

1 **DIRECT TESTIMONY OF DR. RICHARD D. EMMERSON**
2 **ON BEHALF OF BELL SOUTH TELECOMMUNICATIONS, INC.**
3 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

4 **DOCKET NO. ████████ TP**

5 **SEPTEMBER 9, 1996**

6
7 **INTRODUCTION**

8
9 Q. PLEASE STATE YOUR NAME GIVE YOUR BUSINESS ADDRESS.

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11 A. My name is Richard D. Emmerson. I am the President and CEO of INDETEC
12 International, Inc. My business address is 341 La Amatista, Del Mar, CA
13 92014. I am testifying on behalf of BellSouth Telecommunications
14 ("BellSouth" or the "Company").

15
16 Q. WHAT EXPERIENCE AND QUALIFICATIONS DO YOU HAVE
17 PERTAINING TO YOUR TESTIMONY?

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19 A. My academic qualifications include a Ph.D. in economics from the University
20 of California, Santa Barbara in 1971. From 1971 through 1979, I was a full-
21 time member of the Economics Department at the University of California, San
22 Diego (UCSD). Since 1979, I have taught continuously (part time) at UCSD; I
23 was the Director of the Executive Program for Scientists and Engineers (EPSE)
24 at UCSD during 1990-1991, and I continue to teach courses on costing and
25 pricing for EPSE at the present time. I have written articles in professional

1 economic journals, and I have performed research projects for government
2 agencies and private industry. I have also served as an expert witness in
3 antitrust and business litigation cases. I have testified before many Public
4 Service Commissions on various economic and policy subjects such as access
5 charges, bypass, rate structure, competition, terminal equipment pricing,
6 network services pricing, and cost analyses in the jurisdictions of California,
7 Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa,
8 Kentucky, Maine, Michigan, Minnesota, Montana, Nevada, Oklahoma,
9 Pennsylvania, Virginia, Washington, Washington D.C., and Wisconsin, as well
10 as in Canada. Over the course of the past 12 years, my provision of expert
11 witness testimony in over 40 telecommunications regulatory hearings has aided
12 in establishing appropriate cost standards in several jurisdictions within the
13 industry. I have also worked for regulators and telephone companies in nearly
14 a dozen foreign countries during the past three years.

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16 My work experience includes past positions as Senior Vice President of
17 Criterion Incorporated, President of the Institute for Policy Analysis, and
18 President of Economic Research Associates. These companies performed
19 economic analysis for competitive firms, regulated firms, government
20 agencies, regulatory commissions, and trade associations. INDETEC
21 International, Inc. provides consulting and training services to international
22 telephone companies, Lucent Technologies, the United States Telephone
23 Association (USTA), Bellcore, Commission staff members, partners and
24 managers of large accounting and consulting firms, and interexchange
25 companies (these services were formerly offered through INDETEC

1 Corporation and Emmerson Enterprises, Inc.). During the past 20 years, I have
2 taught a wide variety of courses ranging from basic economics for
3 telecommunications to highly specialized courses in incremental cost study
4 methodology. State regulatory commission staff members from numerous
5 states periodically attend my classes in order to improve their understanding of
6 current economics for telecommunications.

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8 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS
9 PROCEEDING?

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11 A. MCI Telecommunications Corporation (MCI) has petitioned the Florida Public
12 Service Commission (FPSC or Commission) to arbitrate certain terms and
13 conditions in its negotiation with BellSouth regarding interconnection,
14 unbundled network elements (UNEs), and resale of existing services. My
15 testimony discusses the basic economic principles which should underlie the
16 Commission's consideration of pricing UNEs and local traffic interchange, and
17 I respond to certain positions raised by MCI in its petition.

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19 **A LEC SHOULD NOT BE PROHIBITED FROM PRICING ITS**
20 **SERVICES TO OBTAIN CONTRIBUTION TO RECOVER ITS**
21 **SHARED AND COMMON COSTS**

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23 **LEC SHARED COSTS ARE SIGNIFICANT**

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1 Q. MCI PROPOSES THAT BELLSOUTH FIX THE PRICES OF ITS
2 UNBUNDLED NETWORK ELEMENTS (UNES) AT TOTAL SERVICE
3 LONG RUN INCREMENTAL COST (TSLRIC).¹ DO YOU AGREE WITH
4 THIS PROPOSAL?

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6 A. No. A multiservice network-based Local Exchange Company (LEC) has
7 shared costs which must be recovered by pricing services above TSLRIC.

