BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition by AT&T Communications of the Southern States, Inc., MCI Telecommunications Corporation, MCI Metro Access Transmission Services, Inc., American Communications Services, Inc. and American Communications Services of Jacksonville, Inc. for arbitration of certain terms and conditions of a proposed agreement with BellSouth Telecommunications, Inc. concerning interconnection and resale under the Telecommunications Act of 1996	Docket No. 960833-TP Docket No. 960846-TP Docket No. 960916-TP

SECOND DAY - LATE AFTERNOON SESSION

VOLUME 9

PAGES 1288 through 1387

PROCEEDINGS:	**HEARING**
BEFORE:	CHAIRMAN SUSAN F. CLARK COMMISSIONER J. TERRY DEASON COMMISSIONER JULIA L. JOHNSON COMMISSIONER DIANE K. KIESLING COMMISSIONER JOE GARCIA
DATE:	Thursday, October 10, 1996
PLACE:	Betty Easley Conference Center Room 148 4075 Esplanade Way Tallahassee, Florida
REPORTED BY:	LISA GIROD JONES, RPR, RMR

APPEARANCES:

(As heretofore noted.)

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WITNESSES

EXHIBITS

PROCEEDINGS

(Transcript continues in sequence from Volume 8.)

MR. HORTON: And I would call Dr. Kahn.

MARVIN H. KAHN

was called as a witness on behalf of ACSI, and having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. HORTON:

Q Dr. Kahn, you were also sworn, were you not?

A Yes, I have been.

CHAIRMAN CLARK: Just for your information, I would propose at this point to finish with Dr. Kahn, we'll take a 15-minute break. I'm going to go up and get a microwave meal and bring it down here. So we'll be taking 15 minutes. You send out for food, send other people out for food, and then we will work straight through until 8:00 or a little while thereafter. Okay? Go ahead, Mr. Horton.

MR. HORTON: Thank you.

Q (By Mr. Horton) Could you please state your name and address for the record?

A My name is Marvin, middle initial H, Kahn, K-A-H-N.

Q And by whom are you employed?

A Exeter Associates, Incorporated.

Q And did you prepare and prefile in this docket direct testimony consisting of 42 pages, supplemental direct testimony consisting of 10 pages and rebuttal testimony consisting of 16 pages?

A Yes, I did.

Q And do you have any changes or corrections to make to this testimony at this time?

A Yes, I do. Turning to the direct testimony, Page 3, Line 9, sentence there beginning with the words "A copy of," that entire sentence should be deleted.

Page 32, Line 18 -- or to put it differently, a section of the testimony beginning at Page 32, Line 18, and continuing on through Page 34, Line 17, should be stricken.

Page 36, Line 18, the fourth word on that line is BellSouth. It should instead be US West.

MR. LACKEY: Could I have that one again, Madam Chairman? I missed that one.

WITNESS KAHN: Page 36, Line 18.

Excuse me, with regard to the supplemental testimony, there's an exhibit attached to the supplemental testimony that was updated as a result of passing events and updating of information. The original exhibit was replaced with an exhibit identified

as revised, and it's my understanding that that has been provided to the parties.

And then, finally, with regard to the rebuttal testimony, there are a number of places in the rebuttal testimony -- not having had the opportunity prior to this time to come in contact with Ms. Caldwell, there was some doubt in our minds as to whether Witness Caldwell was a he or a she, male or female. The flip of the coin resulted in our making reference to Witness Caldwell as a male, and it turns out that is incorrect. I apologize for that. There are a few places in the testimony -- I could go through them -- but in general, we would like them to be reflected that we were wrong, and that in fact we recognize that Witness Caldwell is female. Those are the changes.

Q (By Mr. Horton) And with those changes, if I were to ask you the questions contained in your direct, supplemental direct and rebuttal testimony today, would your answers be the same?

A Subject to only one modification, and that's due to the passage of time. Information has been provided, but the questions and answers that appear in the testimony would be the answers that I would give today, given the information at our disposal at the time.

Q I take it that's a yes?

A Yes, subject to the prehearing rules, correct.

MR. HORTON: Madam Chairman, I would request that his direct testimony, supplemental direct and rebuttal testimony be inserted into the record as though read.

CHAIRMAN CLARK: It will be inserted into the record as though read.

Q (By Mr. Horton) Dr. Kahn, you made reference to an exhibit attached to your supplemental direct that has been revised. Did you prepare -- or do you have any other corrections to make to that exhibit?

A I do not -- excuse me, yes, I apologize. There is one. The first column is entitled Density Zone Households Per Square Mile. That label is incorrect. It should instead be Density Zone Lines Per Square Mile. I would like to scratch the word "Household" and in its place use the word "Lines." Thank you.

MR. HORTON: Madam Chairman, we would like to request that Dr. Kahn's Exhibit MHK-1 be identified as Exhibit 41.

CHAIRMAN CLARK: It will be identified as Exhibit 41.

(Exhibit No. 41 marked for identification.)

TESTIMONY OF

DR. MARVIN H. KAHN

I. QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

A. My name is Marvin H. Kahn. I am a Senior Economist and a founding principal of Exeter Associates, Inc. Our offices are located at 12510 Prosperity Drive, Silver Spring, Maryland 20904.

Q. PLEASE REVIEW YOUR BACKGROUND AND QUALIFICATIONS.

A. I am an economist specializing in public utility regulation, energy, communications and antitrust analysis. My primary research interest is in the application of microeconomic principles to public policy issues. Over the last several years, my interests have turned most specifically to matters regarding the regulation of firms operating simultaneously in competitive and non-competitive markets. Particular issues addressed include the unbundling of services, the effects of imposing line of business restrictions on regulated firms, assessments of alternative regulatory structures, and matters regarding cost allocation and rate design.

In addition to my consulting experiences, I taught economics or lectured at the University of Tennessee, the University of Missouri in St. Louis, Washington University in St. Louis, at Merrimac College and at The Johns Hopkins University. I served as a senior economist with the Institute of Defense Analysis and the Mitre Corporation, both not-for-profit Federal Contract Research Centers in the Washington, D. C. metropolitan area. I also served as a senior staff economist with an Ad Hoc Committee of the U.S. House Committee on Currency and Banking, focusing on energy and employment issues.

I am a graduate of Ohio Northern University and hold a Ph.D. in Economics from Washington University in St. Louis.

Q HAVE YOU TESTIFIED BEFORE REGULATORY AGENCIES ON MATTERS DEALING WITH TELECOMMUNICATIONS?

