for Technical Education." (Exh. 103.)

He further testified that at that time TPT&T employed a GE-100 analysis method, (so-called because it used a GE-100 standardized form with approximately 50 entries and/or calculations) to determine the rates and charges to be tariffed for new offerings of specialized customer premises equipment as well as specialized services such as private line services.

Sumpter was particularly familiar with the GE-100 form and analysis because he personally filled out many of the

6 Predecessor of Pacific Bell.

CORRECTION

**THIS DOCUMENT HAS
BEEN REPHOTOGRAPHED
TO ASSURE
LEGIBILITY**

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O P I N I O N

I. Summary

This decision makes permanent the rates and charges, previously authorized on an interim basis, for AT&T Communications of California's (AT&T-C) intrastate interLATA:

1. AT&T MEGACOM[®] and AT&T MEGACOM 800 service by Decision (D.) 88-11-053 on November 23, 1988, (except for reconfiguration of rates, services, and other changes set forth in Exhibit (Exh.) 103) which were made provisionally effective on January 1, 1990 by AT&T-C under Advice Letter 152.
2. AT&T PROSM WATS California service by D.89-06-050 on June 21, 1989, and
3. AT&T 800 READYLINE[®] service by D.90-04-023 on April 11, 1990.

It also authorizes AT&T-C to establish limited regulatory rate flexibility bands for these services thereby allowing increases of up to 5% and decreases up to 15% from the permanent rates, and conditionally adopts AT&T-C's Transport Incremental Cost Model (TICM) to determine the long-run incremental costs (LRIC) associated with certain of these and other new services to be introduced in California by AT&T-C in the future. In addition, AT&T-C is authorized to file rate increases and decreases, within the flexibility bands, on 30 days and 5 days' notice respectively, prior to their effectiveness.

Lastly, this decision implements a further safeguard against predatory pricing which precludes AT&T-C from filing, by Advice Letter, a rate for any competitive service which is priced lower than the rate of its lowest priced competitor for the similar competing service.

II. Background

By Decision (D.) 88-12-091, dated December 19, 1988 this Commission granted AT&T Communications of California, Inc. (AT&T-C), limited regulatory flexibility to increase or decrease its rates within established bands, for several existing services, by advice letter filings to become effective on five days' notice. AT&T-C was given rate flexibility for a number of its services, such as, its Software Defined Network, Accunet Switched 56, certain changes for Wide Area telephone service (WATS), and 800 services.

D.88-12-091 conditioned the regulatory flexibility granted to AT&T-C on the understanding that AT&T-C shall:

- "1. Maintain statewide average rates.
- "2. Introduce all new services on a statewide basis.
- "3. Make a maximum of four revisions within approved rate bands per service per year.
- "4. Not impose restrictions on the resale and sharing of its services.
- "5. Not abandon any service except by formal application to the Commission.
- "6. Not seek to withdraw any service from a community on a geographically discriminatory basis.
- "7. Use the formal application process for any new service submission or for the revision of existing service where that submission or revision departs from the approved standard costing methodology.
- "8. Use the formal application process for any service submission that utilizes a combination of existing tariff services discounted in order to provide a competitive response to a specific customers." (D.88-12-091, mimeo. pp. 85, 86.)

D.88-12-091 then concluded that "no rate band changes more than 15% in either direction" should be adopted "except when necessary to round to the nearest penny for billing purposes." In so doing, D.88-12-091 recognized that many of AT&T-C's proposed rate bands were in the 5% to 10% range, and that it was unreasonable to adjust all bands to [±]15%. Accordingly, the rate bands adopted by the Commission in D.88-12-091 varied asymmetrically around the rates and charges earlier adopted by the Commission in D.88-12-084 in connection with AT&T-C's last general rate proceeding.

D.88-12-091 also granted AT&T-C the authority to introduce new services with flexible rate bands by advice letter on 40 days' notice using a standard costing methodology after that costing standard is formally approved by the Commission. Specifically, Ordering Paragraph 1, Subparagraph f. and g. stated:

"f. The advice letter process approved today for new services shall not take effect until AT&T-C has filed a new service application where uniform costing methodology shall be established, the new services definition shall be refined and all parties shall be allowed to effectively participate.

"g. After uniform costing methodology is established in the first new service application, future new service filings shall be handled through the advice letter process under General Order 96-A."
(D.88-12-091, mimeo. p. 93.)

D.88-12-091 also directed AT&T-C to not use its PRO California application to develop the uniform costing standard for new services.

On March 29, 1989 AT&T-C filed its first new service application (A.89-03-046) requesting that the Commission issue a certificate of public convenience and necessity (CPCN) for

authority to provide intrastate AT&T¹ 800 READYLINE (READYLINE) service.

AT&T-C stated that its comparable interstate READYLINE service has been available since mid-December 1986 under Federal Communications Commission (FCC) authority. On March 30, 1989 AT&T-C refiled its application (A.89-03-046), including a motion requesting immediate interim authority.

AT&T-C served copies of the application and "Motion For Immediate Interim Authority" on potential competitors and interested parties, and notice of the application appeared in the Commission Daily Calendar of March 31, 1989. Protests to the application and/or the granting of interim authority were subsequently received on or before May 15, 1989,² from the Commission's Division of Ratepayer Advocates (DRA), Pacific Bell, GTE California Incorporated (GTEC), US Sprint Communications, Limited Partnership (US Sprint), Roseville Telephone Company (Roseville), Citizens Utilities Company of California (Citizens), and 18 other smaller independent local exchange telephone companies, six of which joined in Roseville's protest and 12 others joined in Citizen's protest.

On July 14, 1989, a prehearing conference was held for the purpose of determining whether evidentiary hearings were necessary to consider AT&T-C's request for interim authority for READYLINE service, and if so, to limit the issues as appropriate. At the conclusion of the prehearing conference, hearings were set beginning on September 11, 1989 to deal with only two issues pertaining to the interim authority request of AT&T-C, namely:

1 AT&T is the parent of AT&T-C.

2 May 15, 1989 was the deadline date set by the assigned Administrative Law Judge (ALJ) for parties to respond to AT&T-C's motion for interim authority.

1. Can compensation by AT&T-C to the local exchange telephone companies provide sufficient protection of universal telephone service to allow AT&T to market READYLINE now?
2. Is there any harm to Pacific Bell and the other local exchange telephone companies should AT&T-C be successful in marketing READYLINE to approximately 11,000 customers in this first year, when and if competition comes to the intraLATA market?

The second issue was framed with an understanding that AT&T-C will likely provide good service to its READYLINE customers and those customers would then likely remain with AT&T-C and not return to the local exchange company (LEC), if intraLATA competition were authorized.

Following 12 days of hearing held in September through October 4, 1989 with testimony and exhibits presented by 12 witnesses, five for AT&T-C, two for Pacific Bell, one each for GTEC, Citizens, and Roseville, and two for DRA.³ AT&T-C's request for interim authority was to be submitted upon receipt of concurrent opening and reply briefs on October 30 and November 10, 1989, respectively. The November 10 date for reply briefs was later extended for all parties to November 13 then to November 22, 1989, and finally was suspended at the request of applicant's (AT&T-C) counsel, pending action on the proposed settlement agreement.

On January 5, 1990 AT&T-C filed a joint motion with Pacific Bell for approval of a stipulation and settlement agreement. Meanwhile, this READYLINE proceeding had been consolidated with A.88-07-020 and A.88-08-051 to deal with the main

³ Further details regarding these hearings are contained in D.90-04-023, dated April 11, 1990.

issues involving the need for a standard costing model and method for developing rates and charges for new services of AT&T-C. Hearings on the main case began on February 5, 1990 and on that same date AT&T-C forwarded copies of its "Proposed READYLINE Settlement Agreement", bearing the signatures of the representatives of the California LECs, to the ALJ.

Contemporaneously, on February 5, 1990 MCI Telecommunications Corporation (MCI), US Sprint, and DRA filed comments in opposition to the joint motion for approval of the settlement agreement. At the ongoing hearings in the consolidated proceedings involving AT&T-C's A.88-07-020, A.88-08-051, and A.89-03-046, the ALJ raised several concerns regarding the proposed settlement agreement with the parties off-the-record. Following the discussion, AT&T-C agreed to submit a further revised settlement agreement on February 20, 1990 and also agreed that DRA, MCI, and US Sprint would have the opportunity to file comments on the revised settlement agreement by no later than February 27, 1990.

On February 20, 1989 AT&T-C responded to the comments of DRA, MCI, and US Sprint and tendered a further modified settlement agreement.⁴ DRA, MCI, and US Sprint all filed timely comments on that settlement agreement. DRA was supportive of the agreement while MCI continued to oppose it and US Sprint conditionally agreed to set aside its opposition if AT&T-C "would eliminate its request for 'holding-out' authority."

Meanwhile, Pacific Bell on February 16, 1990 filed Advice Letters 15686 and 15690, to provide its complementary 800 services as alternative offerings to customers seeking READYLINE or READYLINE-like services. On March 20, 1990 the ALJ issued his

⁴ A copy of the February 20, 1990 revised "READYLINE STIPULATION AND SETTLEMENT AGREEMENT" is contained in Appendix D of D.90-04-023.

proposed decision for timely comments as provided for under California Public Utilities (PU) Code § 311, with a reduced comment period of 15 days to allow the Commission to consider adoption of the order on April 11, 1990.

On April 11, 1990 the Commission issued D.90-04-023 conditionally granting AT&T-C's request for interim authority to offer intrastate 800 READYLINE service in California, substantially in accordance with the terms and conditions of the February 20, 1990 "READYLINE STIPULATION AND SETTLEMENT AGREEMENT."

However the Commission by D.90-04-023 imposed the following conditions for the interim offering of 800 READYLINE service:

- "a. The terms and words 'DRA, and the CACD,' shall be stricken from the second full sentence on page 2 of the agreement.
- "b. AT&T-C shall not have rate flexibility for the offering of its READYLINE service until further order of this Commission in this proceeding (A.89-03-046).
- "c. AT&T-C shall not be relieved of the restriction against 'holding-out' the offering of intraLATA READYLINE service until further order of this Commission in I.87-11-033 or alternatively, in A.89-03-046.
- "d. AT&T-C shall not offer the availability of calling parties' telephone numbers on a-real-time-basis in the offering of its READYLINE service in California."

A. Issues Remaining to be Resolved

While D.90-04-023 resolved many issues and allows AT&T-C to offer its 800 READYLINE service on an intrastate basis in California, it deferred the following matters to this main phase.

1. The development of a standard for costing and pricing new services similar to "READYLINE," "AT&T MEGACOM and AT&T MEGACOM 800," and "AT&T PRO WATS California" services.

2. The approval of permanent rates for the specific services listed above.
3. Consideration of any necessary refinement of the definition of "new service" adopted by the Commission in D.88-12-091.
4. The development of appropriate flexible rate bands for new AT&T services.
5. The possible lifting of the "holding-out restriction" on intraLATA READYLINE service.⁵

Details of the interim authority hearing schedule, the READYLINE Settlement Agreement, as well as the terms and conditions set forth therein leading to this Commission's granting conditional operating authority to AT&T-C for rendering intrastate READYLINE service are contained in D.90-04-023.

The following matters are also discussed in D.90-04-023, and accordingly will not be repeated herein:

1. Description of applicant.
2. Restrictions to READYLINE service.
3. Public Need for READYLINE service.
4. Facilities requirements and environmental impact.
5. Availability of READYLINE service in the other states.

On February 5, 1990 following submission of the extensive interim authority hearing record, and approximately 65 days prior to the issuance of D.90-04-023, hearings began on the main phase of this consolidated application.

⁵ This issue will likely be addressed in I.87-11-033 or alternatively may be heard in a later phase of this proceeding, if not resolved in I.87-11-033.

An even more extensive record was developed in this main phase with 20 days of hearing spanning over 2,902 pages of transcript. Testimony was given by 13 witnesses, four for AT&T-C, one for GTEC, and two each for DRA, MCI, Pacific Bell, and US Sprint. Twenty-two public exhibits were identified and received in the public record. Fifteen proprietary exhibits were also identified and received in evidence and then were placed under seal.

The greater part of this record was devoted to two issues centering on the reasonableness of AT&T-C's proposed use of its Transport Incremental Cost Model (TICM) to determine long-run incremental costs (LRIC) for AT&T-C's California intrastate switched services, and what inputs and assumptions should be applied when using the TICM model.

Hearings in this main phase of the consolidated proceeding were concluded on May 11, 1990 and this matter was then submitted on receipt of concurrent opening and closing briefs on June 18 and July 2, 1990, respectively.

B. Description of Proposed Service

AT&T-C 800 READYLINE Service is an optional usage sensitive inward calling service designed to meet the needs of customers with low-volumes of incoming traffic, without the need for them to purchase any additional equipment or special access lines to obtain the service. The customer's existing local exchange telephone lines and instruments are used to originate and terminate local and long-distance calls, and to receive READYLINE calls as well.

Customers can maintain their regular current local telephone number, and also receive READYLINE service calling on a READYLINE number on the same instruments. This allows customers to use READYLINE service to offer toll-free calling to anyone they have provided their 800 READYLINE number to. READYLINE toll-free calling may be restricted to preselected geographic areas (down to

a number plan area level) from which a toll-free call will be accepted.

While READYLINE was initially designed for small to mid-size businesses, this service also has many benefits for residential customers who have relatives, friends, or loved ones away from home and wish to provide them the opportunity to call toll-free at will from any operating telephone. This service would be desirable for those in hospitals and nursing homes or away at college, especially where they have no phone of their own for billing purposes.

As designed, READYLINE will provide to low-volume intrastate customers all the benefits of intrastate inward calling that larger customers have enjoyed for years--but without the installation charge and ongoing monthly expense of additional dedicated telephone lines currently associated with and required for AT&T-C's existing intrastate 800 service. Therefore, READYLINE will increase utilization of existing telephone plant facilities and will provide a less costly alternative for customers whose intrastate call-volumes do not justify subscribing to regular AT&T-C 800 service.

An added feature of READYLINE is number portability for the assigned 800 number, which can be retained and forwarded to any other part of the community, state, or nation where AT&T-C 800 READYLINE service is available. The 800 READYLINE number may also be converted to reach any other standard telephone set on a temporary basis if the regularly assigned instrument or number is out of service for any reason. AT&T-C's READYLINE service number portability feature also enables an existing customer of Basic 800 service (jointly provided in California by Pacific Bell, GTEC, and AT&T-C) to switch to AT&T-C's "stand alone" READYLINE service without changing his/her 800 telephone number. Customers of existing Basic 800 service cannot switch to the READYLINE-like services of other interexchange carriers (IEC) in California such

as US Sprint or MCI unless they agree to change their 800 telephone number.

Regular AT&T-C 800 service is also available to READYLINE customers without a number change if their calling volume increases to a point where the toll-free inward calling service should logically be terminated on a dedicated line. (A more comprehensive definition of AT&T-C's 800 READYLINE service and its number portability features is contained in D.90-04-023, pp. 6-10 nimeo.)