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9 Q. ARE THE SHARED COSTS OF A MULTISERVICE NETWORK-BASED
10 LEC LIKE BELLSOUTH SIGNIFICANT?

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12 A. Yes. Shared costs include some of the costs of general engineering of the
13 network, right-to-use fees that apply to multiple functionalities, portions of
14 many physical facilities, the cost of capital and depreciation expenses on
15 facilities which are not directly attributable to individual services, operating
16 expenses and even taxes. For example, Mr. Frank Kolb of BellSouth, in
17 Georgia Public Service Commission Docket 5755-U (page 3) testified:

18
19 "Q. Could Southern Bell price all of its services at incremental cost?

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21 A. Not if Southern Bell wants to stay in business. The incremental cost of all
22 services provided by Southern Bell represents approximately 50% of the total
23 cost of doing business."

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25 ¹ MCI's Petition for Arbitration at page 29.

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Similarly, Barb Smith of Southwestern Bell Telephone, in Kansas Docket No. 190,492-U (page 7) testified:

“SWBT has conducted a preliminary analysis in Texas that shows that the difference between the sum of the LRIC studies for all services and the total costs of the company in Texas will be at a minimum in the range of 40% to 50%.”

I would expect Kansas to have shared and common costs in the same range. Pricing services equal to the LRIC or TSLRIC will not allow SWBT to recover significant portions of its costs.

Q. DO YOU BELIEVE THAT A LEC HAS CHARACTERISTICS WHICH CAUSE IT TO TEND TO HAVE A HIGHER PROPORTION OF SHARED COSTS THAN OTHER COMPETING FIRMS?

A. Yes. There are several factors which I believe will cause a LEC, like BellSouth, to tend to have a higher proportion of shared costs than other competing firms. These factors include: 1) a large number of services offered; 2) network-based provider; 3) a franchise obligation to provide ubiquitous service over broad geographic areas; 4) large scale and lumpy investment characteristics; 5) predominantly producing services rather than products; and 6) “leasing” virtually no unbundled components from other providers.

1 Q. WHAT DO YOU MEAN WHEN YOU SAY LECS ARE "LEASING" VERY
2 FEW FACILITIES?

3
4 A. I have used the term lease in a generic sense to mean not buying or building
5 one's own facilities. LECs will tend to own rather than lease facilities. In
6 contrast, a high proportion of Interexchange Carrier (IXC) and Alternative
7 Local Exchange Company (ALEC) costs may be comprised of expenditures to
8 lease facilities from LECs. At one point in time, AT&T claimed that
9 approximately 60% of its toll revenues were paid to LECs for access services.
10 Therefore, the leasing of LEC facilities (*i.e.*, access payments) became part of
11 the direct cost or incremental cost of AT&T's toll service. An ALEC too may
12 lease a significant proportion of its network from LECs and, therefore, will
13 necessarily have a higher proportion of incremental costs and a smaller
14 proportion of shared costs, *vis-à-vis* the LECs.

15
16 Q. IF A NETWORK-BASED COMPANY LIKE BELL SOUTH IS REQUIRED
17 TO SET RATES FOR EACH SERVICE JUST SUFFICIENT TO COVER
18 TSLRIC, WILL THAT COMPANY RECOVER ALL OF ITS COSTS AND
19 EARN A REASONABLE PROFIT?

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21 A. No. Service prices which only generate total revenue equal to the sum of all
22 services' TSLRICs will not cover total cost. As I have discussed, there are
23 shared costs incurred by a company, especially a multiservice network-based
24 company like BellSouth, which are *not* incremental to any one service but
25 which are never the less valid costs of engaging in its business activities. In

1 total, service revenues must exceed the sum of all services' TSLRICs by a
2 margin sufficient to recover all costs of the firm, including the shared costs of
3 the firm. To simply assure that each service does not receive a subsidy, by
4 establishing all service prices at, or slightly above, TSLRIC, does not
5 guarantee that a provider recovers all of its costs. BellSouth cannot be said to
6 have priced its services to attain a reasonable profit until its prices are set
7 sufficiently above TSLRIC to recover its shared costs. In short, if BellSouth is
8 required to set service prices at TSLRIC, with no provision for shared costs
9 which must necessarily be incurred to provide business services, then it can not
10 earn a profit on those services.

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12 Q. CAN YOU ILLUSTRATE THIS POINT WITH A NUMERICAL
13 EXAMPLE?