A. Yes. I have served as an expert witness on matters regarding telecommunications before commissions in over 20 jurisdictions in this country and Canada. I have also undertaken research and prepared reports on ratemaking issues for the U.S. Postal Service, the National Association of State Utility Consumer

Advocates (NASUCA), the Federal Communications Commission (FCC) and the National Regulatory Research Institute (NRRI).

Q. HAVE YOU TESTIFIED ON ISSUES RELATED TO LOCAL COMPETITION?

A. Yes. I have testified on local competition issues in California, Delaware, Kentucky, Pennsylvania, and West Virginia. Directly or indirectly, all of these testimonies involved the issue of appropriate pricing for unbundled telecommunications network elements. ~~A copy of my resume listing my prior testimonies and reports is attached~~.

II. PURPOSE AND SUMMARY OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I have been asked by American Communications Services, Inc. (ACSI) to address the economic and ratemaking principles that underlie the pricing of unbundled network elements. Specifically, I have been asked to address the appropriate methodology for pricing unbundled local loops, one that is consistent with the Telecommunications Act of 1996 (1996 Act or Act) and with the promotion of meaningful and effective competition in the market for local exchange services. ACSI has also asked me to address the principles underlying the

development of reciprocal compensation for mutual traffic exchange.

Q. WHAT OBJECTIVES ARE IMPORTANT IN DETERMINING THE APPROPRIATE RATES FOR NETWORK ELEMENTS?

A. The 1996 Act established a vehicle to allow meaningful and effective competition to develop in the markets for local exchange services. Currently in the telephone industry, competition does not prevail. The incumbent local exchange carriers (ILECs), including BellSouth Telecommunications, Inc. (BellSouth), still hold a monopoly or near monopoly on most of their telecommunications services and elements; thus, regulatory oversight is still required to ensure the competitive outcome. Where competition prevails, market forces naturally drive prices toward cost and the result is economic efficiency. Hence, a key objective of any pricing policy is to obtain the competitive outcome.

Adherence to economic pricing principles is important in achieving the competitive outcome. The methodology used to determine the price ILECs charge for use of their facilities must send the correct price signals, encourage the entry of efficient competitors, promote efficient make-buy decisions, and allow

consumers to benefit from an increase in competitive activity, including lower retail prices and a diversity of service choices.

Q. WHAT ARE YOUR RECOMMENDATIONS REGARDING THE APPROPRIATE METHODOLOGY FOR DEVELOPING RATES FOR UNBUNDLED ELEMENTS?

A. Prices in a competitive market are based on forward-looking, market-oriented costs. To achieve this competitive market outcome, prices for network elements should be developed based on two criteria. The first is a measure of forward-looking, direct costs. The total service long run incremental cost (TSLRIC) method is, thus, an appropriate standard for achieving the desired results. The second input is a mark-up over TSLRIC to permit recovery of forward-looking, efficiently incurred joint and common costs. As I describe below, I propose that this mark-up not be based on the ILEC's accounting records, but rather limited to what the ILEC elects by its own activities in competitive markets. This is the best approach for ensuring the efficient level of entry, efficient production of end use services, competitively determined end use prices and the avoidance of anticompetitive behavior by ILECs. Since the mark-up is limited to that which does prevail in the ILECs' more competitive markets, it is reasonable by market standards.

Under the 1996 Act, determinations by a state commission of the rate for interconnection and network elements are just and reasonable if the rate is based on cost (determined without reference to a rate-of-return or other rate-based proceeding).[1] The rate may include a reasonable profit.[2] A TSLRIC-based rate is a cost-based rate which is determined without reference to a rate-or-return or other rate-based proceeding. A mark-up over direct cost limited to a level determined by competitive market forces permits a reasonable profit. Thus, the approach outlined above is both economically sound and satisfies the pricing standards of the Act.

In addition, the rates charged for network elements and bundled services must be priced in a manner that prevents uncompetitive price squeeze. Price squeeze occurs whenever the combined price of the unbundled components and bottleneck services (such as number portability and directory assistance) equals or exceeds the price of the bundled function to the end user. While price squeeze is a matter of competitive concern, pricing of bundled services and functions is not addressed in this testimony.

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[1] Section 252(d)(1)(A).

[2] Section 252(d)(1)(B).

In summary, this approach is consistent with the FCC's ruling on interconnection interpreting Section 252(d)(1) of the 1996 Act. As of this writing, the FCC order in Docket No. 96-98 is not available. However, the press release issued on August 1, 1996 states that the FCC has ruled that a cost-based pricing methodology based on forward-looking economic costs (specifically TSLRIC) is most consistent with the goals of the Act. Because the TSLRIC studies are for network elements, the FCC calls them Total Element Long Run Incremental Costs (TELRIC). Under the Order, prices are to be set at TELRIC plus a "reasonable share of forward-looking joint and common costs" (p. 2). Section IV of my testimony discusses the mark-up in greater detail.

Q. HOW IS YOUR ANALYSIS AND RECOMMENDATION AFFECTED BY THE FCC'S RECENTLY ANNOUNCED DECISION IN ITS DOCKET 96-98?

A. The FCC's press release made clear that it has taken two actions with respect to the pricing of unbundled network elements. First, the FCC required that arbitrated rates be based on TELRICs. In addition, the FCC established default proxies to be used on an interim basis absent the necessary TELRIC cost information. Naturally, both of these actions are directly relevant to my

analysis and testimony. I intend to revise and update my testimony, as appropriate, after I review the FCC decision and any BellSouth TELRIC/TSLRIC and other relevant data provided.

Q. WHAT RATES DO YOU RECOMMEND FOR UNBUNDLED LOOPS?

A. BellSouth did not provide cost studies to ACSI during negotiations. Therefore, BellSouth's version of TELRIC or TSLRIC for network elements and data necessary to develop a cost-based, competitive mark-up are not available. In the absence of such data, I recommend using the best cost information currently available to the extent it is also consistent with the approach outlined above.

Q. WHAT IS THE BEST COST-BASED ALTERNATIVE AVAILABLE?

A. The best TSLRIC alternative (at this time) for estimating reasonable TSLRIC data uses the updated Hatfield Model.[3] This model produces TSLRIC data by population density zone (six density zones) for each state. The model is forward looking and takes into consideration population demographics, geology,

[3] Version 2.2, Release 1, by Hatfield Associates, Inc., dated May 30, 1996, is the most current version available at this time, although it is my understanding that an update is due shortly.

network architecture and technology. The cost estimates for the areas to be served by ACSI are provided in Exhibit D of ACSI's Petition. BellSouth has not provided cost studies which could be used to determine or evaluate TSLRIC estimates or a competitive mark-up. In the absence of BellSouth sponsored TELRIC studies completed within two months, I recommend setting interim rates based on the TSLRIC estimates developed in the Hatfield Model. Further, the Commission should order BellSouth to provide the information necessary to estimate the mark-up on BellSouth's more competitive services and to provide BellSouth cost studies or other data which the Commission determines to be necessary to evaluate and verify the Model's TSLRIC estimates. The interim rates should remain in effect until BellSouth's TELRIC-cost-based rates are effective, which should occur no later than six months from now.