C. Historical Precedent for Use of a Standard Costing Method

The use of a standardized method of computing rates and charges for telephone products and services, employing a prescribed computation form, is not a new idea to this Commission or to the California LECs.

In his prepared testimony and through a series of questions from the ALJ, John Sumpter, District Manager for AT&T-C's Market Plans Implementation Division, testified that he had earlier in his career, worked for The Pacific Telephone and Telegraph Company (TPT&T)⁶ and as part of that work during the 1970s he performed service cost studies and taught "Cost of Service" classes for the "Bell System Center for Technical Education." (Exh. 103.)

He further testified that at that time TPT&T employed a GE-100 analysis method, (so-called because it used a GE-100 standardized form with approximately 50 entries and/or calculations) to determine the rates and charges to be tarified for new offerings of specialized customer premises equipment as well as specialized services such as private line services.

Sumpter was particularly familiar with the GE-100 form and analysis because he personally filled out many of the

6 Predecessor of Pacific Bell.

computation forms and later supervised and taught others to prepare them.

The GE-100 analysis form or its equivalent was in general use⁷ by the Commission staff and the LECs from the early 1960s to the late 1970s according to Sumpter.⁸ (Tr. 2772-2777.)

In describing TPT&T's and the Commission staff's view of the GE-100 form analysis method, Sumpter stated:

"There was general acceptance that it would not cause cross-subsidies because of the way it was implemented.

"And when it was used for setting prices in general, it was used in the fully-allocated cost version which delivered higher estimates. It was also used not to set a floor, but to actually set the price. The results of the model invariably became the price."
(Tr. 2773.)

As to the preparation of the GE-100 form itself, Sumpter recalled that when he first saw it, it was manually processed (filled-out in pencil) but by the time he stopped doing it, "it had been computerized." (Tr. 2777.)

Sumpter described the GE-100 analysis process as reasonably complex, and that it took him about two weeks to become comfortable with it after he had obtained the manual for its use. (Tr. 2779.)

7 "General use" means widely used for nearly all tariff pricing computations, except for message toll-service.

8 The GE-100 analysis form and method became controversial toward the end of the 1970s when telephone terminal equipment (customer premises equipment) was deregulated by the FCC. According to Sumpter, "the use of the GE-100 became controversial because it established prices for Pacific Telephone that were not supportable in the market place." "All the competitors who were not regulated at all could sell profitably at prices substantially less." (Tr. 2774.)

In comparing it to TICM which AT&T-C is proposing here and which is discussed at length below, Sumpter opined that:

"The reason it would take two weeks, and the reason something like TICM or a study to look at the network would take much longer is that one of the initial input items on the GE-100 is the investment amount for the terminal product. And in the case of GE-100, and specifically in the case of a piece of terminal equipment, that is a relatively easy number to get.

"If you were going to get a PBX, you can look in the catalog and see what it looks like. You know it is going to sit in a box and you know it is going to have a particular price.

"If you were talking about a minute of a shared network, that computation is much more difficult. And a lot of the complexity in TICM specifically is aimed at calculating that number. Once you have that number, the rest of the TICM is very similar to what happens to the rest of the GE-100, once you have that investment amount identified."
(Tr. 2779-2780.)

Sumpter also acknowledged that the GE-100 form was kept up to date, as changes were necessary. If, for example, tax rates changed or for any other reason, it would be revised promptly.
(Tr. 2784.)

It appears that during the two decades that the GE-100 cost standard was routinely used by the California telephone utilities to determine costs, rates, and charges for specialized telephone equipment and services, literally thousands of the individual GE-100 forms were analyzed and processed by the Commission staff. Sumpter recalled that during the 1970s, TPT&T likely made between 50 and 100 tariff filings each year. The GE-100 forms were used to establish each rate element such that a single advice letter filing involving tariff revisions could have a dozen or more completed GE-100 forms appended to it. (Tr. 2784.)

While the GE-100 cost standard was used effectively for many years to determine fully allocated costs to develop rates and charges for specialized telephone equipment and services, this method became controversial, and its effectiveness was questioned, when the LECs began facing competition as suppliers of customer premises equipment.

This controversy occurred because the GE-100 method yields rates and charges which include a uniform rate of return for each piece of equipment, whereas competitors were often satisfied to enjoy a marginal return over their costs of individual pieces of customer premises equipment.

Accordingly, since AT&T-C is now seeking to price its services in the face of competition it must also employ a different costing standard to determine the rates and charges for its competitive services.

III. Long-Run Incremental Cost (LRIC)

A. AT&T-C's Position in Support of LRIC

AT&T-C, throughout this proceeding, has asserted that long-run incremental cost "LRIC" is the appropriate economic cost standard for AT&T.

AT&T-C's witness Dr. William N. Baumol, Professor of Economics at Princeton and New York Universities, defined long-run incremental cost as the increase in total cost of an enterprise, in the long-run, as a result of some given increase in the volume in which it supplies one of its products. In fewer words, "it is the rise in total cost caused by that increment in output." (Exh. 109, p. 8.)

Baumol's use of the term long-run refers to a period sufficiently long to permit a given firm to adapt its plant and equipment to the increase in output, and the increment in question

as the change from zero supply of that service to the planned level of service. (AT&T-C Opening Brief (Op. Br.) p. 20.)

AT&T-C argues that:

"It is critical that the Commission adopt a cost standard for AT&T which is consistent with the transition to market-based prices."

Accordingly, AT&T-C further contends that:

"All parties in this proceeding agree that LRIC provides such a cost standard." (AT&T-C Op. Br. p. 19.)

B. DRA's Position in Support of LRIC

DRA's Public Utility Regulatory Specialist, witness, J. C. Jong, supports the use of LRIC for establishing price floors for AT&T-C's new service offerings such as "READYLINE".

Jong gave DRA's definition of LRIC:

"as the additional costs a company will incur on a long-run basis because of a new business decision, such as introducing a new service offering or changing an existing tariffed rate. If the new business decision has no impact on the company's existing cost structure, there will be no LRIC incurred by the company. In short, LRIC can be defined as the difference between total costs with and without implementation of the new business decision."

He then explained that:

"LRIC is a forward-looking cost methodology unlike the fully distributed cost (FDC) and embedded cost methodologies. The objective of LRIC pricing is to achieve economic efficiency in terms of efficient allocation of resources and social welfare maximization, and to establish a cross-subsidy threshold that would prevent anti-competitive behavior.

"Prices not determined by competitive market forces are often set by regulatory agencies. Prices set by regulatory agencies are usually designed to recover an authorized revenue requirement. If the revenue requirement need not be recovered from particular services, then market forces should be the principal guide for

price setting, with LRIC as a price floor to avoid anti-competitive behavior. When a new service is the first offered in a market without competitive market prices to be referenced, the LRIC may serve as a guideline for pricing.

"DRA concludes that using LRIC as a floor price for AT&T's new service tariff filings is reasonable, and can be used to justify pricing flexibility. Hence, in the evaluation of AT&T's proposed tariff rate for Readyline 800 service, DRA recommends using unit LRIC as the price floor to ensure that revenue covers cost such that predatory pricing or anti-competitive behavior is unlikely. In other words, for each proposed rate for AT&T, the per unit incremental revenue should not be lower than the per unit LRIC." (Exh. 115, pp. 3 and 4.)

DRA's Dick Van Aggelan, a Financial Examiner, testified that DRA also supports the use of LRIC for the other AT&T-C services in this proceeding as follows:

"While most of the analysis performed for this proceeding was focused on AT&T 800 Readyline, DRA has no objection to the use of LRIC as cost support for the other services covered in these hearings; AT&T Megacom and Megacom 800 Services and AT&T Pro WATS California." (Exh. 115, p. 20.)

C. MCI Supports Group Total LRIC

Dr. Nina Cornell, an economist specializing in microeconomics analysis of regulatory and antitrust issues, testified on behalf of MCI and supported a modified "group" total incremental cost LRIC as the proper test for cross subsidy:

"[T]o be certain that there are no cross subsidies due costs that are common to a subset of the outputs of the firm, the test must not only be run for each single product, but must be run for all groups of outputs of the firm.

"It is necessary to look at the incremental cost of the entire service in order to be certain that the prices charged for that service cover any product-specific fixed costs. When an

entire service is offered, it may impose costs on the company that do not have to be duplicated as the firm expands the output of the service (or would only have to be duplicated for a very large increase in output). These can be thought of as product-specific fixed costs. For example, a printing company that wants to offer color printing services would have to add expensive equipment. Once that equipment was in place, the company would have sufficient capacity to produce additional color printing output by buying more supplies and possibly paying more for labor, but it would not necessarily have to add equipment. The marginal cost of color printing would thus fall below the average total incremental cost of adding color print capacity. (Average total incremental cost is the total incremental cost of the service supplied divided by the quantity supplied.) If the company set its prices for color print jobs above the marginal cost but below average total incremental cost, it would not recover the cost of the color printing equipment. These costs would then have to be recovered by revenues from other services or come out of the pockets of the owners of the company."

Dr. Cornell also testified that it is possible for services as a whole to be subsidized, even if no single service by itself is priced below its own incremental cost. (Exh. 112, pp. 18 and 19.)

D. Pacific Bell Conditionally Supports LRIC

Dr. Jerry A. Hausman, Professor of Economics at the Massachusetts Institute of Technology, who testified on behalf of Pacific Bell, essentially agreed with Dr. Cornell of MCI on the need to do a group analysis when using LRIC to set the lower bound of price by incremental cost. In response to cross-examination questions by AT&T-C's counsel, Dr. Hausman testified that under his group test:

"Of course, you would at some point need to look at the combination of services being provided or products being provided so that jointly they were not below the incremental cost for them."

"You would look at all the services and products produced by the firm and see whether the -- what the incremental costs look like in that situation.

"However, I think that would not be a good use of either the firm's resources or regulatory resources to have a test if you had to look at the whole firm.

"If there were very many products, it would be extremely unlikely that the firm would be failing that test. If so, its shareholders would very much dislike the situation and Carl Icahn and Boone Pickens would be right around the corner." (Tr. 3898.)

Dr. Hausman also emphasized that "when you look at these joint and common costs, you want to do it forward looking."

K. US Sprint Supports Entire Service LRIC

Dr. William B. Tye, a Principal in the management and economic consulting firm of Putman, Hayes and Bartlett, Inc., who also testified on behalf of US Sprint, also supports the use of the long-run incremental cost analysis, however, he asserted that a company's entire service or groups of services should be analyzed. He testified that:

"In order to prevent cross-subsidy and predatory competition, revenues must be greater than the long-run incremental costs of an entire service and greater than the long-run incremental costs of groups of services.

"The long-run incremental costs of a service are the expenditures that a firm would avoid if it were to cease supplying the entire service. For example, the long-run incremental costs of WATS are the costs that AT&T would avoid if it stopped providing WATS altogether.

"The long-run incremental costs of groups of services are the incremental costs associated with providing various combinations of services. The incremental costs of groups of services account for joint costs that would not

be included in a single service's incremental costs.

"In order to prevent cross-subsidy and predatory competition, prices should be set to generate revenues that are greater than the incremental costs of an entire service and greater than the incremental costs of groups of services. In other words, the relevant incremental for use in calculating incremental costs is not the last few units of output, but the entire service. But even prices that yield revenues that are greater than the incremental cost of an entire service are not sufficient to prevent cross-subsidization and predatory competition. The prices charged for various services must generate revenues that cover not only their individual long-run incremental costs but also the common costs associated with jointly provided services -- i.e., the incremental costs of groups of services." (Exh. 113, pp. 6-8.)

F. Discussion

While we concur with AT&T-C that LRIC is the appropriate standard for establishing the lower threshold minimum rate (price floor) for a given telecommunications service, we note that most of the parties to this proceeding also maintain that long-run incremental cost analyses must not be done so independently as to avoid review of other service offerings. We will revisit this issue in the light of unit analysis, group analysis, total service analysis or entire service analysis as we explore the validity of using the TICM model to drive the LRIC analysis for the products and services to be rated.

IV. AT&T's Transport Incremental Cost Model "TICM"

AT&T-C proposes to use AT&T's analysis method for estimating long-run incremental cost for its competitive offering of telecommunications services (other than MTS, private line and directory services). At the heart of AT&T's analysis method is the

TICM computer model. The TICM model, according to AT&T-C, is linked to AT&T's "major operational data bases used in the daily management of AT&T's business." Through these linked inputs, TICM takes the information used by AT&T to design, construct and operate its switched network and applies these data into a LRIC estimation process. AT&T-C claims that this method is used to make business decisions and to support regulatory filings as well. (AT&T-C Op. Br. p. 33.)

A. AT&T-C Explains its Request to Use TICM

AT&T-C's Sumpter testified that AT&T pricing managers rely on TICM in making their pricing decisions for new services, and it is used every day in making basic decisions. Sumpter remarked that no other tool exists and TICM yields the best information available to him. (Tr. 2839.)

Sumpter, in his rebuttal testimony, responded to concerns that TICM⁹ is too complicated to audit, stating that the DRA has conducted an effective audit of TICM and that AT&T has made available its experts to explain how the model works. However, he was quick to point out that any computer model intended to "study the incremental costs of a firm like AT&T will be necessarily complex". (Exh. 116, p. 20.)

B. DRA Discusses the Complexity of TICM

On this point, the most persuasive testimony was given by DRA's Van Aggelen in response to questions from the ALJ regarding the use of the TICM model, as follows:

"Cost models in general tend to be rather complex. You have to deal with the point of view of validating them and maintaining them and monitoring them and making sure that they keep running correctly.

⁹ A block diagram of TICM inputs and outputs is set forth in Appendix C following a short narrative prepared by DRA witness J. C. Jong describing how TICM calculates certain components of LRIC.

"But from the output point of view, it is a relatively straightforward kind of a process, given that you are comfortable with the mechanism itself." (Tr. 3487.)

Van Aggelen further testified that there were three other persons in DRA who were knowledgeable on the use of TICM. He also opined that it was reasonable to assume that in a period of one month, a person who understands the overall operation of the model could input data into it and actually get results from it. However, he felt that to understand "the more intricate details of the model and become involved in the maintenance of the little elements of the model," would entail a longer learning process of 90 days to six months. (Tr. 3488-3490.)

Van Aggelen did not know of any persons in the Commission Advisory and Compliance (CACD) who were familiar with the TICM model or its use. (Tr. 3487-3489.)

In its report, DRA had conditionally recommended the acceptance and adoption of AT&T's TICM model for use in calculating LRIC for future tariff filings for new services. Van Aggelen further explained his concerns in response the following questions from the ALJ.

"Q . . . Earlier this morning you indicated, at least my understanding of what you indicated is you felt that if TICM were to be used, it had to be a living document, and as such, it had to be modified from time to time subject to ongoing necessary revisions as they were noted and felt necessary; it is that correct?

"A That's correct.

"Q And your view of that is that such a living document needs both the inputs of the Commission staff and whatever company is using it working in a well-coordinated effort to achieve such a success?