14

15 A. Yes. Consider products A & B each with an incremental cost per unit of \$.25
16 and with demand of 100 for each service. The incremental cost for the sum of
17 the units demanded is \$25 for A and \$25 for B. However, to produce either A
18 or B the firm must also spend \$50 per period on a machine; in this simple
19 example, the \$50 is a shared cost of these two products. Obviously, if the
20 prices per unit of both services A and B are forced to equal their incremental
21 costs of \$.25, the firm will face a loss of \$50 per period. Similarly, if the firm
22 is forced to price of one of its services at incremental cost, the firm will face a
23 loss unless it can double the contribution margin on its remaining service. The
24 greater the efficiencies of sharing facilities and costs, the larger the shared
25 costs of the firm and the greater the need to price services in excess of

1 TSLRIC. In other words, such increased efficiencies will increase shared costs
2 but with a more than offsetting reduction in incremental costs. However, these
3 larger shared costs must be recovered for the firm to remain in business.

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5 Q. ARE SHARED FACILITIES AND SHARED COSTS BENEFICIAL?

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7 A. Yes. The increased efficiencies from sharing facilities and costs is desirable
8 for the firm and desirable for society as well. However, these costs must be
9 recovered from the services which the firm provides; forcing service prices
10 equal to TSLRIC does not allow for the recovery of the shared costs which are
11 beneficial to society. It is inappropriate to penalize a company for improving
12 its efficiency by not allowing recovery of shared costs. To illustrate this, recall
13 products A and B described earlier where the incremental costs per unit for
14 each is \$.25, the shared cost is \$50, and 100 units of each service are
15 demanded. Consider what occurs if a new machine becomes available which
16 costs \$75 per period but which reduces the incremental cost of both services
17 from \$.25 to \$.10. With demand for A and B at 100 units the new machine
18 offers the opportunity to reduce total costs from \$100 to \$95 (i.e., \$75 + \$10 +
19 \$10). Society is clearly better off with the use of the new machine; however, if
20 the company is artificially constrained to price any of its services at
21 incremental cost it is difficult for the company to make the economic decision
22 which is best for society.

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24 **COMPETITION TENDS TO DRIVE PRICES TO COSTS (INCLUDING**
25 **SHARED COSTS)**

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2 Q. YOU RECOMMEND REJECTING MCI'S PROPOSAL TO PRICE
3 UNBUNDLED NETWORK ELEMENTS AT TSLRIC. DOESN'T
4 COMPETITION DRIVE PRICES TOWARD COSTS?

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6 A. Yes. However, competition does not necessarily drive prices to TSLRIC.¹
7 Competition tends to drive prices to a point where all valid business costs are
8 just recovered, and shared costs are valid costs of business activity. When
9 competition drives prices toward costs, these shared costs are a component of
10 the costs a provider must recover, even in the most competitive of markets.

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12 Q. SHOULD PRICES FOR INTERMEDIATE SERVICES (I.E., SERVICES
13 NOT SOLD TO END USERS) BE ALLOWED TO MAKE A
14 CONTRIBUTION TOWARD THE RECOVERY OF THE SHARED COSTS
15 OF A FIRM?

16

17 A. Yes. In a competitive environment, every activity must be allowed to make a
18 reasonable contribution to help recover the shared costs of the firm. Many
19 firms strictly offer business-to-business services, i.e., they only offer
20 intermediate products or services to other firms and do not sell to end-users.²

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22 _____
23 1 If a firm only provides a single product, all of its costs are generally included in a calculation of
24 TSLRIC. Because the majority of the economics literature implicitly or explicitly deals with single
25 product production, a casual reading of parts of the economics literature would lead one to believe that
26 competition drives prices toward TSLRIC; this is true only for a single product firm.

27 2 Catalogs and directories exist for "business-to-business" products and services; many of these
28 products are used as components or inputs to produce products for final consumers. Some of the firms
29 which are largely or completely intermediate-products firms are obvious and well known such as Intel,
30 Boeing, McDonall-Douglas, U.S. Steel, Alcoa Aluminum, or Peabody Coal. However, many other
31 firms which one might consider as final goods producers, such as Beatrice Foods, Detroit Diesel,

1 Many of these firms may have substantial shared costs which must be
2 recovered from the prices of the intermediate products or services which they
3 sell to other firms. In general, firms in real markets selling intermediate
4 services have shared costs which must be recovered through the prices of the
5 intermediate products or services which they sell to other firms. It is obvious
6 in these instances that providers must obtain a reasonable contribution from
7 each intermediate service or they will be unable to continue in business.