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY STRUCTURED?

A. In Section III, I discuss the economic efficiency goals and explain the role of pricing in achieving those goals. Section IV discusses the appropriate cost-based pricing methodology for achieving the competitive outcome and explains why a TSLRIC methodology best satisfies the criteria for efficient pricing. BellSouth has not

provided any cost studies or estimates of cost. Section V compares the theoretical pricing methodology discussed in Section VI with the proxy cost model developed by Hatfield Associates, Inc. to estimate TSLRIC for network elements.

III. EFFICIENCY GOALS

Q. WHAT OBJECTIVES ARE IMPORTANT IN DETERMINING THE APPROPRIATE PRICES FOR NETWORK ELEMENTS?

A. A key objective of the 1996 Act is a structure that allows the entry of both facilities-based and resale carriers into the local service market to promote effective competition. The pricing of unbundled network elements is one of the critical components of any open market policy, as reflected in new Sections 251(c)(3) and 252(d)(1) of the Communications Act of 1934 (the Act) adopted by the 1996 Act. With this in mind, the goal should be to structure a competitive outcome. A competitive outcome requires efficiency in production and pricing. Efficient pricing, in turn, requires that price reflect the cost of the good or service in question which means that rational choices by producers and consumers are encouraged. Production, entry and consumption decisions are each influenced by pricing, or at least potentially so. Only when prices reflect costs will the market yield the optimal quantity or combination of those goods and services

valued by society at the minimum resource cost to society. Adherence to economic costing principles is important in achieving the competitive outcome and requires the use of reasonable, accurate measures of cost.

Q. WHAT EFFICIENCY RESULTS CAN BE ANTICIPATED FROM A PRICING POLICY CONSISTENT WITH COMPETITIVELY FUNCTIONING MARKETS?

A. In a market structured so that no one firm can dictate price or quantity, the market yields important efficiencies. Relevant aspects of these efficiencies are referred to as operational and allocative.

Operational efficiencies result when the lowest cost method of production is selected. Competition acts to ensure this result, as entry and exit occur freely. New entrants are not required to use the same technology as does the incumbent, but are free to select among all available technologies and adopt lower cost methods of production. As market price is often forced downward with an increase in supply and, in particular, with an increase in lower cost supply, incumbents are forced to become more efficient, lose market share or cease production altogether.

Allocative efficiencies result when resources are channeled into the production of those goods and services that are valued more highly than are the resources consumed in the production process. As long as market price covers the additional cost of production, the unit will be produced in a competitive market. Since resources are limited, it is in society's interest that resources are used in a manner that maximizes the value of that produced from those resources. A competitive market allocates resources efficiently, i.e., to the goods and services valued most highly.

Q. WILL THE EFFICIENCIES JUST DESCRIBED INURE TO THE BENEFIT OF CONSUMERS?

A. There is no question that meaningful competition will create benefits for consumers. What is less clear, unfortunately, is when or even whether the successful emergence of competition can be expected in the various markets for local services. There are generally two factors to consider.

First, it must be recognized that properties which allow the ILECs' monopoly control to remain may delay the competitive entry for some network elements. The Commission should establish rates to allow the benefits of a competitive outcome to be realized by consumers well before full facilities-

based competition emerges for all elements and in all areas of the local service market. Otherwise, the benefits of competition could be delayed indefinitely given the tremendous practical and economic obstacles with replicating more than a negligible portion of the incumbent LEC's network.

Second, the Commission pricing rules must guard against anticompetitive pricing behavior by the ILEC. This is assured if a competitive norm or competitive outcome serves as the basis for pricing all non-competitive network elements. For instance, if the competitive outcome is emulated, the relationship between price and cost will be the same for competitive and non-competitive elements alike. Further, through the application of nondiscrimination obligations and imputation principles, the ILEC will "pay" the same for all non-competitive network elements set by tariff or arbitration as its competitors. Under these conditions, price squeezes and other forms of anti-competitive conduct will be deterred.

In short, the pricing policy designed to promote competition must recognize that competition is not likely to evolve evenly or with equal success for all network elements or in all areas of the state. The policy should be designed to provide the benefits of competition in the end use market to

consumers, even before the successful emergence of that competition. In fact, the policy should be structured to create these benefits in the end use market for consumers, even if competition for each network element never emerges.

Q. WHY IS A TOTAL SERVICE LONG RUN INCREMENTAL COST METHODOLOGY BETTER SUITED THAN OTHER COSTING METHODOLOGIES TO PROMOTING COMPETITION?

A. Prices should be set to recover incremental, forward-looking costs, not the firm's historically incurred embedded costs or revenue requirements. Pricing based on TSLRIC results in several market benefits. First, entrants have a continuous stream of make-buy decisions. Prices based on forward-looking cost will provide the correct signal on which to base decisions regarding facilities based investment and market entry. Second, cost-based pricing identifies the low cost supplier in any market, affecting decisions among alternative providers of a given product or service. Finally, cost-based prices permit efficient decisions in choosing among different goods.

Pricing based on embedded costs or revenue requirements cannot provide these benefits. Further, such pricing requires that the firm has -- and that it exercises -- a certain degree of market

power. Market power permits the ILEC to engage in anticompetitive conduct by allocating costs to non-competitive network elements. This will provide a "cost basis" to raise the prices for those non-competitive network elements, removing the need to recover these costs from competitive network elements.

Q. TO WHAT EXTENT IS UNBUNDLING OF NETWORK ELEMENTS NECESSARY FOR THE EFFICIENCY GOALS TO BE MET?

A. Without the availability of unbundled network elements, entry into the local exchange market is severely restricted and in some circumstances would be impossible. It is for this reason that the Act specifically requires incumbents to provide nondiscriminatory access to network elements on an unbundled basis at any technically feasible point.[4] Further, to facilitate competition, network elements must be available in a manner such that new entrants are not forced to take and pay for elements that are not needed by that entrant in the provision of the local service, and are not denied access to key elements needed to ensure quality provision on a par with the ILEC's services. If new entrants are forced to buy unneeded elements in order to get others (if elements are not sufficiently unbundled), they will incur

[4] Section 251(c)(3).

unnecessary costs which will deter efficient entry. Similarly, if access is denied to certain elements needed to ensure equal quality service, efficient entry will be deterred. The Act not only requires access to unbundled elements, it requires that unbundled elements be available in a manner that allows requesting carriers to choose the desired combination of those elements to provide the services they choose to the extent technically feasible.[5]

The network elements at issue in this arbitration are loops. The loop is the component of local service, i.e., the circuit or channel, by which the LEC provides transport between the end user premise and the LEC wire center. These communications channels or circuits may be provided as 2-wire or 4-wire copper pairs, as radio frequencies or as channels on a high-capacity feeder/distribution facility.