"A That's correct. That is assuming that this is going to be effectively utilized as a tool by the Commission.

"If it is going to be not a major tool, it probably is not worthwhile doing that.

"But if the Commission should adopt this and make it a major tool, then that kind of a commitment is probably worthwhile.

"I will have to differentiate, though, between the involvement -- my understanding is that AT&T is pretty much committed to this ongoing effort already. So it would be at this point -- again, I'm not in a position to commit management of DRA to actually fulfill this, but I would expect it would be reasonable to put forth an effort to continue monitoring it and do what's necessary.

"Q When you speak of monitoring and DRA's monitoring in particular as part of your conclusions in this proceeding, do you have in mind any specific reporting requirements for the observation that you need to monitor?

"A I have some ideas about reporting or typically what I would suggest as a method of approaching it would be to have a quarterly or semiannual meeting that's prearranged and preset with AT&T people involved with the model and the appropriate staff people and determine what's happened, updating what's being changed on the model or whatever factors have been changed. And then given these periodic meetings, that doesn't mean that there won't be other activities during the year.

"Periodically, presumably staff would do some sample runs or certainly look at things. When a new product application was pending, they may go in and take a look at the specific runs that were involved in that." (Tr. 3490 - 3492.)

C. DRA Conditionally Recommends Use of TICM

For this specific proceeding DRA recommends that TICM be adopted "with conditions applicable to (AT&T-C's) future tariff filings for new services." The conditions DRA alludes to are that:

1. AT&T should be required to perform a comprehensive demand forecast considering relevant cross-elastic effects based on DRA's findings of sensitivity analysis.
2. AT&T should further justify and modify other inputs to TICM (such as cost factors) to avoid over- or underestimated results, and.
3. TICM should be updated and reviewed periodically for future new service tariff filings to reflect new changes in technology, service features, base demand forecast, AT&T's network engineering and planning, LEC developments, and cost factor adjustments. (Exh. 115, p. 2.)

With these considerations in mind, DRA asserts that it cannot recommend use of TICM to verify AT&T-C's requested price flexibility band of $\pm 25\%$ range and instead recommends a maximum band of $\pm 15\%$ from current rate levels. DRA argues that (AT&T-C) has not substantiated comprehensive demand forecasts within the full $\pm 25\%$ range using TICM. (Exh. 115, p. 2.)

When asked about nonsymmetrical bands of flexibility authorizing AT&T-C to drop rates a maximum of 15% and to increase them by only 5% from the current levels, Van Aggelen opined that "that may very well be an acceptable solution". However, he pointed out that DRA's position is plus or minus 15%. (Tr. 3502.)

D. MCI Challenges Use of TICM

MCI challenges AT&T-C's showing in support of TICM, claiming that TICM does not provide the necessary analysis for groups of services, MCI contends that the TICM model fails to include in a measure of its total service (TS) LRIC the relevant

costs corresponding to the replacement values for product specific fixed costs of assets and fixed costs of assets specific and relevant to groups of services. (MCI Op. Br. p. 41.)

MCI's Dr. Cornell emphasized in her rebuttal testimony that:

"The TICM model does not look at the cost that would be incurred to establish the 800 data bases, or indeed at any other costs that would be incurred as part of the start-up costs of any service." (Exh. 120, p. 4.)

Dr. Cornell suggests that the proper approach when looking at groups of services is to make sure that any services that share significant common costs should be studied together as well as individually. This requirement means that "such services as the 800 family of offerings must be studied collectively, as those services share at least a data base." She also emphasized that, "this requirement must include both intrastate and interstate 800 services, as the data bases and many of the facilities are used for both intrastate and interstate offerings." (Exh. 120, p. 5.)

Dr. Cornell commented that in some cases the resulting difference might be small but could be larger in other cases. Her concern was that if AT&T is allowed to omit costs that should be included, it can manipulate its cost studies to make a regulatory requirement of a price floor meaningless. (Exh. 120, p. 5.)

MCI contends that AT&T-C's witness Dr. Baumol basically concurs with Dr. Cornell in his response to the supposition that any sunk costs that a firm has incurred would be the amount that the firm would have to incur if it were beginning to offer the service tomorrow for the first time, as follows:

"Q Would those sunk costs be included in the estimate of total service incremental cost made after the service was already being offered?

"A Not directly, but usually something approximating that would be included. And

the reason for that is that sunk plant usually has to be renewed after a time.

"And the future renewal costs have to be included in the discounted present value of costs of operation of that service."
(Tr. 4047.)

However, NCI points out that AT&T ignores the recommendations of its own witness and instead takes the position that nothing approximating that would be included because those costs have, in a financial sense been recovered. Thus, NCI argues, "AT&T has succeeded in completely enshrouding in ambiguity that 'something approximating' the replacement cost with the effect of omitting relevant costs using TICM." (NCI Op. Br. p. 43.)

E. US Sprint Addresses Weaknesses of TICM

US Sprint finds similar flaws with the use of TICM. US Sprint asserts that: "Most inputs to TICM depend upon unauditable, subjective and unexamined assumptions made by AT&T employees." US Sprint gave as an example Sumpter's response regarding inflation assumptions wherein he said: "I am given three choices in the model. And the three choices are 0%, 8%, and I believe 12%. As a matter of course, we select eight." When asked why, he responded "Because the people in finance who are responsible for estimating that kind of thing for AT&T recommend that I use 8%. And I rely on their competence." He testified that he has "been told informally that the number is going to change in the near future. But I don't know what that is going to change to. (US Sprint Op. Br. p. 9.)

US Sprint also challenges Sumpter's use of a marketing factor which was developed as a percentage of revenue factor such that for every dollar of revenue AT&T will experience 3.2 cents of commercial and marketing costs. US Sprint notes that marketing expense issues were extensively litigated in past AT&T and Pacific Bell rate cases. (US Sprint Op. Br. p. 11.)

After addressing its concerns on inputs to TICM through various examples, US Sprint argues that it is particularly

interesting to note that TICM results are remarkably similar over a wide range of inputs, and quotes a range of about a penny per minute of network costs. US Sprint then quotes DRA witness Jong's statement from Exh. 115, p. 10 pointing out that biased inputs will produce biased results. (US Sprint Op. Br. pp. 11-12.)

With that backdrop of examples and concerns US Sprint contends that AT&T's whole "Existing Services Group Analysis" is dependent on its MTS covering costs that are not otherwise covered in the AT&T incremental cost calculations. US Sprint argues that AT&T starts with an assumption that it cannot compute MTS costs but since AT&T is profitable on an overall basis, then all revenues at least equal the total of all costs. Therefore, MTS costs must be less than MTS revenues. (US Sprint Op. Br. p. 22.)

US Sprint further contends that AT&T's whole approach to incremental costing "assumed (as is the case) that AT&T has an existing network", "that is already there, is in place and is profitable." Therefore, "the incremental cost of adding services in addition to MTS is very low." US Sprint asserts that it is wrong to ask ratepayers to again pay for a network that is already there, so that AT&T may offer new services, which are merely new pricing packages for existing services. (US Sprint Op. Br. pp. 22-26.)

Mark P. Sievers, Director of Policy and Coordination for US Sprint, testified that rather than adopt TICM the Commission should instead authorize AT&T to set pricing flexibility bands of 5% above and below (and not more than 15% below) the current rates for existing services for both categories of services e.g. "new services" and "repricings". (Exh. 114, pp. 22 and 23.)

Sievers opines that even the new services in this proceeding, READYLINE, MEGACOM WATS and MEGACOM 800, "differ from existing WATS and 800 products only in the type of access arrangements used," and PRO WATS is "simply a repricing of AT&T's existing MTS service." Therefore, existing rates can be used as

reference rates around which AT&T can have reasonable upward and downward pricing flexibility. (Exh. 114, p. 20.)

Sievers concludes his testimony by recommending that AT&T-C's request to use the TICM model to compute AT&T's LRIA be rejected and instead use existing rates to set reference rates for rate flexibility.

By doing that, Sievers asserts that no proprietary information is involved and no complex assumptions or calculations are necessary. Conversely, AT&T's LRIA approach requires access to AT&T's confidential information by the Commission staff and intervenors, scrutiny of AT&T's assumptions, and a general audit of a very complex computer model. This, suggests Sievers is an extremely burdensome undertaking for the Commission and other parties, without demonstrated improvement in the regulatory process. (Exh. 114, p. 24.)

F. US Sprint Compares TICM to "Wizard of Oz"

US Sprint's conclusions in its opening brief includes an even more descriptive argument in a comparison of TICM to the "Wizard of Oz," as follows:

"[G]reat things are expected of and great powers attributed to the Wizard of Oz. Dorothy, the Scarecrow, the Lion, the Tin Woodman all have great expectations that the Wizard will give them something that each needs. When they all reach Oz, the Wizard is a melodramatic voice emanating from a black screen and a mysterious cloud of smoke. The dog Toto knocks over the screen, and from behind the smoke cloud a little trembling man emerges, saying I am Oz the Great and Terrible...I will do anything you want me to do.

"TICM is like the Wizard of Oz--dependent upon a lot of noise, smoke and theatrics. Like the Wizard, it does what it is told to do. TICM depends upon inputs that the result of subjective assumptions about factors such as cross-elasticities, demands, and growth in calling. Large categories of common costs simply are left out. The network costs (a

penny a minute) produced are similar over a wide range of inputs. The unfortunate result for consumers and competitors is that such calculations will allow AT&T to recover costs from services in areas of at least competition, such as message telephone service ('MTS'), and possibly to drive competitors out of more competitive areas.

"The Commission should not be led down the proverbial yellow brick road. In the days following divestiture, AT&T often spoke of a 'level playing field' concept when arguing particular proposals. Of course the field was not then level, as the Commission then recognized, and there still are a lot of slippery slopes. AT&T continues to possess advantages such as the size of its network, number of customers and network calling volumes not obtained by entrepreneurial effort but rather are a result of its monopoly past.

"AT&T's costing proposal in this proceeding has neither heart, brains nor courage. The Commission needs to supply all three by continuing down its original Observation Approach path.

"The Commission can supply the 'heart' component by evaluating the AT&T proposal carefully, knowing that whatever decision is reached will be one that dramatically can affect the type of services and prices consumers will experience in the California telecommunications marketplace for some time into the future. Who bears the burden of common costs is not a policy decision that the Commission should leave up to AT&T.

"TICM is a complex process, and certainly brains will be needed to sort through the various claims about what TICM can and cannot do in establishing pricing standards for its telecommunications pricing in California. TICM is a 'black box' -- a work in progress, a moving target which will require great diligence upon the part of the Commission staff to continually evaluate and monitor. As with other types of moving targets, the watchwords.

should be 'to trust but verify', or perhaps 'be skeptical and check'.

"Finally, courage always helps in a evolving telecommunications market. This Commission is considering a number of major related policy issues in the next few months. Decisions on the issues in this proceeding, and other related upcoming cases will not be easy ones for the Commission, and will have significant effects upon how and to whom telecommunications services are offered in the California marketplace." (US Sprint Op. Br. pp. 28-30.)

With that comparison, US Sprint again asks the Commission to "reject the TICM model, grant [AT&T-C] limited bands around its [rates for] services and not permit [AT&T-C] to use incremental costs as a price floor for its services." (US Sprint Op. Br. p. 31.)

G. AT&T Responds to Challenges of TICM's Validity

AT&T-C in its reply brief challenges US Sprint's arguments on the validity of AT&T-C's pricing proposal, claiming that US Sprint's witnesses were not fully familiar with it, and Sievers' hypotheticals do not relate to the actual conditions in today's telecommunications market.

AT&T-C notes that it "is consistently losing market share to its competitors, despite the fact that AT&T has made major rate reductions in all switched service categories."

AT&T-C then asserted that US Sprint's pricing proposal of plus or minus 5% would only benefit US Sprint by tying "[AT&T-C's] prices to within 5% of the prices approved in [AT&T-C's] last rate proceeding." (AT&T-C's Closing Brief (Cl. Br.) pp. 25-27).

H. Pacific Bell Supports Use of LRIC Generally, and TICM Conditionally, for AT&T-C

Pacific Bell recommends that the Commission adopt the use of incremental costs by AT&T-C and the LECs as well. Pacific Bell notes that the Commission has not acted formally to approve the use of incremental costs though it has recognized their

importance in establishing correct pricing standards.¹⁰ Pacific Bell contends that incremental costs pricing will lead to the efficient use of society's scarce resources, and promote a major Commission policy objective, namely economic efficiency. (Pacific Bell Op. Br. pp. 6 and 7.)

Pacific Bell asserts that while MCI's Dr. Cornell and US Sprint's Dr. Tye quarreled with AT&T-C's method and manner of determining such costs and expressed misgivings about AT&T-C's ability to cross-subsidize its competitive services, no one argued that incremental costs were not the correct standard for making pricing decisions that promote efficiency. In Pacific Bell's analysis of AT&T-C's TCM approach, Dr. Hausman testified that he saw nothing to suggest that it offended accepted economic practices. (Pacific Bell Op. Br. pp. 7-15) also (Tr. 4013).

Pacific Bell also contends that Messrs. Hausman and Baumol suggested a more straight-forward and manageable approach, whereas, Dr. Cornell's process was backward looking, and argued that only forward looking costs should be taken into account when determining incremental costs. (Pacific Bell Op. Br. pp. 16-17.)

Pacific Bell then addressed the ALJ's request for a rule or formula that might be used to establish reasonable price floors in relation to [AT&T-C's] estimated incremental costs. Pacific Bell suggests that such rule or formula should establish floors that do no violence to the notion of economic efficiency, and yet account for the concerns of MCI, US Sprint and DRA, that [AT&T-C] may have understated its incremental costs.

In response, Pacific Bell recommended the following (new) approach:

"A simple rule of allowing regulated firms to 'meet the competition' can and should apply here. Under this approach, any regulated firm

¹⁰ See D.89-10-031 issued October 12, 1989 mimeo., pp. 159-160.

would be permitted to set its price floors at the lowest tariff rate of its competitor for like services so long as such levels are above the regulated firm's incremental cost. This allows the regulated firm to respond to competitive pressures, provides customers with the opportunity to experience meaningful price reductions from a broad array of service providers, allows efficient firms to set their prices to reflect their efficiencies, particularly where competitive pressures dictate such an approach, yet it does not permit the regulated firm to price below its lowest priced competitor. As is true with MCI's and US Sprint's concerns over potential cross-subsidies, application of the proposed 'meeting the competition' rule should not be delayed or frustrated based on speculative claims of below cost pricing. Once incremental costs are presented by the regulated firm, competitors should not be permitted to delay price reductions unless there is some showing that a price floor that meets the competition is below the regulated firm's incremental cost." (Pacific Bell Op. Br. p. 25.)