8

9 **EVEN INTERMEDIATE SERVICES SOLD TO OTHER PROVIDERS**
10 **SHOULD NOT BE PRECLUDED FROM MAKING A CONTRIBUTION**
11 **TOWARD SHARED COSTS**

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13 Q. IF ONE ASSUMES THAT ONE OR MORE OF THE SERVICES IN THIS
14 PROCEEDING IS A MONOPOLY SERVICE, OR AN ESSENTIAL
15 SERVICE, SHOULD THAT SERVICE BE PRECLUDED FROM
16 PROVIDING A REASONABLE CONTRIBUTION TOWARD THE
17 SHARED COSTS OF THE LEC?

18

19 A. No. All services should be allowed to provide a reasonable contribution to the
20 shared costs of the LEC. It is possible that a telecommunications provider
21 would only provide services which some customers would consider to be
22 "monopoly" or "essential" services. Such classifications do nothing to make

23

24 *Kellogg, Phillip Morris, Proctor & Gamble, or Frito Lay, provide relatively few, if any, products to end*
25 *users. These firms rely on other firms to actually provide products to end users. Certainly, any firm*
which only provides intermediate services must recover all of its shared costs from those intermediate
services.

1 the shared costs of a firm disappear or be magically recovered elsewhere.
2 Under such a rule, a LEC which provides some "monopoly" or "essential"
3 services as well as other services, would be faced with attempting to recover
4 most if not all of its shared costs from the "other" services at a time when
5 expanding competition makes it difficult or impossible to obtain such
6 contribution.

7

8 Q. WOULD THE MCI POSITION, THAT UNES BE PRICED AT TSLRIC,
9 LEAD TO PERVERSE RESULTS AS LOCAL COMPETITION EXPANDS?

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11 A. Yes, it would appear that MCI may not object to service prices which are
12 above TSLRIC; rather MCI objects to prices for what it claims are monopoly
13 components which are greater than TSLRIC and which provide some
14 contribution to the shared costs of the LEC. As MCI or other companies enter
15 the facilities-based segment of the market and offer equivalent or alternative
16 UNEs, these companies, like BellSouth, will need to recover their joint and
17 common costs. A market price will emerge which, in all likelihood, will be
18 higher than BellSouth's TSLRIC. It appears that MCI would then allow
19 BellSouth to raise its prices for these services which would lead to higher end
20 user prices. Therefore, under the MCI proposal, as local competition expands,
21 prices for unbundled intermediate component services (which were previously
22 considered as monopoly components) would be allowed to rise in order to
23 contribute to the significant shared costs of the LEC. This leads to the perverse
24 result that the expansion of local competition would lead to increased prices
25 rather than decreased prices.

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In contrast, starting with intermediate services priced to correctly provide a reasonable contribution toward shared costs could emulate competitive results from the outset of the establishment of the unbundled services.

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Q. ISN'T IT UNFAIR FOR AN ALEC TO PAY MORE THAN THE TSLRIC FOR A SERVICE IF IT BELIEVES THAT IT NEEDS THAT SERVICE TO PROVIDE ITS OWN SERVICES?

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A. No. The sum of the TSLRICs of all services only represents a fraction of the total costs of a LEC. LEC shared facilities and shared costs are not shared only by end-user services. This is especially true in the increasingly competitive environment today. Similarly, I expect that each of the components or intermediate services which the ALEC purchases from other sources (such as switch providers) are priced to provide a reasonable contribution to the shared costs of those other suppliers. I don't expect MCI to provide services to a reseller at TSLRIC even though the reseller may need the services it receives in order to provide its own services. I don't expect MCI to price its own access services at TSLRIC. As a general matter, I expect that an ALEC "needs" most of the facilities and factors of production they purchase, not just the ones they purchase from a LEC; however, this does not preclude prices for each of these components from generating a contribution to its provider.

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Q. DOESN'T AN ALEC HAVE TO RECOVER ALL OF ITS SHARED COSTS FROM END-USER SERVICES?

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A. No. I expect that most ALECS will obtain some combination from both intermediate services (including access services to IXCs) and end-user services. The very nature of competition to date, with the terms “alternate access provider” or “competitive access provider” indicates that providing intermediate services (e.g., access to IXCs) will be a critical service and a critical source of contribution. To the extent that the ALECs have shared costs, I expect them to obtain contribution from both intermediate and end-user services. Every firm must recover its shared costs from the services it provides. To the extent that an ALEC only provides access services to IXCs, it must obtain all of its contribution, to recover its shared costs, from those intermediate services.

However, the critical distinction is that the ALEC has the opportunity to utilize the ubiquitous facilities of the incumbent LEC when and where it chooses. A LEC facing a franchise obligation has no such opportunities.