Further unbundling, for example, unbundling at the sub-loop level, is technically feasible, albeit ACSI is not asking for such further unbundling at this time. The FCC has concluded that unbundling of local loops is feasible[6] and that, tentatively, further unbundling of the local loop should be required.[7] In

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[5] Ibid.

[6] Press Release, August 1, 1996. The Commission identified a minimum of seven network elements, including the local loop.

[7] Notice of Proposed Rulemaking, CC Docket No. 96-98, ¶97.

addition, the FCC has identified local and tandem switches (including all software features provided by switches) as one of seven separate unbundled network elements; and, apparently, left additional unbundling requirements up to the states.[8] Competition is enhanced by allowing the degree of unbundling requested by ACSI.

Q. DOES COMPETITION REQUIRE THE AVAILABILITY OF UNBUNDLED LOOPS AT COST-BASED RATES?

A. Yes. Physical replication of the loop by facilities-based carriers could not occur in the relatively near future; such massive investment would take time, if it occurred at all. Currently, BellSouth has a virtual monopoly on loop elements, which, in turn, are necessary for facilities-based competition to occur. Without access to the unbundled loop, and specifically access at economically feasible rates, entry will not occur and the objective of promoting efficient facilities-based entry will not be met. Lack of access to unbundled loops at cost-based rates would perpetuate the entry barriers in the local exchange market. Such entry barriers are inefficient from an economic perspective and clearly inconsistent with the 1996 Act.

IV. APPROPRIATE METHODOLOGY FOR

[8] Press Release, August 1, 1996.

PRICING UNBUNDLED ELEMENTS

Q. WHAT IS THE APPROPRIATE METHODOLOGY FOR ACHIEVING THE EFFICIENCY GOALS DESCRIBED IN SECTION III OF YOUR TESTIMONY?

A. Rates based on a TSLRIC methodology give the appropriate signals to carriers and consumers, ensure efficient entry into the market, and promote efficient utilization of the telecommunications network. As pointed out above (Section III), in a competitive market, prices are driven toward market-oriented, incremental costs over the long term. Thus, the rates for unbundled network elements should be based on a long run incremental cost methodology. TSLRIC is just such a cost methodology.

Q. WHAT IS MEANT BY TSLRIC?

A. As the FCC in its Notice of Proposed Rulemaking[9] points out, parties sometimes assign (or appear to assign) different meanings to the term TSLRIC. Generally, however, the TSLRIC of an unbundled network element is the sum of the costs added (or avoided) by a decision to supply (discontinue) all of the demand for an element, assuming that the carrier continued to provide its other network elements, services and functionalities.

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[9] CC Docket No. 96-98, in the matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996.

A number of states have adopted this approach as the standard for costing local service and network elements.[10] In some instances, this same costing approach has been adopted, though a different name is used. For instance, the Illinois Commission has adopted this type of costing approach, referring to it as Long Run Service Incremental Cost, or LRSIC.[11] Some, including the FCC, have suggested that when applying the principle to network elements rather than services, it should be described as the Total Element Long Run Incremental Cost, or TELRIC.[12] This rose may go by several other names.

Q. WHY IS TSLRIC THE PROPER MEASURE OF THE COST OF NETWORK ELEMENTS?

A. Using TSLRIC will result in prices for network elements reflecting forward-looking, efficiently incurred costs. It is appropriate that the TSLRIC be forward looking. Efficient decisions regarding market entry, exit and expansion are based on forward-looking comparisons of expected revenues and

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[10] Notice of Proposed Rulemaking, FCC 96-182, CC Docket No. 96-98, paragraph 127.

[11] Ibid.

[12] As noted above, the FCC has used the TELRIC terminology in describing a TSLRIC methodology applied to unbundled network elements in the Press Release dated August 1, 1996.

expected costs. For correct price signals to promote efficient market activity, forward-looking costs should be used.

The appropriate cost study is long run in nature, i.e., it is based on a time horizon long enough to allow entry or exit to occur and/or for substantial changes in capacity or technology to occur. All costs affected by any of these decisions (entry, exit, capacity expansion or technology adoption) are variable. A properly structured incremental cost study should therefore include forward-looking capital costs, and the preponderance of all expenses should be viewed as variable, i.e., joint and common costs should amount to a relatively small fraction of total costs.

The relevant increment of demand to estimate network element costs is the total demand by all users, including the incumbent. Hence, the "total service" (or total element) designation. ILECs realize economies of scale. Focusing on any volume of output smaller than the total volume realized may result in higher per unit costs than are actually realized.

Further, the incremental cost calculation is intended to capture the added cost from producing or the cost avoided from discontinuing the service, assuming all other ILEC outputs remain unchanged. The incremental cost of a port is calculated assuming no change in the volume of loops, and the incremental

cost of loops is calculated assuming no change in the volume of ports. Since all else is held constant, the calculations focus exclusively on the cost of the unbundled network element.

Q. PLEASE EXPLAIN THE ECONOMIC CIRCUMSTANCES WHICH GOVERN THE NEED FOR A MARK-UP OVER DIRECT COSTS.

A. In economic terms, when a firm is characterized by economies of scale or scope, its cost structure is such that incremental costs will generally be less than average costs. Thus, even in a highly competitive market, the price charged by firms with this cost structure will exceed the marginal or incremental costs, if the firm is to recover its costs in total, i.e., if the firm is to remain in business. It is generally accepted that the telephone industry is characterized by scale and scope economies. This will lead to various costs being joint and common. Therefore, the total costs of the firm operating in this industry will exceed the direct costs, and the rates charged must generally exceed the sum of the direct costs. This is true whether the services or network elements in question are competitive or monopolistic.

Q. WHY IS A LIMIT TO THE MARK-UP APPLIED TO NETWORK ELEMENTS APPROPRIATE?

A. There are at least four reasons why a limit to the mark-up should be applied. First, by applying the competitive mark-up to all elements, non-competitive elements are treated as if they were competitive. This allows the benefits of competition to be realized even before actual competition emerges. This also keeps the ILEC from using revenues from non-competitive elements to finance strategic pricing responses in competitive markets.