Pacific Bell contends that this approach is particularly appropriate in this proceeding because AT&T's incremental costs have been presented and interested parties have been provided ample opportunity to show a correct statement of AT&T's incremental cost. Nothing has been offered to suggest that meeting the competition forces AT&T to price below its cost. In fact, the record shows that AT&T would have a substantial margin over its incremental cost if it were permitted to price its interLATA READYLINE service to meet the competition.

Pacific Bell claims that its approach is also consistent with the recommendation of Dr. Hausman on what would constitute a reasonable approach to setting price floors. When asked about his comfort level with a floor based on AT&T's TICM results he stated:

"...well, I have two situations I could think about.

"If I take the TICM model to be quite accurate, what I would say is that I believe that AT&T should have maximal downward flexibility all the way down to incremental cost, which I believe is beyond what the staff and perhaps even AT&T has asked for.

"I'm not certain that I would, from a consumer point of view, be comfortable with allowing AT&T to have -- I believe they're asking for 25 percent upward flexibility.

"I think I would be more in line with what the staff said which is, as I remember, a lesser amount, although I can't remember the exact number.

"That is situation No. 1.

"Situation No. 2, if the staff and you decide that they have doubts about the accuracy of the TICM model, I believe the principle of pricing down to incremental cost remains correct.

"I think you might want to allow a very small cushion to account for inaccuracies.

"But then if you do that, I believe that AT&T, again on the downward side, should be able to have sufficient flexibility that if, let's say, you put a 5 percent cushion in, that they would be able to price below that 5 percent cushion down to TICM in the sense that they needed to do so to meet competition.

"But I believe that the principle of incremental cost is correct as the bottom level. It's just a question of how accurately it can be measured." (Tr. 4014-15.)

MCI and DRA both challenge Pacific Bell's suggestion that AT&T-C be allowed to reduce rates down to the price of its lowest competitor as a lower limit (floor).

DRA specifically urges that the Commission reject Pacific Bell's "Meet the Competition" proposal because Pacific Bell has

submitted no testimony nor any other evidence regarding such a rule. DRA argues that:

"Pacific has failed to meet its burden of demonstrating the reasonableness of its proposal. The 'meet the competition' rule has not been the subject of cross-examination because Pacific did not have a witness sponsoring it. Given this alarming lack of evidentiary support, the Commission should reject Pacific's 'meet the competition' rule."
(DRA Cl. Br. p. 4.)

I. Discussion

The material discussed above represents only a small portion, but gives a succinct flavor, of the enormous record developed in this proceeding regarding long-run incremental costs and the TICM model. The parties have become so entrenched with their own positions that they could see little room for other views and any reasonable alternatives. What we believe is that the parties are really closer to each other in their views than could ever be noted or appreciated by a first reading of the lengthy record. Accordingly, in the fundamental attempt to reach a reasonable and responsible position based on as much common ground as possible, we will carefully examine areas where there is near agreement.

1. Use of LRIC to Establish Price Floors

First there is near agreement, if not full agreement, that a properly performed long-run incremental cost analysis is the appropriate standard for determining a price floor below which AT&T-C may not set rates for any new service. Incidentally, we will dwell further on the definition of "new service" later in this order. It is sufficient, for now, to say that the services being considered in this consolidated proceeding, for the purposes of this discussion, will all be considered "new services" except PRO WATS California, and that will be considered as a repricing of existing service(s).

While the various parties have all suggested different methods to approach the determination of long-run incremental cost for AT&T-C's services we have noted one universal concern, which is, that the determination of LRIC should not exclude any costs that in any way can be identified and attributed by reasonable persons to the provision of such service. Beyond this objective there may be other more subjective challenges by MCI and US Sprint who are both competing with AT&T-C's services in California.

2. Conditional Use of TICM to Determine LRIC

On the other side of the coin, no party except AT&T-C fully concurs that TICM used as AT&T-C suggests (without further inputs, and absent modifications or output adjustments) will provide a reliable estimated LRIC for any new service offering.

Especially critical is US Sprint, with its comparison of TICM to the "Wizard of Oz" by which it effectively portrayed TICM as a model which has no mind, heart or courage of its own, and as such can only, and obediently will do only that which it is told to do with only the inputs provided to it.

Obviously pleased with the point it effectively made with its "Wizard of Oz" comparison to TICM, Sprint later in its reply brief compares AT&T-C, and its showing on methods for calculation of LRIC in this proceeding, to the weavers in the fable "The Emperor's New Clothes", who, after being given all the necessary threads of gold and silk, prepared nothing for the emperor and then somehow convinced him that they had truly woven a fine suit of clothes for him and allowed him to go naked through the streets of town.

It is clear to us that the parties in their attack of AT&T-C, and its proposal, have lost sight of AT&T-C's need and real purpose for filing these applications, which was to obtain authority to render these services, which it gained by the interim decisions in these matters, and now seeks a range of reasonable

rates and charges for these services that will permit it to effectively compete in these markets.

These are serious requests that go far beyond the comparisons and arguments raised here, because any models and method we approve here, for use in this proceeding, will also be used to develop floors of rates and charges for other new services of AT&T-C. However, we do recognize that there are elements of truth to the claims of the parties who attack the TICM model. Especially apparent is the lack of significant cost input for AT&T's data base and associated program essential software, without which READYLINE cannot be provided. We will not accept as proper AT&T's or AT&T-C's removal, as a sunk cost, or by any other claim, any significant cost element which was prematurely retired or charged off as an accounting expense, without sustaining full period depreciation or other amortization over a traditional useful service life for that hardware or software. We also recognize that quite often, in rendering a communications service, certain elements of plant or electronic data processing software may have been fully amortized or depreciated and such costs have been fully recovered over the predetermined useful service lives. In such cases, when certain plant, equipment and/or software is still used and useful, we would require that any associated ongoing repair, maintenance or replacement costs, estimated to occur during the test period under study be included as inputs for determination of LRIC.

The complexities of TICM lead MCI and US Sprint to oppose its use for the determination of LRIC. Pacific Bell, and the DRA would accept its use with minor reservations and/or modifications.

Even though it is complex, as can be noted by review of Appendix C, TICM can, if it has proper inputs and/or conditioning of its outputs, be another useful tool to help assure that AT&T-C does not price its intrastate services below LRIC. We also note that DRA's Van Aggelen who, along with others in DRA, will review

any new filings of AT&T-C, is comfortable with the conditional use of TICM to determine the LRIC for new services.

We also recall that for two decades all California telephone utilities used the relatively complex GE-100 process to actually set rates and charges for new specialized equipment and services. During that period, the GE-100 analysis form and method were treated as living documents which underwent continual periodic revisions as necessary to maintain this accuracy and reliability during the course of changing events.

We will expect nothing less for TICM as we approve its conditional use as one test to determine whether the lowest rate for any given AT&T-C service offering remains above LRIC.

In adopting TICM as one test for LRIC, for any of AT&T-C's services in this proceeding or any other appropriate new service, we will condition its use in concert with the suggestions of DRA and in addition we will require that all known costs for used and useful properties, hardware and/or software and labor, taxes, and related expenses be included either as inputs to the model, or as a rate adjustment to the output LRIC result, in any case where TICM cannot handle the particular cost factor as an input.

We will set the ranges for rates and charges for the services in this proceeding, and within the ranges adopted here no further TICM data submissions will be required of AT&T-C. When and as AT&T-C chooses to apply its TICM model to determine the LRIC of any new services or to expand the lower band of rates for existing services, DRA and other parties may request full documentation of TICM data results, from AT&T-C, in support of its LRIC.

Meanwhile we recommend that the CACD and DRA continue to work with AT&T-C to maintain a continuing understanding of the strengths and weaknesses of the TICM model and cooperatively address and implement any input or output modifications that may be reasonable and necessary to assure reliable results. This effort

should include periodic trial runs to determine current LRIC for existing services where prior runs have been supplied.

We believe that this arrangement as outlined above, meets the concerns of the DRA, and those of Pacific Bell, and together with the range of rates and other conditions we will adopt, will satisfy fully Pacific Bell's alternative minimum confidence position.¹¹

3. Reasonable Range of Floors and Ceilings for Rates

We have before us the range of $\pm 25\%$ sought by AT&T-C in A.89-03-046 as the broadest request for rate ceilings and floors above and below the reference rates for the services under review in this proceeding. We also have before us US Sprint's recommendation of a range of $\pm 5\%$ ¹² as the narrowest recommended range for these services in keeping with current reference levels. DRA recommends that we adopt a $\pm 15\%$ ¹³ range above and below the current reference rates but would not object to an asymmetrical range of $+5\%$ and -15% if we opt to adopt such a range.¹⁴

US Sprint notes that the Commission should not adopt a price flexibility range greater than "15% downward and approximately 5% upward"¹⁵ for AT&T-C in this proceeding, consistent with the ranges of flexibility it has granted AT&T-C for other services by D.88-12-091.

MCI states that it does not oppose reasonably and narrowly limited pricing flexibility for AT&T-C, but then urges

11 Dr. Hausman at Tr. 4015 discussed earlier.

12 Sievers, Exh. 114, p. 22.

13 Van Aggelen, Exh. 115, p. 24.

14 Van Aggelen, Tr. 3502.

15 Sievers, Exh. 114, p. 23.

that "fixed prices for [AT&T-C] make more sense until AT&T develops a reliable method to accurately measure TS LRIC."¹⁶

We will first establish the reference rates for all services involved in these consolidated proceedings as those which were set forth in the draft tariff schedules appended to the interim orders which granted to AT&T-C its California operating authority for the services at issue, namely:

1. Appendix B of D.88-11-053, issued November 23, 1988 in a A.88-07-020 for intrastate interLATA AT&T MEGACOM and AT&T MEGACOM 800 Service, as reconfigured and modified by Attachment 1 to Exh. 103, and which changes were made provisionally effective on January 1, 1990 under AT&T-C's Advice Letter 152,
2. Appendix B of D.89-06-050, issued June 2, 1989 in A.88-08-051 for intrastate interLATA AT&T, PRO WATS California service, and
3. Appendix E of D.90-04-023, issued April 11, 1990 in A.89-03-046 for intrastate interLATA AT&T 800 READYLINE Service.

Next we will authorize AT&T-C to establish a range of plus five percent (5%) and minus fifteen percent (15%) from the reference rate levels identified above.

The plus 5% limit is chosen to preclude AT&T-C from moving quickly downward, as it has asserted is necessary for competitive reasons, and then with equal enthusiasm move to increase rates to the upper end of the band which would otherwise be 15% to 25% higher than the original reference rates. It would be difficult and we would be reluctant to explain to AT&T-C customers why we permitted such a large flexibility band for increases of 15% to 25% at a time when AT&T-C contended it needs

¹⁶ MCI Opening Brief, p. 2.

lower rates for these competitive services to protect its market share. Also, no witness was able to defend with an adequate showing, the need for increases greater than 5% in any existing rate for the AT&T-C services at issue in this proceeding as is required by PU Code § 454 (a).

The minus 15% range is fully supported by the DRA, falls within the maximum range limit acceptable to US Sprint, and remains above the lowest rate of a competitor offering a similar service as recommended by Pacific Bell in its opening brief.¹⁷

Upon further analysis we note that we have, with this plus five percent and minus fifteen percent range over and under the reference rates for these AT&T-C services, stayed within the limits recommended by all parties, excepting MCI.

As a further safeguard,¹⁸ we also accept Pacific Bell's lower limit of rates for AT&T-C that will not allow AT&T-C's rates for any competitive service to fall below "the lowest tariff rate of its lowest price competitor for like services", but we will add no further clarifiers to that extra safeguard.

AT&T-C's tariff filings to reduce rates within the range of flexibility will become effective on not less than five days' notice. AT&T-C's tariff filings increasing rates within the range of flexibility will become effective on not less than 30 days'

¹⁷ AT&T-C's reference rate for intrastate READYLINE is 26¢ per minute. Pacific Bell notes that MCI's Business Line Service day rate is priced at 23.84¢ per minute and US Sprint's FONLINE comparable rate is 21.2¢ per minute. With a reduction of 15%, AT&T-C's intrastate READYLINE would be priced at 22.1¢ per minute and thus would still remain 0.9¢ per minute higher than the existing Sprint's rate and thus meet Pacific Bell's proposed criteria of not allowing AT&T-C to price lower than its lowest competitor.

¹⁸ This is the third safeguard in addition to no less than LRIC computed by a modified TICM and the flexibility range of +5% to -15% from existing reference rates.

notice. These notice periods are consistent with D.90-08-032, issued August 8, 1990, in R.85-08-042, for nondominant inter-exchange carriers of communications services. The standard 40-day notice period and justification requirements will apply for AT&T-C's tariff filings, selectively reducing rates below the band of flexibility, for any service, and to make minor increases other than within the upper band of flexibility for the services at issue in this proceeding.

The term "minor increases" is understood to mean an increase in rates which does not increase AT&T-C's California intrastate revenues by more than one percent (1%) and which will not increase rates for the affected service by more than five percent (5%).

AT&T-C will continue to be required to file applications for increases in any rates for services outside its flexibility bands, except those considered "minor" under the above definition. Applications will also be required for expansion of existing rate bands or to create new rate bands for flexibility.

V. Definition of New Services

AT&T-C's urges the Commission to "reaffirm the 'new service' definition adopted in D.88-12-091".¹⁹ This definition is important because AT&T-C contends that such definition provides

¹⁹ D.88-12-091 adopted AT&T-C's definition of new services as set forth in Finding of Fact 31 of that order as follows:

"31. AT&T-C's definition of a new service as an offering which customers perceive as a new service and which has a combination of technology, access, features, or functions that distinguishes it from any existing services, meets the guidelines stated in D.87-07-017." (D.88-12-091 at p. 88 mimeo.)

sufficient protection against any possible misuse of the pricing flexibility previously granted to it by D.88-12-091. (AT&T-C Cl. Br., p. 30.)

DRA accepts the definition of new services set forth in D.88-12-091, except that its Financial Examiner Van Aggelen comments that:

"There appears to be agreement among users of the definition that repackaging of an existing group of services or discount plans do not conform to this definition." (Exh. 115, p. 20.)

MCI argues that it is imperative to refine the definition of "new" service so that any "new" service must provide "new features or functionalities rather than just (optional) access or amorphous technology changes." MCI also urges that the Commission require some evidentiary showing of customer perception of a distinct service. (MCI Cl. Br. p. 41.)

US Sprint asserts that:

"Most so-called 'new' long distance telecommunications services are simply a repackaging of existing services, or existing services with different access arrangements".

US Sprint concedes that certain of these services can be categorized as new services. At the same time, it contends that narrow rate bands are consistent with the type of flexibility AT&T currently has in most existing offerings, are simpler to administer and monitor, and, if properly enforced, will limit AT&T's ability to engage in unfair, unequal competition. (US Sprint Op. Br., p. 26.)