Forcing LECs to price intermediate services at TSLRIC would allow ALECS to utilize the shared facilities and shared costs of the LEC ubiquitous network when and where they choose without contributing to the recovery of LEC shared costs. Without a contribution from intermediate services, the LEC’s end-user customers must provide all of the contribution to cover its shared costs; however, both the LEC’s end-user customers and the ALECs purchasing unbundled LEC component services share in the capabilities of the LEC’s ubiquitous network.

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Q. HOW ARE THE CIRCUMSTANCES FOR THE INCUMBENT LEC AND THE ALEC DIFFERENT?

A. ALECs will benefit from the incumbent's economies of scope. When an incumbent LEC provides an unbundled loop, for example, however, the incumbent LEC does not have the opportunity to share in the benefits offered by any shared costs of the ALEC purchasing the unbundled loop. Even with local interconnection, it is the incumbent LEC which has placed a ubiquitous network of facilities in advance of the demand for services in order to satisfy obligations to serve customers in a timely fashion. Facilities-based ALECs have far greater latitude to build facilities if, when, and where they choose, utilizing the facilities of the LECs in all other instances.

Q. IF THE LEC IS PRECLUDED FROM OBTAINING A REASONABLE CONTRIBUTION FROM INTERMEDIATE SERVICES, WHAT WILL BE THE EFFECT ON THE LEC'S END-USER CUSTOMERS?

A. The burden on LEC end-user customers of recovering shared costs will continually increase in such a scenario. Assume that BellSouth's total costs are \$100, with \$50 of shared costs and \$25 of incremental costs for residential local service and \$25 of total incremental costs for all other services. Also assume that residential service generates \$25 in revenue, just covering its incremental costs. Initially then, on average each service (other than residential local service) must generate \$2 in contribution for each \$1 of

1 incremental cost; i.e., the other services must provide on average 200%
2 contribution to recover the \$50 of shared costs.¹

3
4 For simplicity, also assume that BellSouth initially had 100% market share of
5 the other end-user services in its territory. Later, other end-user service
6 providers enter by purchasing unbundled loops and other unbundled BellSouth
7 facilities which are priced at incremental cost, capture 50% of the end-user
8 market for these other services. BellSouth must now obtain \$4 in contribution
9 above its incremental costs (i.e., a 400% contribution) from each of its end-user
10 customers. If residential local service is subsidized to some degree, as the
11 economics literature suggests, then the contribution levels must be even higher
12 in each scenario.

13
14 Peculiarly, both the new end-user service providers (ALECS) and BellSouth
15 explicitly or implicitly utilize at least a portion of BellSouth's shared facilities
16 and receive some of the benefits of its shared costs. However, when unbundled
17 components are priced at incremental cost, only BellSouth end-user customers
18 will pay for the benefits of the shared facilities and shared costs. Obviously,
19 this creates an artificial advantage for ALECs and an unsustainable
20 disadvantage for BellSouth.

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25 ¹ This example ignores demand elasticity without loss of generality.

1 Q. IF THE LEC IS FORCED TO PRICE INTERMEDIATE SERVICES AT
2 TSLRIC, WOULD THE EXISTENCE OF A RATE CAP FURTHER
3 CONSTRAIN THE LEC'S ABILITY TO RECOVER ITS SHARED COSTS?
4

5 A. Yes, absolutely. Without contribution from its intermediate services, the LEC
6 will be forced to attempt to raise prices for its services offered to end-user
7 customers. Obviously, the existence of a rate cap on end-user services would
8 constrain or preclude such shared cost recovery.
9

10 **PRICING UNES AT INCREMENTAL COST WOULD RETARD THE**
11 **GROWTH OF FACILITIES-BASED COMPETITION**
12

13 Q. DOES PRICING UNES AT INCREMENTAL COST PROVIDE AN
14 INCENTIVE FOR FACILITIES-BASED COMPETITION?
15

16 A. Certainly not. A firm would virtually never choose to take the risk of
17 constructing facilities when it has the opportunity to "lease" unbundled
18 components from the incumbent LEC priced at incremental cost. In particular
19 another provider can lease facilities priced at incremental cost at the time,
20 scale, location and duration of its choosing and it can change any of these
21 factors as market conditions change. Pricing unbundled components at
22 TSLRIC will essentially guarantee that alternative providers will construct no
23 new facilities to compete with the incumbent LEC.
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25 **THE FCC'S UNE PRICING STANDARDS AND COST TERMINOLOGY**

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Q. WHAT PRICING STANDARD IS ESTABLISHED BY THE TELECOMMUNICATIONS ACT OF 1996 FOR INTERCONNECTION AND UNBUNDLED NETWORK ELEMENTS?