Second, this produces non-discriminatory rates, consistent with the requirements of the Act. Sections 251 and 252 require that rates for interconnection and network elements be cost-based and non-discriminatory. Discrimination results whenever price differentials are not cost-based, that is, whenever mark-ups differ.

Third, by not limiting the mark-up, the ILEC is able to recover a large, if not virtually unlimited, volume of shared and common costs in prices charged for monopoly elements. As such, it has no incentive to accurately classify costs as direct as opposed to shared or common in TSLRIC studies. Misclassifying costs as shared or common will reduce price floors and maximize pricing flexibility, improving the ILEC's position in competitive markets without any change in the level of costs incurred. On the other hand, if the extent to which

monopoly service elements can bear a mark-up is limited, there is less opportunity to recover these costs through pricing of monopoly services and there is less incentive to misassign these costs as shared or common. To be sure, the ILEC can still misassign costs and can still reduce prices selectively. However, the ability to recover the costs misassigned is substantially limited and, therefore, the incentive to do so is reduced. The result is a general incentive to increase the proportion of costs subject to direct attribution. Further, putting shared and common costs at risk by limiting the mark-up will also provide the ILEC with greater operational incentives to minimize these shared and common costs.

Finally, this will limit the prices that ILEC can charge competitors. The ILEC has a clear incentive to charge competitors high prices. High prices provide a financial advantage to ILECs by increasing their margins relative to their competitors. Limiting the mark-up to the competitive norm establishes a reasonable mark-up, while minimizing overcharging.

Q. HOW DO YOU PROPOSE THAT THE RELEVANT MARK-UP FOR NETWORK ELEMENTS BE ESTABLISHED?

A. A mark-up over direct costs is appropriate to recover forward-looking joint and common costs. Since a competitive environment would limit the mark-up to a level needed to fully recover only efficiently incurred, forward-looking joint and common costs, it would be reasonable that the mark-up be limited to (1) an amount no greater than the ratio of efficiently incurred joint and common costs to direct costs, or (2) that realized on BellSouth's competitive services, whichever is lower. To do otherwise will allow the ILEC to recover monopoly rents by overpricing these essential, monopoly network elements.

A primary issue with regard to the provision of network elements is the "make-buy" decision. Many of the potential entrants have the option of either functioning as a reseller (buying unbundled components from the LECs) or, alternatively, becoming a facilities-based provider (using their own network). Setting the mark-up at other than what would be expected to exist in a competitive market could well result in incorrect price signals and inefficient investment. Because the goal, however, is to promote efficient entry through proper pricing policy, restricting that mark-up to the competitive market norm, appears to be an appropriate economic and regulatory policy.

Q. HOW WOULD THE MARK-UP ON COMPETITIVE SERVICES BE DETERMINED OR MEASURED?

A. The purpose of the mark-up is to capture the competitive outcome in the pricing of network elements. By mark-up, I mean the difference between the rate charged for an element (or service) and the TSLRIC of the element (or service). The determination of a mark-up should be based on comparable, competitive transactions and it must recognize that the tariff rate is not always the relevant figure to use.

BellSouth's services are subject to various degrees of market competition. The intent here is to identify the mark-up consistent with an actively competitive market. Consequently, the focus should be on those elements or services provided by BellSouth that are subject to more competition, rather than an average of all services provided. Services subject to a greater degree of competition (than basic local exchange or even MTS services) include, for example, Centrex, and 800 service.

Further, it must be recognized that rates established historically have been designed to allow BellSouth to fully recover its revenue requirement. Rates for many of the services that are less elastic have been set at levels necessary to accomplish this recovery. If competition successfully emerges in

these markets, rates for many of these services are likely to fall. Consequently, in the interest of capturing a competitively inspired mark-up, it is inappropriate to take the average of all services, but instead the focus should be on competitive market operations and the market pricing of BellSouth's more competitive activities, i.e., on the revenues realized under specific market-type contracts negotiated by BellSouth.

Q. YOU INDICATED THAT TARIFFS MAY NOT ALWAYS BE THE RELEVANT SOURCE OF PRICING INFORMATION. WHY IS THAT?

A. The ILECs typically have had contracting capability for some time now. This allows an ILEC to price off-tariff in especially competitive market conditions. With this, rates covered by contracts can be at discounts off of the tariffed rate.

Q. IS THERE ANY EVIDENCE ON THE EXTENT OF THE MARK-UP NECESSARY TO RECOVER EFFICIENTLY INCURRED JOINT AND COMMON COSTS?

A. While none has been presented by BellSouth in the context of negotiations, other available data point to a mark-up in the 10-15 percent range. However, an analysis of BellSouth's data would be needed to determine the appropriate mark-up for BellSouth.

Q. ON WHAT DO YOU BASE THE INFORMATION REGARDING OTHER AVAILABLE DATA?

A. I have performed an analysis of the more competitive contracts for two ILECs in California. An analysis of contracts entered into by GTE and Pacific Bell in California for their competitive Centrex offering points to mark-ups of up to 15 percent. Comparing the Centrex contract revenues with Pacific Bell's estimate of TSLRIC (as filed with the California Commission in the cost study proceedings) provides a median mark-up of approximately 15 percent. The mark-ups obtained by GTE were generally lower.[13]

Q. DOESN'T ALLOWING A MARK-UP ON ESSENTIAL MONOPOLY ELEMENTS PROVIDE BellSouth AN ADVANTAGE OVER ANY ENTRANT THAT MUST TAKE SERVICE FROM BellSouth TO COMPETE?

A. In part, it may. The mark-up provides BellSouth a cash flow from any profit that may be realized. On the other hand, it is for reasons such as this that I am suggesting that the mark-up be restricted to no more than a competitively determined level. In this manner, whatever profit realized is no more than what could be expected from a competitive activity.

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[13] R.93-04-003, I.93-04-002, Rebuttal Testimony of Dr. Marvin H. Kahn (Revised), July 25, 1996, Tables III and IV.

Q. IS YOUR PROPOSED APPROACH TO PRICING NETWORK ELEMENTS CONSISTENT WITH THE 1996 ACT?

A. Yes. Section 251(c)(3) requires that incumbent LECs provide "non-discriminatory access to network elements on an unbundled basis ... on rates, terms and conditions that are just, reasonable and non-discriminatory." Section 252(d)(1)(B) provides that determinations by a state commission are just and reasonable if those rates are:

(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);

(ii) nondiscriminatory; and

(iii) may include a reasonable profit.

These conditions clearly proscribe the use of the embedded or fully-allocated cost methodology of traditional regulation, which is based on the historical and actual costs incurred, in setting cost-based rates for network elements. A long-run incremental cost methodology does not rely on historical, embedded costs and is, therefore, consistent with the Act. In addition, rates based on a competitive mark-up are nondiscriminatory; reassured by Section 252(i) of the Act which requires an ILEC to make available any interconnection, service or network element provided under any agreement approved by a state commission

on the same terms and conditions. With my proposal, competitive and non-competitive elements are each priced according to identical standards.