In addition, US Sprint's witness Sievers testified that:

"The services being considered in this proceeding that would meet the new services criteria adopted in D.88-12-091, and therefore qualify for introduction by Advice Letter, are READYLINE, MEGACOM WATS, and MEGACOM 800. These services differ from existing WATS and 800 products only in the type of access

arrangements used. For example, AT&T's MEGACOM services are simply WATS services with dedicated access arrangements rather than switched access arrangements. The other service being considered, PRO, is simply a repricing of AT&T's existing MTS service. For both categories of service, 'new' services and 'repricings', existing rates can be used as the reference rates around which AT&T can have reasonable upward and downward pricing flexibility." (Exh. 114, p. 20.)

Discussion

We do not plan to change the definition of "new services" from that set forth in D.88-12-091 Finding of Fact 31. However, we do agree that a reasonable and proper interpretation of that definition would yield the conclusions reached by Sievers that READYLINE, MEGACOM WATS, MEGACOM 800 are new services, however, PRO WATS California, is merely a repricing of AT&T and AT&T-C's existing MTS (message toll services).

As to the PRO WATS California service, it would be appropriate for AT&T-C to only consider further flexibility and/or other charges for this service, except as provided by this order, in a formal application that also addresses companion services such as MTS.

VI. Specific Requests Made by Pacific Bell

In its opening brief, Pacific Bell recommends that the Commission "promptly approve the use of incremental costs by regulated firms, and also take the following action:

1. Recognize the additional protections against anti-competitive conduct provided by "price caps", and not apply to LECs limitations on the use of incremental costs that may be appropriate with AT&T.

2. Adopt a "forward looking" approach to the development of incremental costs, and not require that such costs be predicated on estimated "replacement" values.
3. Do not permit competitors of regulated firms to delay or frustrate the use of incremental costs except on a specific factual showing that any particular incremental cost estimate is inaccurate and,
4. Permit regulated firms to at least "price to meet the competition," so long as such prices remain above the regulated firms' incremental costs. (Pacific Bell Op. Br. pp. 26-28.)

A. Opposition of MCI and DRA

MCI and DRA vigorously attack Pacific Bell's attempt to bring in new pricing rules for the LECs emerging competitive intraLATA services as a part of any decision in this AT&T-C application.

MCI urges the Commission to be wary of Pacific Bell's attempt to blatantly misuse this proceeding concerning AT&T-C's pricing and costing methodology for new services as a precedent favorable to LECs with monopoly powers throughout the industry.

DRA's reply brief is even more forceful in its attack on the merits of the recommendations set forth in Pacific Bell's opening brief as follows:

"This proceeding has been designated by the Commission to be the forum whereby AT&T would propose a uniform costing standard for setting prices for its switched services. Decision 88-12-091 did not contemplate that the efficacy of incremental pricing for LECs would be an issue in the case. Indeed, aside from some passing references by AT&T's witness, Dr. Baumol, there has been no testimony submitted regarding the use of incremental cost pricing for LECs in this case. There are significant differences between the costs of maintaining and operating the network of a LEC such as Pacific (including the local loop) than

operating and maintaining an interexchange carrier's network (IEC) such as AT&T. Pacific has presented no evidence regarding why incremental pricing is appropriate for an LEC in light of the obvious differences between itself and AT&T. In making the request that the Commission adopt incremental pricing for regulated telecommunications firms in the instant case, Pacific has asked the Commission to issue a decision that is beyond its authority in this limited application.

"If Pacific genuinely wants to see the Commission adopt incremental pricing as the means of regulating its rates, Pacific should submit an application making such a request to the Commission. Using AT&T's READYLINE Application as a vehicle for such a request is clearly inappropriate and must be rejected by the Commission." (DRA Cl. Br. p. 3.)

B. Discussion

While we generally accept and endorse some form of LRIC for establishing the price floor for any competitive service²⁰ offering of communications utilities in California, we concur with the DRA that this proceeding is an application of AT&T-C, and as such is not the appropriate proceeding for addressing any rate

20 In D.89-10-031 dated October 12, 1989, in I.87-10-031 et al. (at pages 159-160, mimeo.) we recognized that the incremental cost of the least efficient provider whose output is needed to balance supply and demand is theoretically the price established by a completely competitive market. "However, as various witnesses point out, that theoretical minimum is seldom realized as a matter of course in the real world. We agree with AT&T and CPIL that, in the event that incremental cost analysis progresses to the point that a local exchange carrier requests modifications to price floors to reflect this theoretically efficient price, such a floor should provide also for the recovery of some amount of overheads. We will reserve judgment regarding the appropriate amount of overheads to be included in incremental cost-based floors until such a proposal is before us."

design process, or determinations for Pacific Bell or any other local exchange telephone company.

When and if Pacific Bell develops its own model or mechanism for the determination of the LRIC for any of its new "competitive services" it may file an application seeking such relief as it may deem appropriate for the potential use of the model or mechanism. Meanwhile, this application, and our determination reached here, will apply exclusively to AT&T-C and will include conditions necessary for implementing its own TICM model.

VII. Comments: ALJ's Proposed Decision

In accordance with PU Code § 311, the ALJ draft decision prepared by ALJ George Amaroli was issued on August 31, 1990. Timely comments on the proposed decision were filed by AT&T-C, DRA, Pacific Bell, and US Sprint. Late filed comments were also received from MCI Telecommunications Corporation (MCI). MCI asserts that its late filing of comments was occasioned by transportation problems on the due date. Since AT&T-C does not object to the acceptance of these late filed comments and due to the unusual circumstances cited by MCI, we will accept and consider them.

A. Arguments on Issues

The bulk of the comments received centered on arguments of the parties' positions which were previously raised during the course of hearings and/or briefs in these proceedings. In keeping with Rule 71.3 of the Commission's Rules of Practice and Procedure such arguments are given no weight.

Such arguments include those of AT&T-C seeking to justify premature write-off of assets which are later used to provide new services, which (new services) may or may not have been contemplated at the time of the write-off. Also, AT&T-C raises the

argument that TICM should be used to establish incremental costs for certain elements of MTS which was not well established by the record evidence. Conversely, MCI and US Sprint again seek to overturn the use of TICM as a basis for determining LRIC for the services at issue in this proceeding even with safeguards set forth in this order. Each of these parties challenges others' use of comments to reargue this case.

B. Lowest Cost Competitor Safeguard

AT&T-C and DRA take issue with the use of the safeguard recommended by Pacific Bell which would not allow AT&T-C (outside of a formal application) to seek authority to price a product or service below its lowest-priced competitor for a similar offering.

It may well be appropriate to review the need for that added safeguard after TICM has been implemented for a reasonable period of time, during which the parties may recommend input modifications and operational improvements to that model. Through such efforts, the Commission staff and other parties may gain greater confidence with TICM's ability to properly establish LRIC for each service under review.

However, AT&T-C does appropriately raise the issue of the impropriety of using the lowest-priced substantially similar service threshold for setting or lowering overall MTS rates. We agree, and since TICM is not being authorized here for revision of overall MTS rates, we see no need or rationale to adopt that lower limit safeguard for basic MTS. If and as AT&T-C continues to show any substantial increase in profits from its California intrastate MTS operations, we will encourage and expect it to continue to share those economic benefits, without limitations, with its general body of ratepayers through the lowering of basic MTS rates.

We are also concerned that this rule not become a means by which AT&T's competitors could force AT&T to change rates. Utilities in competitive markets should set prices independently of one another, and should not be able to use the regulatory process to force price changes upon each other. We will clarify here that once AT&T lawfully establishes any rate level under the various provisions of this decision, the fact that its competitors may raise their rates above that level will impose no obligation upon AT&T to match their increases.

Further, we recognize that the services offered by AT&T and its competitors are not always identical; indeed, small differences in features can make an important difference to customers and the competitive process. When ordering that AT&T not price below its competitors for certain services, our intent is to compare AT&T's price or rate elements to those of the lowest priced most substantially similar service offered by any of AT&T's competitors. We will anticipate a certain degree of flexibility in applying this requirement where the comparable services are not identical, e.g., if the service is ordinarily purchased as a bundle of rate elements we may compare the price of comparable bundles rather than the prices of each individual rate element. We will rely on the CACD to be the arbiter of any disputes which arise over the comparability of services.

We also encourage AT&T-C to develop reasonable and reliable LRIC costing standards for its overall basic MTS service in future proceedings, thereby giving the utility added flexibility in setting rates and charges for additional categories of its services.

C. Use of TICM to Support Directory Service Rates

The issue of using TICM and/or LRIC as a basis for setting rates and charges for directory service ²¹ was not considered in the record evidence in this proceeding and AT&T-C's attempt to raise that as an issue in its eleventh-hour comments here is misplaced and inappropriate.

D. Protective Agreements on Confidential Data

AT&T-C raises the issue of the need to have protective agreements signed prior to allowing access by parties other than CACD and DRA to its confidential competitive source data for its TICM runs. We will include a change here to so require, but we will also expect AT&T-C to provide full access to and disclosure of all readily available data to interested parties who have signed such protective agreements.

E. Reference Rates

AT&T-C also cites an error in the use of stale tariff schedules to establish base rates for MEGACOM WATS and MEGACOM 800 service. AT&T-C points out that MEGACOM services have been reconfigured and now include off peak (e.g., night and weekend) rates. Therefore, the current rate levels are well below the low end of the rate bands which would result from the use of D.88-11-053 interim rates in the ALJ's draft decision as reference rates for these services.

²¹ Rates and charges for directory services are at issue in A.90-02-060 filed February 26, 1990, and now pending hearings.

US Sprint contends that none of the services with "provisional" approval were examined in this proceeding and that there was no record on rates or bands for such services. US Sprint suggests in its reply comments that, "If AT&T now seeks rate banding or final approval for these rates, it should be ordered to do so by application". We disagree in part with US Sprint. AT&T-C did provide Exhibit 103 as a basis to examine the provisional rates for MEGACOM service which become effective January 1, 1990, as well as revised TICM runs for that service, which US Sprint and other parties could have reviewed and examined, both on and off the record.

The provisional rates have been effective for approximately ten months and there is no evidence that use of these rates has been anticompetitive. Accordingly, we will modify the ALJ draft order to employ the MEGACOM Service tariff sheets contained in Exhibit 103, received in evidence on March 2, 1990. In so doing, we will make the provisional rates in Exh. 103 for MEGACOM WATS and MEGACOM 800 service permanent, and use them as reference rates to establish rate bands for these services.

Except for MEGACOM rates and associated tariff reconfiguration, we will adopt the ALJ proposed decision provisions and criteria to establish rates for the other services under consideration in this proceeding. In so doing, we are mindful of US Sprint's concerns and cautions that adoption of certain of AT&T's recommended changes would "go far beyond 'clarification' transforming the [proposed decision] into its own wish list".

F. Use of TICM to Develop LRIC

We believe that the authorized use of TICM by AT&T-C, with appropriate safeguards, to develop LRIC for the selected services set forth in the ALJ proposed decision, as modified here, will continue to allow AT&T-C to market its competitive services without engaging in anticompetitive practices or pricing. We further believe that the reasonable application of TICM and

resulting LRIC to the selected specialized services at issue here and for other new services will not only allow AT&T-C to fairly meet the competition for such services, but will also help expand the overall use of such services in the telecommunications market.

Nothing we have done here will preclude us from continuing the observation approach recommended by US Sprint. In fact, we fully expect that the resulting expanded competition will also place and maintain pressure on AT&T-C and its competitors to reduce basic MTS rates in the future to benefit all ratepayers.

G. MCI's Concerns Regarding Inputs to TICM

Finally, MCI in its reply comments, vigorously opposes the efforts of AT&T-C and Pacific Bell to use their comments to advocate a change to the ALJ proposed decision which would yield an untenable conclusion that:

1. An LRIA may exclude the replacement costs of assets which are required by AT&T-C to provide a product or a service and which were prematurely written off or considered sunk costs.
2. Assets indispensable to the provision of a service, which required substantial investment, may be utilized cost-free, if their forward looking repair, maintenance, and replacement costs are negligible over a five-year horizon, and
3. AT&T may base prices upon an estimate of only part of a service.

We share many of MCI's concerns on these points and have not modified the ALJ draft decision, based on the comments received from AT&T-C on these issues. Alternatively, we have not included many of MCI's suggested changes which would challenge the use of TICM results with the safeguards set forth in this order. To do so could impair the orderly evolution of a more reliable TICM by delaying its implementation.

While we are sensitive to MCI's concerns, we do not believe that the rates and range of flexibility that AT&T-C will obtain from this order and its implementation of TICM will yield the unreasonable and grave results predicted by MCI. Instead we remain confident that AT&T-C's California intrastate ratepayers will see a general lowering of rates, including MTS rates, in the future.

H. AT&T-C's Motion to Vacate Hearing Schedule and Close Proceeding

On October 16, 1990, after the comment period on the ALJ draft decision, AT&T-C filed a "Motion to Vacate Hearing Schedule and Close Proceeding". By that motion AT&T-C requested that the hearings on the one remaining issue in A.89-03-046, namely; removal of the "Holding Out Restriction" on its 800 READYLINE Service, previously set for October 29-31, 1990, be vacated, and that this proceeding be closed on the existing evidentiary record.

On October 19, 1990 US Sprint filed comments on AT&T-C's motion stating that it "...has no objection to AT&T's Motion to Vacate provided the record in this case is clear with respect to AT&T's authority to hold itself out as a provider of intraLATA service in the provision of 800 READYLINE Service". US Sprint then asked that this order make clear the fact that AT&T-C may not "hold out" to customers any ability to provide 800 READYLINE Service on an intraLATA basis.

US Sprint also recommends AT&T-C's READYLINE tariffs be modified to include language stating that 800 READYLINE Service may not be provided on an intraLATA basis. US Sprint offered the following text from AT&T-C's MEGACOM tariff (Schedule Cal. P.U.C. No. A9, Original Sheet 33) as suitable for this clarification when included in AT&T-C's 800 READYLINE tariff:

"[c]ustomers can terminate calls to all locations within the State of California, except where both the originating and terminating locations are within the same LATA."

US Sprint's request and suggested tariff language are reasonable and consistent with the "holding out" restriction currently being imposed on all IECs' intraLATA switched services. Accordingly, we will require AT&T-C to include US Sprint's suggested language in its 800 READYLINE tariffs.

The hearings scheduled for October 29-31, 1990 were vacated by a ruling of the assigned ALJ dated October 19, 1990, and by this order, we will close this proceeding, based on the existing evidentiary record.

This action is taken without prejudice to AT&T-C, or any other party, to raise the issue of holding out restrictions on intraLATA services, if and as appropriate, in future formal proceedings dealing with regulatory frameworks for telecommunications utilities.

Findings of Fact

1. AT&T-C has heretofore been granted CPCNs with interim or provisional rate authority for all the services listed in these consolidated proceedings, and these services are now in place and available to AT&T-C's customers in California.

2. This Commission, by D.88-12-091, dated December 19, 1988, granted AT&T-C limited regulatory flexibility to increase or decrease its rates, on short notice, within established rate bands for several of AT&T-C's then existing services.

3. D.88-12-091 did not include any rate flexibility for the new services under consideration in these consolidated proceedings.