A. Section 252(d)(1) of the Telecommunications Act of 1996 (hereinafter the "Act"), regarding pricing standards for interconnection and network element charges, states as follows:

Determinations by a State commission of the just and reasonable rate for the interconnection of facilities and equipment for purposes of subsection (c)(2) of section 251, and the just and reasonable rate for network elements for purposes of subsection (c)(3) of such section (A) shall be (I) based on the cost (determined without reference to a rate -of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable), and (ii) nondiscriminatory, and (B) may include a reasonable profit.

Q. IN ITS RECENTLY RELEASED ORDER OF AUGUST 8, 1996,¹ WHAT METHODOLOGY DID THE FCC CONCLUDE SHOULD SERVE AS THE BASIS FOR PRICING UNBUNDLED NETWORK ELEMENTS?

¹ The August 1, 1996 Order in the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, released August 8, 1996, CC Docket No. 96-98 (hereinafter "FCC Interconnection Order I").

1 A. The FCC concluded that the price for an unbundled network element should be
2 based on the LEC's total service long run incremental cost of that particular
3 network element (which the FCC calls "Total Element Long-Run Incremental
4 Cost," or TELRIC), plus a reasonable share of forward-looking joint and
5 common costs.¹

6

7 Q. PLEASE DEFINE THE MEANING OF THE ACRONYM TELRIC.

8

9 A. The acronym TELRIC actually stands for Total Element Long Run
10 Incremental Cost and it is a terminology coined by the FCC in its recent order²
11 dealing with the implementation of the unbundling and interconnection aspects
12 of the Telecommunications Act of 1996. However, even within the FCC's
13 order itself there are alternative applications of this term.

14

15 Q. HOW IS THE TERM TELRIC USED DIFFERENTLY IN THE FCC
16 ORDER?

17

18 A. The term TELRIC, in many places of FCC Interconnection Order I, is used to
19 denote a methodology for developing costs of a set of functions, deemed to be
20 those that proposed competitors either want or need in order to compete with
21 the incumbent company. However, FCC Interconnection Order I also refers to
22 the term TELRIC when referencing a mechanism for setting a price for these
23 proposed functions. The use of the same terminology to refer to two very

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25 ¹ FCC Interconnection Order I, paragraph 29 and 672.

² FCC Interconnection Order I, paragraph 678.

1 different disciplines creates a multitude of opportunities for confusion in the
2 application of these principles going forward.

3

4 Q. HOW DOES THE TELRIC COST METHODOLOGY DIFFER FROM A
5 TSLRIC OR TOTAL SERVICE LONG RUN INCREMENTAL COST
6 METHODOLOGY?

7

8 A. From a cost methodology perspective, specifically excluding pricing
9 considerations and joint or common allocations, there should be no difference
10 in the actual cost methods; only a change in the *cost object* under study. The
11 same principles of cost causation and identification should be used to
12 determine the incremental cost of an element, or a service.

13

14 Q. IF THE SAME METHODS, AND THE SAME INPUTS, ARE USED FOR
15 BOTH TELRIC AND TSLRIC STUDIES, HOW WILL THE RESULTING
16 AMOUNTS BE DIFFERENT?

17

18 A. A very basic principle is that the result of a cost study is highly interdependent
19 with the question that is being posed. If one assumes that the purpose of a
20 TELRIC study is to develop a price floor (again, excluding the reference to a
21 TELRIC price methodology) for a particular network function then the
22 question is no longer “What is the cost to the company to provide an additional
23 unit of service or product?” Instead, the question has been changed to “What is
24 the cost to the company of providing an element or function of the network in
25 its entirety, without regard to the services consuming it?”. For example, in the

1 case of a TSLRIC study conducted for a particular service, the direct cost of
2 the service would not include any costs that are shared among other services
3 using that capacity of the network. However, a TELRIC study conducted on
4 the elements of the previous service would include as direct costs some of the
5 costs that were identified as shared in the service specific study. Pricing issues
6 aside, the alignment of the cost object under study with the actual network
7 structure in terms of how costs are incurred will serve to reduce shared costs
8 and, instead, drive them to be a direct cost of the object under study.

9

10 Q. IF THIS IS TRUE, AND SERVICES ARE CONSTRUCTED DIRECTLY
11 FROM THESE ELEMENTS, CAN THESE ELEMENTS JUST BE ADDED
12 TOGETHER TO OBTAIN THE COST FOR ANY SERVICE?