Q. UNDER SECTION 252(d)(1)(B) OF THE ACT, A COST-BASED RATE FOR NETWORK ELEMENTS MAY INCLUDE A REASONABLE PROFIT. IS YOUR APPROACH CONSISTENT WITH THIS PROVISION?

A. Yes. The Act does not define "reasonable profit." However, few would disagree that a mark-up over direct costs equal to that which would prevail in a competitive market is reasonable. In a competitive market, the achievable mark-up over cost will be disciplined by competition in the market and held to a reasonable level. Attempts to maintain excessive mark-ups over price will invite entry into a competitive market, driving prices down and reducing mark-ups or profits to what economists sometimes call a normal level. Restricting the mark-up on monopoly elements to a competitive level ensures that the element will earn only a normal profit and that the mark-up will not exceed a reasonable level.

Q. IS A LONG RUN INCREMENTAL COST APPROACH CONSISTENT WITH THE FCC ORDER ON INTERCONNECTION?

A. Yes. The FCC press release regarding Docket No. 96-98 indicates that the FCC has adopted a TSLRIC or long run incremental cost-based

methodology. The FCC's press release uses the term "Total Element Long Run Incremental Cost," instead of Total Service Long Run Incremental Cost, but the methodology is the forward-looking, incremental cost methodology of TSLRIC.[14]

Q. WHAT ARE NON-RECURRING CHARGES?

A. Non-recurring charges (NRCs) are the charges which an ILEC assesses to recover the one-time or non-recurring costs associated with establishing, moving and/or changing the service received by a particular customer. Typically, NRCs consist of multiple elements which include charges for activities such as service orders, central office line connections and premise visits.

Q. HOW SHOULD THE NON-RECURRING COSTS ASSOCIATED WITH ESTABLISHING, MOVING OR CHANGING THE SERVICE RECEIVED BY A CUSTOMER OF ACSI OR ANOTHER COMPETITOR BE RECOVERED BY BellSouth?

A. The NRCs which BellSouth is allowed to charge ACSI to establish, move, or change service for a customer of ACSI should not exceed the charges which would apply if BellSouth was establishing, moving or changing service for a customer which it was serving directly. Moreover, the NRCs assessed should be limited to only the charges

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[14] FCC, NEWS, Report No. DC 96-75, Action In Docket Case, August 1, 1996.

applicable to those activities specifically required by ACSI or another competitor.

Q. CAN YOU PROVIDE EXAMPLES OF THE TYPES OF NRCS WHICH SHOULD APPLY BASED ON NRCS ASSESSED TODAY?

A. Yes. One example of a situation where BellSouth would assess NRCs today would involve the situation where ACSI requests that service be established to a new customer which is not currently served by BellSouth. In that case, ACSI is effectively acting as the customer's agent and the NRCs which apply should be the same as those which apply if the customer was connecting directly to BellSouth. This might include service order and central office line connection or similar charges. Of course, if ACSI will be responsible for activities at the customer's premises, BellSouth should not be entitled to assess premise visit charges for that purpose.

A second example of a situation where NRCs could apply would involve an existing customer of BellSouth changing to a new location. In this case, the only non-recurring costs involved would be those associated with changing the cross-connect from BellSouth's switch to ACSI's node. In situations such as this, the appropriate NRC would be comparable to the NRC which applies when customers switch from BellSouth to ACSI. If BellSouth does not have a specific NRC in place for changing local service providers, an appropriate level for the NRC

would be the secondary service charge applicable to a new customer or a customer move to a new location.

Q. YOU INDICATED PREVIOUSLY THAT THE NRCS ASSESSED TO ACSI SHOULD NOT EXCEED THE CHARGES WHICH WOULD APPLY IF THE ILEC WAS PERFORMING THE NON-RECURRING ACTIVITY FOR ITS OWN DIRECT CUSTOMER. WOULD THAT CHARGE NECESSARILY BE THE SAME THAT BellSouth CHARGES ITS OWN CUSTOMER?

A. No. In developing their NRCs, ILECs often include the costs of sales and marketing activities which are not directly attributable to establishing service to a customer and setting up the necessary customer records. Instead, these costs are associated with marketing additional "value-added" services. ACSI and other competitors will be responsible for and will incur their own costs to market value-added services to their customers. Therefore, to the extent that costs for these types of sales and marketing activities have been included in BellSouth's NRCs, ACSI and other competitors should receive a discount to exclude these costs.

~~Q. WHAT PRICING METHODOLOGY OR METHODOLOGIES ARE APPROPRIATE FOR ESTABLISHING TRANSPORT AND TERMINATION CHARGES?~~

~~A. Under Section 252(d)(2) of the 1996 Act, the terms and conditions for transport and termination of traffic are just and reasonable if (1) they~~

provide for the mutual and reciprocal recovery of costs, and (2) costs are determined on the basis of a reasonable approximation of the additional costs of terminating calls. The Act does not preclude arrangements that waive mutual recovery, such as bill-and-keep arrangements (Section 252(d)(2)(B)). Indeed, the FCC in its Docket 96-98 decision stated that bill-and-keep is an appropriate reciprocal compensation mechanism where traffic exchanged between the two carriers is balanced and network architectures are symmetrical. As stated in the testimony of Richard Robertson, ACSI expects traffic to be balanced.

Where a state commission chooses not to adopt bill-and-keep in an arbitration, TSLRIC would be the appropriate costing methodology under the Act for estimating such charges.

Both approaches -- bill and keep, and TSLRIC-based charges -- promote competition by ensuring that the ILECs, with their greater market power, do not charge excessive rates for termination and transportation. However, where traffic is balanced, bill-and-keep is more efficient because it avoids the administrative costs associated with traffic measurement.

Q. HAVE OTHER STATES ADOPTED BILL-AND-KEEP ARRANGEMENTS?

A. Yes. Washington adopted bill-and-keep for reciprocal compensation as an interim measure. Florida, California, Connecticut and Oregon have

also adopted bill-and-keep for specified periods of one to two (1-2) years. Other states, such as Delaware, are considering bill-and-keep in the establishment of interim rules on local competition.