4. D.88-12-091 concluded that no rate band changes greater than 15% in either direction should be adopted, except for rounding to the nearest penny for billing purposes.

5. D.88-12-091 did not grant AT&T-C the authority to introduce new services with flexibility rate bands by standard, 40-day notice, advice letters "...until AT&T-C has filed a new service application where uniform costing methodology shall be

established, the new services definition shall be refined and all parties shall be allowed to effectively participate."

6. D.88-12-091 also directed AT&T-C to not use its PRO California application (A.88-08-051) to develop the uniform costing standard for new services.

7. On March 29, 1989, AT&T-C filed its first new service application (A.89-03-046) seeking authority to provide READYLINE service.

8. The READYLINE application included AT&T-C's request to establish, and its associated evidentiary support for, the AT&T TICM model to be used in the determination of LRIC for its switched service offerings.

9. The parties other than AT&T-C had serious concerns over the reliability of the TICM model; therefore, in an effort to authorize interim authority for AT&T-C to provide READYLINE service in California, while TICM was studied further, this proceeding was phased and subsequently AT&T-C was granted interim READYLINE authority by D.90-04-023 on April 11, 1990, at the conclusion of Phase I.

10. The main phase of this consolidated proceeding began on February 5, 1990 to consider development of a costing standard, permanent rates for these services, the definition of a "new service", development of appropriate rate bands for these services, and for possible lifting of the "holding-out restriction" on intraLATA READYLINE service.

11. The bulk of the record evidence reviewed in this proceeding was devoted to TICM, its inputs and assumptions, and its ability to determine LRIC for AT&T-C's new intrastate switched services in California.

12. The use of a standardized method of computing rates and charges for telephone products and services is not a new idea to the CPUC or the California LECs.

13. A GE-100 analysis form or its equivalent was in general use by the CPUC and the LECs from the early 1960s to the late 1970s to establish rates and charges based on fully allocated costs for customer premised telephone equipment and specialized telecommunications services.

14. The GE-100 analysis form and process were reasonably complex but yielded reliable results for persons who took the time to become familiar with them.

15. The GE-100 analysis form was kept up to date, and as changes were necessary for tax rate or for any other reasons, it was revised promptly.

16. The GE-100 analysis method became controversial in the face of competition for customer terminal equipment because competitors were willing to accept marginal returns, rather than fully allocated costs, on individual pieces of equipment.

17. Since AT&T-C is seeking to price its services in the face of today's competition, it must employ a different costing standard than the GE-100 method.

18. AT&T-C has proposed the use of LRIC as a "cost standard" for market based prices for its competitive services.

19. All parties in this proceeding, with the exception of US Sprint, agree that some adaptation of LRIC is a proper "cost standard" for determination of minimum rate levels for services in a competitive market.

20. US Sprint's witnesses asserted that an incremental cost price floor, even if accurately estimated, does not prevent anti-competitive pricing by a dominant firm.

21. When using LRIC, it is necessary to assume a period of implementation sufficiently long to allow the utility to adapt its plant and equipment to the increase in output and the change in the given service from zero supply to the current level of service.

22. DRA's recommendation to use unit LRIC to determine the price floor for AT&T-C's new services is one reasonable test to help preclude predatory pricing or anti-competitive behavior by AT&T-C.

23. MCI's and US Sprint's recommendations to require AT&T-C to perform a group total LRIC as a test for cross-subsidy, while desirable, would require a full analysis of all the services and products produced by AT&T-C each time a new service offering was being proposed and, therefore, would not be a good use of AT&T's or this Commission's resources.

24. To rely exclusively on unit LRIC to set price floors for new communications services or to modify the price floors of existing services of AT&T-C, and thus totally avoid the review of its other service offerings and or those of competitors, is unreasonable.

25. AT&T has developed and proposes to use a TICM computer model, linked to its major operational data bases used in the daily management of its business, to determine the LRIC of its services.

26. AT&T-C proposes to use the TICM model to support its regulatory filings for new, and for changes to existing services in California as well.

27. The TICM computerized model intended to study the incremental costs of AT&T is necessarily complex, as evidenced by Appendix C to this order.

28. DRA has, based on the record evidence, four persons who are knowledgeable in the use and application of TICM for determination of LRIC by AT&T-C.

29. DRA's recommendation that adoption of TICM, as a tool to determine the LRIC of new AT&T-C services, be conditioned on a demand forecast to consider cross-elastic effects, justification, and modifications of input data to avoid over- or underestimated results, and necessary periodic updating to reflect changes in

technology, regulatory environment, and changing cost factors is reasonable.

30. MCI's challenge of AT&T-C's exclusion of 800 data base costs as inputs to TICM is valid and reasonable and illustrates the type of refinements necessary to ensure improvement in the accuracy and reliability of resulting LRIC estimates.

31. We also agree with US Sprint's argument supported by references to the testimony of DRA that biased inputs to TICM will produce biased results.

32. We do not agree, however, that the TICM method to compute AT&T-C LRIC and LRIA is unreasonable and warrants rejection as recommended by US Sprint.

33. US Sprint's argument that TICM is dependent on inputs, and will do only that which it is told to do, is a fair representation which needs to be addressed so that reasonable safeguards are in place to ensure that proper and complete input data is entered into TICM for each new service analyzed.

34. Pacific Bell has suggested another way of setting the lower limit of rate flexibility for AT&T-C, that would allow its rate to equal but not fall below the lowest rate of its lowest priced competitor, so long as that rate also exceeds AT&T-C's incremental cost estimates. This method by itself, in absence of other LRIC tests, would not be reasonable, but has merit when used to support other flexibility requirements and TICM in its early evolution of use.

35. The GE-100 historical cost standard was a "living document" which was routinely revised and modified to meet changing conditions and requirements. It is reasonable to assume that TICM would benefit from maintaining it as a "living document" as well with the concurrence of AT&T-C, DRA, and the CACD.

36. US Sprint's recommendation to use existing rates of similar services as reference rates for rate flexibility for new AT&T-C service offerings is reasonable and makes good sense for

instances where the new service offering does not readily lend itself to a reliable LRIC using TICH.

37. The $\pm 25\%$ proposed range of flexibility requested by AT&T-C, above and below the reference rates previously adopted as interim rates in this proceeding, is not supported by the DRA, MCI, or US Sprint.

38. The $\pm 5\%$ recommended range of flexibility for AT&T-C by US Sprint would do little to help AT&T-C respond to competition and is only based on an observation approach and not on any reasonable assessment of AT&T-C's LRIC or the current rates of AT&T-C's competitors.

39. There is general agreement among DRA and US Sprint that a maximum downward rate flexibility of -15% , from current interim (reference rates), is reasonable as long as the minimum rate level of that range is above LRIC and when such rate level exceeds the rate for a like service offered by its lowest cost competitor, Pacific Bell's concerns are also satisfied.

40. Although DRA supports an upward rate flexibility band of $+15\%$, neither it nor any other party justified the need for such a band, much less the $+25\%$ rate band proposed by AT&T-C.

41. The record evidence is clear that AT&T-C needs downward rate flexibility, to allow it to file lower rates for its competitive services to respond to competition by other IECs.

42. Some upward rate flexibility may be appropriate and lacking specific justification for a greater amount, it is reasonable to accept a $+5\%$ band in excess of the reference rates for the services established by this decision.

43. The record supports, as reasonable, a range of rate flexibility of plus five percent (+5%) and minus fifteen percent (-15%) above and below the reference rates established by this decision.

44. The lower limit of the range for READYLINE would be 22.1 cents per minute with a 15% reduction from the current 26 cents per minute reference rate, and accordingly it would still exceed US Sprint's existing comparable 21.2 cents per minute rate by 0.9 cents per minute.

45. No further data from AT&T-C is necessary to establish the +5% and -15% rate bands for the services under consideration here.

46. The use of TICM for determining the unit LRIC of new services is reasonable so long as AT&T-C does not exclude, remove, or otherwise prematurely amortize or retire any significant used and useful cost element that would otherwise be included in current costs to provide the new service under consideration.

47. In the event that the TICM model cannot accept a given cost input, it would be reasonable to adjust the output LRIC results and the rates developed thereby to account for the cost at issue.

48. It is reasonable to require AT&T-C to continue to work with the CACD, the DRA, and other parties who have signed protective agreements relative to disclosure of confidential information, and to provide documentation of TICM and data results in support of the LRIC of its new services.

49. It is reasonable to allow AT&T-C's downward tariff revisions, within the approved rate flexibility bands, to become effective on five days' notice after filing, consistent with D.90-08-032, issued August 8, 1990 in R.85-08-042.

50. It is reasonable to allow AT&T-C's upward tariff revisions, within the approved rate flexibility bands, to become effective 30 days after filing, consistent with D.90-08-032.

51. A standard 40-day notice period tariff filing is reasonable and necessary for review of documentation supporting TICM developed LRIC data associated with the proposed offering of new AT&T-C intrastate services, as well as for individual rate reductions and/or minor increases for existing services outside of approved flexibility bands.

52. It is reasonable to require AT&T-C to file applications for increases in rates outside of its flexibility bands, except for those considered minor in nature.

53. It is also reasonable to require AT&T-C to file applications for the expansion of existing, or to create new, rate bands or to deviate from the TICM method for additional regulatory flexibility.

54. It is reasonable to retain the existing definition of "new services" set forth in D.88-12-091, Finding of Fact 31, (see Footnote 19 herein for details).

55. PRO WATS California, in this consolidated proceeding, is merely a repricing of AT&T and AT&T-C's existing MTS (message toll services) and as such cannot reasonably be considered a "new service".

56. Further expansion, except as provided by this order, of the rate flexibility bands for PRO WATS California cannot be reasonably considered apart from a formal application review which addresses companion services such as MTS.

57. In Attachment 1 to Exh. 103, AT&T-C evidenced certain restructuring of its MEGACOM WATS and MEGACOM 800 services, to incorporate off peak (e.g., night and weekend) and other rate changes which became provisionally effective on January 1, 1990 under Advice Letter 152.

58. AT&T-C's request to use the revised tariff sheets associated with Advice Letter 152 as reference rates for its restructured MEGACOM WATS and MEGACOM 800 services in this proceeding, in lieu of the original tariff sheets associated with D.88-11-053, is reasonable.

59. AT&T-C, by its "Motion to Vacate Hearing Schedule and Close Proceeding" date October 16, 1990, requested that hearings on the remaining issue of the holding out restriction on intraLATA 800 READYLINE service be vacated, and this proceeding be closed based on the existing evidentiary record.

60. US Sprint notes that AT&T-C's existing 800 READYLINE tariff schedules do not contain any reference to the current Commission restriction precluding IECs from holding out the offering of intraLATA switched services.

61. US Sprint's recommended inclusion, in AT&T-C's 800 READYLINE tariffs, of language similar to that contained in AT&T-C's Schedule CAL. P.U.C. No. A9, Original Sheet 33 for MEGACOM services, describing the intraLATA Service restriction, is reasonable.

62. This application of AT&T-C is not an appropriate proceeding for consideration of LRIC and any pricing models for Pacific Bell or any other local exchange telephone company.

Conclusions of Law

1. The interim rates approved by D.89-06-050 and D.90-04-023 for the services being considered in these consolidated proceedings should be made permanent to establish the reference rates for further consideration of regulatory rate flexibility.

2. The provisional rates for MEGACOM WATS and MEGACOM 800 services contained in the tariff sheets filed by Advice Letter 152, which were effective on January 1, 1990, should be made permanent and used to establish the reference rates for consideration of regulatory flexibility in this proceeding.

3. AT&T-C should be granted limited regulatory rate flexibility for the services in this proceeding, in accordance with provisions of this order, to respond to competition by other IECs.

4. AT&T-C should be authorized to use unit LRIC as one test basis for setting the minimum rates and charges (floors) for any new competitive service offering.

5. AT&T's TICM method with proper input data will produce reasonable and reliable output data for LRIA and LRIC, however, the output data should not be trusted if any appropriate input costs are inadvertently omitted or purposely excluded.

6. AT&T-C should be authorized to use the TICM method of determining the LRIC of new services, so long as AT&T-C does not exclude, remove or otherwise prematurely amortize or retire any significant cost element that would otherwise be included as a necessary current cost by any other supplier to provide services similar to the service under consideration.

7. In the event that TICM cannot accept and process a given cost input, then AT&T-C should adjust the output LRIC results and/or rates developed thereby to properly account for the cost at issue.

8. AT&T-C should be required to continue to work with the CACD, the DRA, and other interested parties, who have signed protective agreements relative to disclosure of confidential information, to maintain and provide documentation of TICM data results in support of the LRIC studies for its new services.

9. AT&T-C in cooperation with CACD and the DRA should maintain the TICM method as a "living model" by making revisions and modifications to it, and its inputs as necessary, from time to time, to retain and improve upon its ongoing accuracy and reliability.

10. The existing definition of "new services" set forth in D.88-12-091, Finding of Fact 31, (see Footnote 19 herein for details) should continue to be used to identify new service offerings of AT&T-C as contrasted to repricing of existing services.

11. PRO WATS California as described in A.88-08-051 is merely a repricing of existing MTS (message toll services) and should not be considered a "new service."

12. The record evidence does not support a need by AT&T-C for upward rate flexibility, to compete with other ICE's in providing the services under consideration here, and accordingly no upward rate flexibility in excess of a nominal 5% should be granted.

13. AT&T-C has clearly demonstrated a need for downward rate flexibility for the services under consideration in this proceeding and there is some consensus that a 15% downward rate flexibility should be authorized for these AT&T-C services.

14. The substantial record evidence in this consolidated proceeding supports a plus five (+5%) to a minus fifteen percent (-15%) regulatory rate flexibility range for the services in this proceeding, and therefore AT&T-C should not be required to provide any further support relative to a timely tariff filing of such or narrower rate bands for these services.

15. AT&T-C should be required to incorporate a provision describing the intraLATA service restriction in its 800 READYLINE tariff, similar to the comparable restriction contained in its MEGACOM tariff schedules discussed earlier herein.

16. AT&T-C should file a formal application if it desires to make any significant expansion to the rate bands authorized herein.

17. This order should be made effective today to allow AT&T-C to reduce its rates for these services, within the range of regulatory rate flexibility, without further delay.

18. The issues and subjects in this consolidated proceeding have been fully addressed by this order; therefore, A.88-07-020, A.88-08-051, and A.89-03-046 should be closed.

19. It is our goal to adopt reliable long-run incremental cost estimates as the standard for setting minimum rates and charges for all of AT&T-C's switched and private line services. The implementation of TICM as authorized herein should advance us toward our goal as the parties gain confidence in the use and evolution of that model.