13

14 A. No. As I stated above, the determination of cost for any particular service
15 includes considerations over and above the determination of the elements of
16 which it is constructed. In the previous example, the price floor for an element
17 used in the provision of the service would consider "spare" capacity as a shared
18 cost, to be recovered through prices. If, instead, the study were considered the
19 sum of previously constructed TELRIC studies, that shared cost would have
20 been included as a direct cost of each element and the resulting service "cost"
21 would have a *de facto* allocation of shared costs among all services studied in
22 this manner.

23

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1 Q. MCI ALSO RECOMMENDS THAT RATES FOR UNES SHOULD BE SET
2 EQUAL TO TOTAL ELEMENT LONG RUN INCREMENTAL COST
3 (TELRIC).¹ DO YOU AGREE?
4

5 A. No. FCC Interconnection Order I clearly states that prices for interconnection
6 should not only recover the TELRIC of a particular network element, but
7 prices should be set *above* TELRIC in order to recover the shared and common
8 costs of the firm.
9

10 We conclude that, under a TELRIC methodology, incumbent LECs' prices for
11 interconnection and unbundled network elements shall recover the forward-
12 looking costs directly attributable to the specified element, as well as a
13 reasonable allocation of forward-looking common costs.²
14

15 In other words, a reasonable contribution³ must be made toward BellSouth's
16 residual shared and common costs (sometimes called "joint and common
17 costs").
18

19 Q. PLEASE EXPLAIN THE DIFFERENCE BETWEEN TELRIC AND TSLRIC
20 AS IT RELATES TO SHARED AND COMMON COSTS.
21
22

23 _____
24 ¹ MCI'S Petition for Arbitration at page 51.

25 ² FCC Interconnection Order I, paragraph 682.

³ By "reasonable contribution", I refer to the level of contribution which would be obtained according to effectively competitive market conditions. It is *possible* that this contribution may be minimal or even zero if market conditions so indicate. Such conditions do not exist in local exchange companies.

1 A. The FCC suggests that the amount of costs that will be directly attributable will
2 be greater under a TELRIC methodology than a TSLRIC methodology:

3

4 Therefore, the amount of joint and common costs that must be allocated among
5 separate offerings is likely to be much smaller using a TELRIC methodology
6 rather than a TSLRIC approach that measures the costs of conventional
7 services.¹

8

9 Q. SINCE MORE COSTS WILL BE DIRECTLY ATTRIBUTABLE UNDER A
10 TELRIC METHODOLOGY THAN A TSLRIC METHODOLOGY, HENCE
11 LEAVING A SMALLER AMOUNT OF COMMON COSTS TO BE
12 RECOVERED, WHY THEN DO PRICES STILL NEED TO BE SET
13 ABOVE TELRIC, RATHER THAN EQUAL TO TELRIC?

14

15 A. TSLRIC methodology results in common costs which cannot be attributed to
16 individual services. The amount of these common costs is very significant.
17 Although TELRIC methodology aims to reduce the amount of these common
18 costs, there is no doubt that there will still be a significant amount of common
19 costs which will not be directly attributable to network elements. As explained
20 previously in my testimony, however, the actual amount of common costs will
21 depend on how network elements are defined.

22

23

24

25

¹ FCC Interconnection Order I, paragraph 678.

1 The greater the efficiencies of sharing facilities and costs, the larger the shared
2 and common costs of the firm and the greater the need to set prices in excess of
3 **TELRIC.**¹ In other words, such increased efficiencies will reduce incremental
4 costs but increase shared and common costs. However, these shared and
5 common costs must be recovered for a firm to remain in business.

6
7 The increased efficiencies from sharing facilities and costs is desirable for the
8 firm and desirable for society as well. However, these costs must be recovered
9 from the services which the firm provides; pricing at **TELRIC** does not allow
10 for the recovery of the shared and common costs which are beneficial to
11 society. It is inappropriate to penalize a company for improving its efficiency
12 by not allowing recovery of shared and common costs.

13
14 **Q. IF PRICING AT TELRIC LEAVES SHARED AND COMMON COSTS**
15 **UNRECOVERED, SPECIFICALLY HOW SHOULD PRICES BE SET TO**
16 **GENERATE THE ADDITIONAL REVENUE REQUIRED TO COVER**
17 **THESE COSTS?**

18
19 **A. Prices should be set based on market conditions in such a way that the**
20 **contributions from all services (revenues in excess of incremental costs) are**
21 **sufficient to cover the shared and common costs of the firm. It is the value of**
22 **the service to the customer and the market conditions for that service, not cost-**

23
24

¹ The efficiencies due to sharing facilities and costs in the provision of multiple services are sometimes
25 called economies of scope. This is similar to, but may be distinct from, the concept of economies of
 scale which reflects cost savings from large scale production of a particular (a single) product or
 service.