Q. IF THE COMMISSION DOES NOT ORDER A BILL-AND-KEEP ARRANGEMENT, HOW SHOULD COMPENSATION BE DETERMINED?

A. If the Commission does not order a bill-and-keep mechanism, it should require charges determined in accordance with TELRIC, as discussed above. Where TELRIC studies are not yet available, rates should be established using the default proxies established in the FCC's Interconnection Order. Specifically, the FCC set a range of 0.2 to 0.4 cents per minute where traffic is terminated at the end office, and an additional charge not to exceed 0.15 cents per minute where the traffic is terminated at the tandem. Appropriate rates, if the proxies must be used on an interim basis, are presented in Exhibit J. These were established using the results for end office and tandem switching from the Hatfield Model.

V. DEVELOPMENT OF COST-BASED RATES IN THE ABSENCE OF BellSouth DATA

Q. HAS BellSouth PROVIDED TSLRIC STUDIES TO USE TO DEVELOP COST-BASED PRICES FOR UNBUNDLED NETWORK ELEMENTS?

A. No. BellSouth has not provided cost-studies which could be used to determine reliable TSLRIC estimates. Thus, it was necessary to turn to alternative sources of cost information to develop cost-based rates.

Q. WHAT SOURCE OF DATA DID YOU USE AS AN ALTERNATIVE?

A. I would use TSLRIC estimates developed by Hatfield Associates, Inc. (Hatfield Model) to set rates for these elements on an interim basis. The Hatfield Model is a widely known model of network costs. In addition, the model is based on publicly available data, which allows it to be subject to detailed review and analysis, and updated when appropriate.

Q. DOES THE HATFIELD MODEL PERMIT THE CALCULATION OF TSLRICS THAT ARE CONSISTENT WITH YOUR PROPOSED APPROACH?

A. Yes. The model uses a TSLRIC methodology that is forward-looking, and includes the entire demand for each network element. The TSLRIC measure used in the model is based on the costs of an efficient, cost-minimizing entrant into the local service market.[15] The model assumes (1) a high quality network that incorporates copper distribution loops with copper and fiber feeder, digital switching, SS7 signaling and all fiber interoffice transport; (2) network capacity sufficient to serve all narrow band switched and dedicated local demand, intraLATA toll and access service demand in the region examined; and (3) the provision of

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[15] That is, the costs of assets that are optimally configured, sized and operated.

all basic network elements needed for local service. In addition, the model reflects ILEC specific geographic and demographic differences that may affect cost. A summary of TSLRIC pricing rules and standards employed in the model is provided in Exhibit D of the ACSI Petition.

We relied upon Hatfield Version 2.2, Release 1. This is the most recent version of the model. The numeric results of the Hatfield Model Version 2.2,[16] Release 1, most recently submitted to the FCC are also presented in Exhibit D.

Q. GENERALLY, HOW IS THE HATFIELD MODEL CONDUCTED?

A. The Hatfield Model (HM) is primarily an engineering model, which is used to design a local network subject to various rules and constraints. The network is designed to meet demands for local and toll services, including both switched and dedicated access. The end product of this analysis can be costs for individual services or, as is the case here, cost by network element.

The Hatfield Model is based in part on the Benchmark Cost Model (BCM). The BCM is a costing technique initially developed by two ILECs (NYNEX and ~~BellSouth~~ US West) in cooperation with two IXCs (MCI and Sprint). The purpose of the BCM was to estimate the cost of local service in greater detail, i.e., in smaller geographic areas, than had been done to date. The intent was to focus on geographic areas where costs

[16] Ex parte presentation of AT&T Corp. in FCC Docket No. 96-98, dated July 3, 1996.

were fairly homogeneous across the entire area. Census block groups were selected for this purpose.

One of the strengths of the Hatfield Model was its reliance on the detailed census block data included in the BCM. This information can be drawn upon to obtain cost estimates not only at the census block group, but can also be aggregated to obtain cost estimates at the wire center level, the LATA, the state, across regions and nationwide. In addition, other aggregations, such as by "density zones" are also possible. Finally, these data are based on census blocks nationwide, which permits direct comparisons of costs across companies within a state, as well as across states. The information presented in Version 2.2, Release 1 is based on BellSouth's operation and is displayed by density zone.

Q. ARE THERE ANY CHARACTERISTICS SPECIFIC TO THE HATFIELD MODEL THAT DISTINGUISH IT FROM ILEC CONDUCTED TSLRIC STUDIES WITH WHICH YOU ARE FAMILIAR?

A. Yes. As indicated, the Hatfield Model represents an attempt to construct the cost of a local network for the provision of local and toll narrowband services. In this manner, the model focuses on the minimum cost, most efficient network for that limited purpose, rather than the cost incurred based upon the infrastructure currently in place by the ILECs for

whatever combination of commercial interests may be driving that entity.[17] For instance, while the model assumes fiber facilities are used in both the interoffice and feeder network, it is premised on only copper facilities used in the loop distribution system.[18] In this manner, the costing procedures in the Hatfield Model do not require cost allocations to deal with those network facilities which are not needed to provide local service, but which are necessary to provide various strategic services such as high-speed data or video.

The Hatfield Model is driven by current demand levels for local and toll services. The network is sized to meet both local and toll requirements for business and residential customers (including second line residential demands), plus the growth of these services over time. In this manner, a network is modeled that is efficiently sized to meet the demands of these customers, but not the demands for other strategic services whose evolvement is both risky and possibly distant. Spare capacity is required in this analysis, but not to meet potential strategic service demands.

As noted, the Hatfield Model draws from the BCM census block data base. This sets it apart from the typical ILEC TSLRIC study, which tends to be both state and purpose specific. By that, I mean that

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[17] Hatfield Model, Version 2.2, Release 1, Documentation, May 16, 1996, page 2.

[18] Id., page 3.

the cost studies are developed individually for each state and based upon the specific requirements at hand. Cost studies may be developed at the wire center level, at other times by exchange, or at other times utilizing statewide averages. Therefore, comparisons of costs across these studies, as well as across space and time, are most difficult. With the Hatfield Model, such comparisons are both possible and, in fact, are promoted by the study authors.

Q. THE HATFIELD MODEL HAS BEEN CRITICIZED AS PROVIDING INEFFICIENT OR INACCURATE ESTIMATES OF COSTS FOR LESS DENSELY POPULATED AREAS. HOW HAVE YOU DEALT WITH THIS?

A. For the purposes at hand, that criticism is not limiting.

One of the difficulties in any technique that draws on data that is widely applicable is that the accuracy of the analysis in any individual specific circumstance may be limited. The inaccuracies or inefficiencies of the calculation procedure are typically greatest the further one goes from the median, or average, of the distribution of outcomes. With regard to the data used in the Hatfield Model, the inaccuracies in the calculation procedure have been claimed to exist primarily with regard to cost estimates in census block groups with the lowest population densities. While there may be a large number of such census block groups, they tend to include but a small portion of the total number of

subscribers and therefore have a limited impact on the calculated results. More importantly, for the purposes at hand, our data requirements do not focus on the costs in these tail blocks of the distribution, but rather for those geographic areas that are among the more densely populated. Consequently, to the extent that the criticisms are accurate, they have little impact on the cost information that we are drawing upon.