O R D E R

IT IS ORDERED that:

1. AT&T Communications of California (AT&T-C) (U-5002-C) is conditionally authorized to use its Transport Incremental Cost Model (TICM) to determine the Long-Run Incremental Costs (LRIC) for its new competitive telecommunications services, excepting message toll service (MTS), private line service and directory services; or any new service which is merely a "repricing" of these excepted services; subject to the following conditions:

- a. AT&T shall, prior to submission of any application or advice letter for a new service or services, be required to perform a comprehensive demand forecast considering relevant cross-elastic effects.
- b. AT&T shall further justify and modify other inputs to TICM (such as cost factors), at the time of the scheduled updates of its factors for TICM, but not less frequently than semi-annually, to avoid over- or underestimated results.
- c. TICM shall be maintained as a living document and updated and reviewed periodically for future new service tariff filings to reflect new changes in technology, service features, base demand forecast, AT&T's network engineering and planning, LEC developments, and cost factor adjustments.

- d. AT&T-C shall not exclude, remove or otherwise prematurely amortize or retire any significant cost element that would otherwise be included in current costs to provide the new service under consideration, and which is used and useful in providing that service. (In the event that a cost element has been written off prematurely in the past, and is now found used and useful for a new service, the full cost written off, including cost of money, will be brought back and properly allocated as an input or alternatively as an output to, or from, TCM to determine the LRIC of the service).
- e. AT&T-C shall provide documentation of TCM and data results in support of the LRIC of new service(s) to the CACD, DRA, and other parties, who request such information, whenever it makes a formal or informal request for authority to provide such new service(s) to this Commission. Such information when deemed confidential and proprietary, shall be provided to such interested parties other than CACD and the DRA, upon execution of appropriate nondisclosure and proprietary protection agreements prepared by AT&T-C.

2. The interim or provisional rates previously authorized for AT&T-C's intrastate services involved in these proceedings as set forth in:

- a. Attachment 1 of Exh. 103, with emphasis on Schedule CAL. P.U.C. No. A9, 4th Revised Sheet 7, for intrastate interLATA AT&T MEGACOM WATS and AT&T MEGACOM 800 Service.
- b. Appendix B of D.89-06-050, issued June 2, 1989 in A.88-08-051 for intrastate interLATA AT&T, PROSM WATS California service.
- c. Appendix E of D.90-04-023, issued April 11, 1990 in A.90-03-046 for intrastate interLATA AT&T 800 READYLINE[®] Service,

are hereby made permanent and may be used by AT&T-C as reference rates for the additional regulatory rate flexibility provided for by this order.

3. AT&T-C is granted limited regulatory rate flexibility to establish rate bands of plus five percent (+5%) and minus fifteen (-15%), above and below the reference rates established for the specific services listed in Ordering paragraph 2 above.

4. AT&T-C is authorized to file an advice letter, after the effective date of this order, and in compliance with General Order 96 A, containing the reference rates, and the rate bands authorized by Ordering Paragraphs 2 and 3 above.

5. Any rate reductions within the rate bands authorized by Ordering Paragraph 3 above, whether included in the advice letter described in Ordering Paragraph 4 above, or a subsequent advice letter will become effective not less than 5 days after filing.

6. Any rate increases within the rate bands authorized by Ordering Paragraph 3 above, whether included in the advice letter described in Ordering Paragraph 4 above, or a subsequent advice letter will become effective not less than 30 days after filing.

7. The definition of "new service" contained in Finding of Fact 31 of D.88-12-091 issued December 19, 1988, namely:

"31. AT&T-C's definition of a new service as an offering which customers perceive as a new service and which has a combination of technology, access, features, or functions that distinguishes it from any existing services, meets the guidelines stated in D.87-07-017."

shall remain unchanged by this order.

8. AT&T-C shall be required to use the formal application process to seek expansion or other modifications to the regulatory flexibility rate bands authorized herein.

9. AT&T-C may use the normal 40-day advice letter filing process to seek a change in rates or charges for a specific service offering or for a new service. In doing so, and as long as

uncertainties in cost estimates exist, AT&T-C shall provide supporting documentation that the rates and charges requested are greater than the LRIC for the service as computed using TICM in accordance with this order, and that the rates and charges are not less than the tariff rates and charges of the lowest-price substantially similar service offered by a competitor.

10. AT&T-C shall, within 30 days after the effective date of this order, file an Advice Letter with appropriate tariff sheets and in compliance with General Order 96-A to incorporate the substance of the following restrictive provision in its 800 READYLINE tariff schedule:

"AT&T 800 READYLINE service is an intrastate interLATA offering. Customers can terminate calls to all locations within the State of California, except where both the originating and terminating locations are within the same LATA."

11. Except as may be expressly provided in this order, all requests for any and all separate relief requested by Pacific Bell are hereby denied.

12. The ordering paragraphs and other requirements of D.88-11-053, issued November 23, 1988, D.88-12-091, issued December 19, 1988; D.89-06-050, issued June 2, 1989; D.90-04-023, issued April 11, 1990; and D.90-07-016 issued July 6, 1990; except as expressly modified here, shall continue to apply to AT&T-C after the effective date of this order.

A.88-07-020 et al. ALJ/GAA/gn

13. All remaining issues involved in Applications
(A.) 88-07-020, A.88-08-051, and A.89-03-046 have now been resolved
by this order and these proceedings are hereby closed.

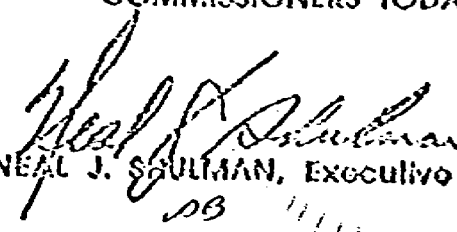
This order is effective today.

Dated November 9, 1990, at San Francisco, California.

G. MITCHELL WILK
President
FREDERICK R. DUDA
JOHN B. OHANIAN
PATRICIA M. ECKERT
Commissioners

Commissioner Stanley W. Hulett,
being necessarily absent, did
not participate.

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


NEAL J. SULMAN, Executive Director

APPENDIX A

List of Appearances

Applicant: Richard A. Bromley and Michael P. Hurst, Attorneys at Law, for AT&T Communications of California, Inc.

Protestants: Marlin D. Ard and Thomas J. Ballo, Attorneys at Law, for Pacific Bell, and Messrs. Armour, St. John, Wilcox, Goodin & Schlotz, by Thomas J. MacBride, Jr., Attorney at Law, for California Association of Long Distance Telephone Companies.

Interested Parties: Mark Barmore, Attorney at Law, for Toward Utility Rate Normalization (TURN); Messrs. Davis, Young & Mendelson, by Jeffrey F. Beck, Attorney at Law, for CP National, Citizens Utilities Company of California, Happy Valley Telephone Company, Hornitos Telephone Company, Kerman Telephone Company, Pinnacles Telephone Company, Sierra Telephone Company, The Siskiyou Telephone Company, Tuolumne Telephone Company, The Volcano Telephone Company, and Winterhaver Telephone Company; John H. Engel, Attorney at Law, for Citizens Utilities Company of California; James L. Lewis, Attorney at Law, for MCI Telecommunications Corporation; Jerry O'Brien and Diane Martinez, for API Alarm Systems; Messrs. Cooper, White & Cooper, by E. Garth Black and Mark P. Schreiber, Attorneys at Law, for Calaveras Telephone Company, California-Oregon Telephone Company, Ducor Telephone Company, Foresthill Telephone Company, The Ponderosa Telephone Company, and Roseville Telephone Company; Earl N. Selby, Attorney at Law, for Bay Area Teleport; Shelley I. Smith, Asst. City Attorney, for City of Los Angeles; Phyllis A. Whitten, Attorney at Law, for US Sprint Communications Company, Limited Partnership; John Witt, City Attorney, by William S. Shaffran and Leslie Girard, Deputy City Attorneys, for City of San Diego; Orrick, Herrington & Sutcliffe, by Robert J. Gloistein, Attorney at Law, for Contel of California, Inc.; and Peter A. Casciato, Attorney at Law, for Cable and Wireless Communications, Inc.

Division of Ratepayer Advocates: Jason Zeller, Attorney at Law, and Thomas A. Doub.

(END OF APPENDIX A)

APPENDIX B
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Glossary of Acronyms

A.	Application
ALJ	Administrative Law Judge
AT&T	AT&T Corporation (Parent)
AT&T-C	AT&T Communications of California, Inc. (Applicant in this proceeding)
C.	Case
CACD	Commission Advisory and Compliance Division of the California Public Utilities Commission.
Citizens	Citizens Utilities Company of California (a California LEC)
Cl. Br.	Closing Brief
CPCN	Certificate of Public Convenience and Necessity
CPUC	California Public Utilities Commission
D.	Decision
DRA	Division of Ratepayer Advocates of the California Public Utilities Commission.
Exh.	Exhibit
FCC	Federal Communications Commission
GE-100	The number of a standardized historical form used by the CPUC and the California telephone utilities during the 1960's and 1970's to determine the rates and charges for specialized telephone equipment and services.
GTEC	GTE california Incorporated (a California LEC)
IEC	Interexchange carrier (such as AT&T-C, Allnet, Execulines, Inc., MCI, Starnet, US Sprint, Western Union, and others.)
LATA	Local Access and Transport Area

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Glossary of Acronyms

LEC

Local Exchange Company

(One of the 23 telephone companies who provide local exchange and intraLATA telephone service in California. The term LECs represents all 23 of these companies.)

LRIA

Long Run Incremental Analysis

(A means, based on microeconomic theory, of assessing the effects of possible near-term decisions on the total revenues and costs of the firm over the long run. Decisions to introduce a new service at a particular price; to change the price of an existing service; or to eliminate an offering are the ones most commonly analyzed. Of course, others, such as the decision to launch a new advertising campaign, can also be subjected to this type of analysis. LRIA looks at the difference between revenues and costs that would occur, if the decision were decided one way versus another. All other influences (e.g., time, and economic conditions on costs and revenues) are held constant. A management decision with respect to one service --such as a price change-- may affect the quantities sold and therefore, the costs and revenues of other services, which may be cross-elastic with the service in question.)

LRIC

Long Run Incremental Costs

(The cost portion of LRIA. It is the difference in costs, over the long run, between two alternative courses of action. These cost differences are due to the difference in the quantity provided of the service affected directly by the decision, (e.g., price change), and the differences in the quantities provided by cross-elastic services. It is the net differences in long run costs and revenues --the opportunity costs and revenues-- that are included in the Long Run Incremental Costs of the decision being assessed in a full LRIA. The time frame used in developing LRIC must be long enough to permit complete adaptation of facilities, plant, and expenses to the particular change in output, which is under consideration.)

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Glossary of Acronyms

(See also the definitions of LRIC by Dr. William N. Baumol, J. C. Long and others in the narrative of this order.)

LRIR	Long Run Incremental Revenues (The revenue portion of LRIA. It is the difference in revenues from specific service between what would be, if a decision directly affecting that service, (e.g., a price change were decided one way versus what would be if it were decided another. This revenue difference is due to the differences in quantity of the service demanded by and provided to consumers and to any differences in rates charged for that service. The time frame used in developing LRIR must be long enough to permit full and complete market reaction.)
MCI	MCI telecommunications Corporation
MTS	Message Toll [Communications] Service
OII (also I.)	Order Instituting Investigation
Op. Br.	Opening Brief
Pacific Bell	Pacific Bell (a California LEC)
PHC	Prehearing conference
POP	Points of Presence
TPT&T	The Pacific Telephone and Telegraph Company (Predivestiture predecessor of Pacific Bell)
PU Code	The California Public Utilities Code (Reference is usually followed by a section number)
READYLINE	Intrastate AT&T 800 READYLINE® Service
R&D	Research and Development
RD&D	Research, Development and Demonstration

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Glossary of Acronyms

Roseville	Roseville Telephone Company (a California LEC)
TICM	Transport Incremental Cost Model (See Appendix C for details.)
Tr.	Transcript
US Sprint	US Sprint Communications Company, Limited Partnership
WATS	Wide Area Telephone Service

(END OF APPENDIX B)

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I. TICM and Its Relationship to LRIC

As part of Exhibit 115 DRA witness, J. C. Jong prepared a narrative describing AT&T's long-run incremental cost (LRIC) analysis, which first identified the components of LRIC and then developed TICM's relationship to that analysis, including a brief discussion of how network related expenses are computed by TICM. That narrative with only minor reorganization and editing for clarity is included here, together with a functional block diagram of the TICM model, to acquaint interested parties with these basic calculations and the relative complexities of TICM and its proposed application for determining the LRIC of AT&T-C's services.

A. DRA's Description of AT&T's Long-Run Incremental Analysis (LRIA)

The purpose of LRIA is to estimate the long-run change in revenues and costs resulting from a change in the circumstances surrounding the company's operations. The results of LRIA are unit Long-Run Incremental Revenue and unit LRIC, which consists of three components:

1. Access and billing costs.
2. Marketing and taxes (revenue related expenses) and,
3. Network transport-related expenses.

The most complicated part of LRIA is estimating the network transport-related LRIC. AT&T (Bell Laboratories) has developed TICM to accomplish this task.

Conceptually, LRIA is composed of three parts: input, TICM, and Economic Impact Study System (EISS).

The EISS aggregates the above-mentioned three components of LRIC and produces the intermediate outputs -- the total LRIR and LRIC. Then AT&T takes the output of EISS to run a spreadsheet program to calculate the final outputs -- the levelized 5-year per unit LRIR and LRIC.

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B. Input Data for LRIA

The input of LRIA includes data describing AT&T's network demand and supply, and financial and accounting factors. These data are sampled and summarized from AT&T's operational databases, source data, and specific studies and analyses, as well as input directly from the user. The user can set specific input parameters to obtain LRIR and LRIC under various market scenarios.

These parameters are:

1. Number of study years;
2. Incremental demand in messages and minutes by customer type, service, time, day, geographical area, and mileage band;
3. Price and revenue;
4. Exogenous expenses (such as access and billing); and
5. Overriding default factors (such as maintenance expense factors).

All these data are prepared and translated to be applied in TICM and EISS. Part of the input data goes to EISS directly, including the price, incremental revenue, LEC's access and billing charges, tax rates, inflation rate, and capital cost factors (depreciation rates, and cost of debt and equity). The rest of the input data goes to TICM, including incremental demand, base demand, base network, investment factors and expense factors. The output of TICM, in turn, becomes an input to EISS to calculate depreciation and cost of money (debt interest and shareholder return).

TICM, a relatively complex computer model, simulates AT&T's network demand/supply and network transporting processes to estimate the network transport-related LRIC by replicating AT&T's entire network with a 13-year forecast of engineering and planning to accommodate its base demand forecast. On the supply side, the base network in TICM includes AT&T's Switched Network (ASN) and common Channel Signaling network. TICM emulates procedures followed in AT&T's operational switched Network Forecasting Systems (NFS) and Fundamental Traffic Network Planning Systems (FTNPS). On the demand-side, AT&T's Marketing Analysis and Forecasting (MA&F) organization is responsible for developing two demand forecast; engineering base and marketing base. The engineering base demand forecast includes the assumptions and effects of new services and pricing plans not yet implemented, and a statistically derived risk

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assurance cushion. The marketing base demand forecast is a "business-as-usual" or base case forecast made by gathering basic business and economic forecast data without adjustments regarding assumptions of new services and pricing plans, and the risk assurance cushion. NFS uses engineering base demand forecast for AT&T's operational decision-making processes, whereas TICM uses the marketing base demand forecast to calculate the LRIC caused by new services or pricing plans.