1 based formulas, which will determine how shared and common costs can be
2 recovered in the marketplace. Every network element should provide a
3 contribution toward shared and common costs, based on market conditions.
4 The market place is where prices should be determined. Dr. Alfred Kahn is
5 very emphatic about this point as explained in the following editorial:

6
7 The FCC should simply get out of the way and leave the decisions to investors
8 and consumers. The commission should call off its cost-allocation rule
9 making, leave the prices of regulated services where they are and let the market
10 work.¹

11

12 **INTERCONNECTION: MUTUAL TRAFFIC EXCHANGE**

13

14 Q. MCI ADVOCATES MUTUAL TRAFFIC EXCHANGE (MTE) FOR THE
15 INTERCHANGE OF LOCAL TRAFFIC.² DO YOU AGREE?

16

17 A. No. Mutual traffic exchange is a form of interchange where interconnecting
18 carriers do not explicitly compensate each other for terminating local traffic.
19 Each carrier bills its customers for the services it provides and keeps the
20 revenues but does not bill other carriers for the service of terminating their
21 local traffic. For this reason, MTE is also known as bill and keep.

22

23

24

25 ¹ Kahn, Alfred E., "Ask Not the Bells for Tolls," *Wall Street Journal*, August 6, 1996, page A14.

² MCI's Petition for Arbitration at page 45.

1 MTE is very much in the interest of MCI. It is entirely contrary to competitive
2 outcomes and economic efficiency. The incentives in this arrangement are not
3 to become the most efficient provider of service, but to maximize the
4 opportunity to bill (and keep) revenues. For example, BellSouth acquired both
5 high and low geographical concentrations of revenue by building a large
6 network (pursuant to its universal service and carrier of last resort obligations)
7 and was able to maintain affordable rural rates through statewide average
8 tariffs or limited tariff differentials between urban and rural areas. A new
9 entrant like MCI might be able to bill, say, 50% of BellSouth's revenue while
10 making only 10% of BellSouth's investment (and incurring 10% of
11 BellSouth's cost). A bill and keep arrangement takes all of the contribution
12 from the highest contributing portions of the business (those that the
13 competitor wants to enter) and requires an incumbent LEC like BellSouth to
14 find alternative sources of contribution to sustain its universal service and
15 carrier of last resort obligations. In other words, the arrangement essentially
16 erodes away one of the most important sources of contribution to the universal
17 service and carrier of last resort obligations. A bill and keep arrangement
18 would thus greatly increase the need for funding the LEC's universal service
19 and carrier of last resort obligations and would reward the new competitor in
20 ways not possible in an unrestricted competitive environment. In a competitive
21 environment, an incumbent LEC could win the business where it was most
22 efficient (and lose business where it was inefficient) through flexibly pricing to
23 profitably meet the competition. Similarly, the new entrant would enter the
24 areas with low revenue concentrations if it could more efficiently serve in
25 those areas than could the incumbent. In other words, each player would be

1 attracted by profit opportunities equally in rural and urban areas depending on
2 who was most efficient, not where they could bill and keep the most revenue
3 and leave the high cost, low revenue business to the carrier with the universal
4 service and carrier of last resort obligations.

5

6 Q. IS MTE CONSISTENT WITH COMPETITIVE OUTCOMES?

7

8 A. No. Wholesalers do not agree that retailers may keep all revenue received.
9 Even when wholesalers supply each other's retailer (this is the situation
10 between interconnecting retail telephone suppliers), they do not compensate
11 each other simply by allowing each other's retailers to keep all revenues
12 received from further distribution of the goods. Rather, the wholesale and
13 retail transactions are negotiated at "arms length," not bill and keep
14 agreements. The risk of imbalanced compensation is too great to allow such
15 agreements to become common in competitive markets.

16

17 In general, in order to avoid inadvertent price discrimination and maintain
18 competitive parity, all transactions among carriers should be explicit. Bill and
19 keep arrangements mask the gross revenue flows among carriers by assuming
20 the net flows are and should be zero (a "net" flow is what one carrier owes the
21 other less what is due back).

22

23 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

24

25 A. Yes.