In response to an incremental demand on the network, TICM re-distributes the total load of the (marketing) base demand base plus the incremental demand on its base network. If the network does not have sufficient (excess) capacity, TICM will add new trunks and capacity to accommodate the new total demand. The algorithm used in TICM to optimize trunking and re-trunking processes for both the Hierarchical and Dynamic Non-Hierarchical Routed (DNHR) portions of the network, is adapted and approximated from NFS and FTNPS. The network transport-related LRIC is estimated after the trunking and re-trunking processes.

C. DRA's Description of TICM Calculation of Network Transport Related Expenses

The key point of using TICM to calculate network related LRIC is to convert the demand and incremental demand from minutes of usage (MOU) and messages into toll holding time (THT), which in turn can be converted to (busy hour) service attempts and more importantly, to equivalent trunk group capacity. DRA also found that the base network of TICM is static over the 13-year forecast horizon in the study. That means TICM does not dynamically update its base network over the 13-year time horizon in the study whenever there is an incremental quantity added to the base network caused by the incremental demand. Therefore, to calculate the relative incremental quantity of each study year, the difference of incremental quantities calculated based on the static base network in two successive years should be determined to avoid the double counting. DRA noted that though TICM does not update its base network dynamically in the 13-year forecast horizon, it does dynamically update the base network mathematically in the calculation of incremental quantities. TICM calculates the network transport-related LRIC in three steps.

1. Step 1.

In the first step, TICM calculates the switched network incremental capacity requirements due to the incremental demand. The results from this step will be directly applied to the calculation of the incremental investments in the next step. Since TICM is a model with 13-year forecast, after the network trunking and re-trunking processes as described in § A. (above), TICM

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"smooths" trunk growth by eliminating year-to-year churn within the forecast. The same smoothing algorithm is contained in NFS and FTNPS. After the smoothing process, TICM determines the difference, or "delta", between the base trunk and switch network and the alternative trunk and switch network. Since the base network is not updated dynamically each year when incremental switch terminations and trunks are added to the network, the incremental quantities of switch terminations and trunks are simply the differences between the delta quantities in two successive years.

2. Step 2.

In the second step, TICM calculates incremental investments related to operator handled calls (OPH), CCS network, and switched network. The results from the first step are directly applied to the calculation in this step, and the incremental investments obtained in this step will be used to calculate the incremental expenses in the next step and to calculate the depreciation and cost of equity and debt in EISS.

- (a) The OPH related incremental investments are calculated based upon the change in busy hour attempts and the unit investments for the equipment items and operator positions which are used to process operator handled calls.
- (b) The CCS network related incremental investment are calculated from two parts: First the physical setup of CCS (hardware and software), and second the intelligence for call processing. The former is driven by the number of incremental trunks which use CCS. The latter is driven by the number of incremental service attempts.
- (c) The switched network related incremental investment are calculated from three parts: first the circuit related investments, second the switch modular related investments, and third the switch and processor related investments.
 - (1) The circuit related incremental investments are driven by adding physical units of circuit terminations and transmission facilities in the network. Therefore, circuit related incremental investments can be calculated simply by multiplying the

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number of incremental units of terminations/facilities (obtained from the result of the first step above) by the unit investment per circuit/facility.

- (2) The switch modular related incremental investments are driven by adding physical units of terminations to switches. The switch modular related incremental investment is calculated exactly the same way the circuit related incremental investments: Simply by multiplying the number of incremental terminations to switches by the unit investment per termination.
- (3) The switch and processor related incremental investments are driven by the advancement or deferral of placement and exhaust dates of switches and processors. The estimated advancement (change) in placement or exhaust date is the ratio of the incremental terminations (obtained from the first step) for a year to the growth rate of that switch in terminations per year. Clearly, it is assumed that the growth rate of each switch is linear in the estimation of an surrogate value for the time advancement of the exhaust date. Since the network of TICM is not updated dynamically each year, the switch processor related incremental investments is only carried during the year it occurs. Therefore, for the subsequent year the prior year's switch/processor related incremental investment should be removed. The switch/processor related investments is computed in each study year by (i) multiplying the estimated advancement or change of the placement/exhaust date by the investment of the new switch/processor at startup, and (ii) taking the present value of the product from the new placement/exhaust date to the study year when the incremental demand is placed; then (iii) subtracting from it the similar investment as calculated in (i) and (ii) from the prior year of the study. AT&T assumes in TICM that after 1991, the switching capacity of each existing 4ESS switches can be expanded to its real time

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call processing capacity. Prior to 1991, in order to add real time capacity to the network more witches must be added. All the 4ESS switches planned to be added for capacity relief in the AT&T network during 1989-1990 are included in the TICM base network. The exhaust dates of processors are also included in TICM's base network.

3. Step 3.

In the third and final step, TICM calculates the incremental operating expenses related to OPH CCS network, and switched network. The incremental expenses are usually calculated by multiplying the incremental investments (obtained from the previous step) by related cost factors. Most of these expenses are categorized as maintenance expenses. All these incremental expenses are input to EISS and inflation rates are applied for each appropriate year. Finally, the inflated incremental expenses from EISS are input to the AT&T's spreadsheet program and levelized by a discount rate to become part of the LRIC.

- (a) The OPH related incremental expenses consist of two parts: OPH maintenance expenses and OPH wage expenses.
 - (1) The OPH incremental maintenance expenses are calculated by multiplying investment related maintenance factors by the incremental investments in operator equipment.
 - (2) The OPH wage expense is driven by incremental operator hours. The operator hours can be calculated from total hour attempts. The OPH incremental wage expenses are computed by multiplying the incremental operator hours by the labor rate.
- (b) The CCS network related incremental expenses are calculated by simply multiplying investment related maintenance factors by the incremental investments in CCS equipment.
- (c) The switched network related incremental expenses are calculated from four parts: first the switch related expenses, second the circuit related expenses, third the facility terminal related expense, and fourth the outside plant (OSP) related expenses.

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- (1) The switch related incremental expenses are calculated by multiplying investment related maintenance factors by the incremental switch investments.
- (2) The circuit related incremental expenses consist of two parts: Circuit equipment related and circuit administration related. Both of them are based upon the number of incremental circuit terminations required by the study. This number is multiplied by the unit expense for equipment maintenance per circuit for recurring and for nonrecurring equipment related incremental expenses. For administration related incremental expenses, the same number is multiplied by the circuit termination related expense factors.
- (3) The facility terminal related incremental expenses are calculated by multiplying investment related maintenance factors by the incremental facility terminal investments.
- (4) The OSP related incremental expenses are calculated by multiplying investment related maintenance factors by the incremental investments in linehaul equipment.

4. Other expenses

All the transport-related incremental expenses are calculated in TICM as described above. The revenue related expenses and access and billing related expenses are usually calculated in EISS. However, the marketing and sales expenses, which is revenue driven and not network transport related, is also calculated in TICM by multiplying a revenue related expense factor and the incremental revenue associated with the study.

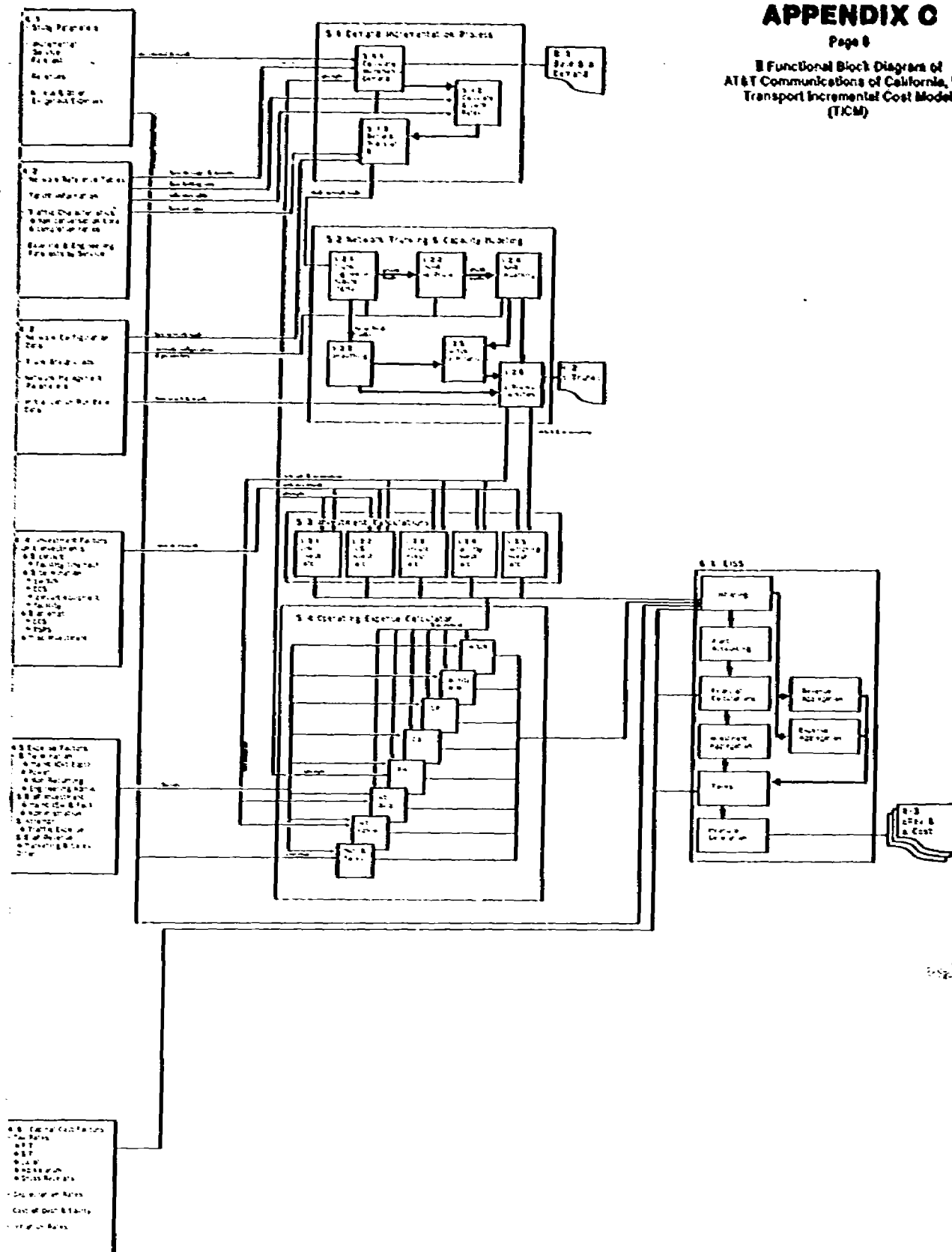
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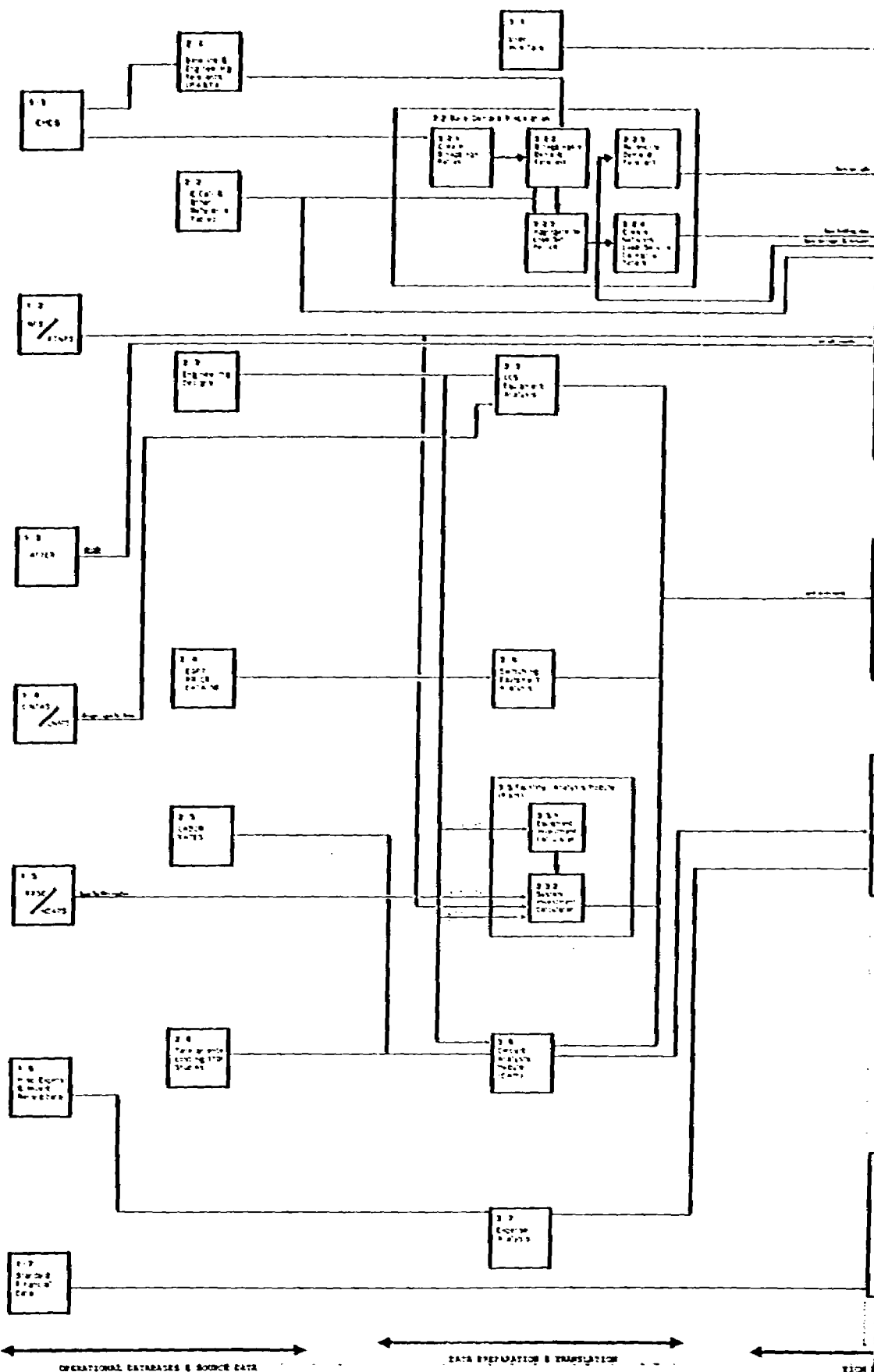
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Functional Block Diagram of
AT&T Communications of California, Inc.
Transport Incremental Cost Model
(TICM)





OPERATIONAL DATABASES & SOURCE DATA

DATA PREPARATION & TRANSLATION

FILE

(END O