Q. HAVE YOU ANALYZED THE HATFIELD MODEL AND ITS UNDERLYING ASSUMPTIONS?

A. Yes. At this juncture, I have reviewed the model and its assumptions in order to gain a complete understanding of its construction and its operations. In this manner, I have been able to identify the differences between the Hatfield Model's approach to obtaining cost estimates and those typically used by ILECs in their study procedures. As indicated earlier, BellSouth has not provided any TSLRIC information to this point. It is my expectation that such information will be forthcoming and a detailed review of that analysis will be conducted.

Q. HOW CAN THE OUTPUTS OF THE HATFIELD MODEL BE USED TO SET RATES FOR UNBUNDLED LOOPS AND PORTS?

A. The outputs of the Hatfield Model are TSLRIC estimates. These estimates should be marked up by an appropriate factor for the recovery of efficiently incurred shared and common costs. The appropriate mark-up can be estimated either through a detailed examination of BellSouth's

costs or, alternatively, as I have suggested in Section IV, by assessing the mark-up which BellSouth has elected in the context of pricing its most competitive service offerings.

The difficulty faced by the Commission in either of these instances is that the data necessary to construct the mark-up are within BellSouth's control. Consequently, the ability to calculate this mark-up must await the availability and the examination of those data. It is my understanding that ACSI is seeking those data through discovery.

Q. IN THE EVENT THAT THE NECESSARY DATA TO EFFICIENTLY ESTIMATE AN APPROPRIATE MARK-UP IS NOT AVAILABLE, WHAT ARE YOUR RECOMMENDATIONS?

A. Since the information necessary is within the control of BellSouth, it is my recommendation that a default mark-up be established that increases the likelihood that the necessary information would become available. Simply stated, I would recommend that no mark-up be established unless or until the information necessary to construct the appropriate mark-up has been made available for review.

Q. ARE THERE ANY ADDITIONAL ISSUES RELATED TO THE HATFIELD MODEL WHICH SHOULD BE BROUGHT TO THE ARBITER'S ATTENTION AT THIS TIME?

A. Yes, there is one. It should be noted that the Hatfield Model is being updated and the results of this update will be available soon. When

those results are available, the information included in Exhibit D and Exhibit H (ACSI's proposed rates) of ACSI's Petition will be updated.

Q. YOU NOTED THAT BellSouth DID NOT PROVIDE ITS TSLRIC FOR YOUR REVIEW. IF THAT WERE TO BE MADE AVAILABLE ON A TIMELY BASIS, WOULD YOU USE THE RESULTS OF THAT ANALYSIS IN PLACE OF THE HATFIELD MODEL?

A. That is not clear. It is my understanding that ACSI is requesting copies of BellSouth's TSLRIC studies. Upon receipt of that cost study information on a timely basis, it will be reviewed and a decision will be made as to its applicability in terms of establishing rates in this proceeding. At that time, I will comment on whether this BellSouth's study should be adopted, modified and adopted, or simply rejected. At this juncture, I offer no observation.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

SUPPLEMENTAL TESTIMONY OF DR. MARVIN H. KAHN

Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

A. My name is Marvin H. Kahn. I am a Senior Economist and a founding principal of Exeter Associates, Inc. Our offices are located at 12510 Prosperity Drive, Silver Spring, Maryland 20904.

Q. ARE YOU THE SAME MARVIN H. KAHN WHO SUBMITTED TESTIMONY ON BEHALF OF AMERICAN COMMUNICATIONS SERVICES, INC. (ACSI) IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY?

A. At the time my original testimony was filed, the FCC had announced the release of the First Report and Order[1] (FCC Order) implementing Sections 251 and 252 of the Telecommunications Act of 1996 (Act). Since then, I have had an opportunity to review the FCC Order and assess the impact of the FCC's rulings on the recommendations of my testimony. In general, the FCC's rulings fully support my

[1]First Report and Order, Released August 8, 1996, In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98.

recommendations in terms of the appropriate costing and pricing methodologies to be used for unbundled loop elements. There are (two) areas of my testimony which I believe should be clarified in terms of overall consistency with the FCC Order.

The first area relates to the development of rates using the total element long run incremental cost (TELRIC) costing methodology and the FCC position on geographic deaveraging. The second area relates to the FCC's prescribed mark-up over TELRIC and why that ruling is consistent with the recommendations of my testimony. The discussion of each relates the FCC's provisions to my recommendations.

TELRIC Costing Methodology

Q. PLEASE SUMMARIZE THE FCC'S RULING REGARDING THE COSTING METHODOLOGY FOR PRICING UNBUNDLED LOOPS.

A. The FCC adopted specific requirements governing the methodology to be used in developing cost-based rates for interconnection and unbundled elements, including unbundled loops. The general pricing standard requires that rates be established on the basis of a forward-looking economic cost-based pricing methodology. The forward-looking economic cost of an element is defined in the FCC Order as the sum of :

(1) the total element long-run incremental cost of the element (TELRIC), and

(2) a reasonable allocation of forward-looking joint and common costs.[2]

TELRIC is the forward-looking cost over the long run of the total quantity of the facilities and functions that are directly attributable to, or reasonably identifiable as incremental to, an element, given the incumbent LEC's provision of other elements. TELRIC and the term total service long run incremental cost (TSLRIC) are identical conceptually. The term TELRIC is used by the FCC in applying the concept to the pricing of network elements.

The FCC also required states to establish different rates for unbundled loop elements in at least three defined geographic areas within the state to reflect geographic cost differences.[3] In the event that state commissions do not have cost information available which meets the forward-looking economic cost criteria, the FCC produced a statewide average ceiling proxy at or below which unbundled loops can be priced on an interim basis.

Q. ARE THE FCC'S RULINGS CONSISTENT WITH YOUR CONCLUSIONS AND RECOMMENDATIONS?

A. Yes. I recommended that the appropriate costing methodology for pricing unbundled elements is a TSLRIC approach. As noted above, TSLRIC and the TELRIC approach promulgated by the FCC are

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[2]First Report and Order, Appendix B-Final Rules, §51.505(a).

[3]*Id.*, §51.507(f).

methodologically the same. In addition, the FCC has mandated a minimum of three cost-based density zones. ACSI did not have access to the LEC's cost studies during negotiations. In the absence of LEC sponsored forward-looking economic cost data using the TELRIC (or TSLRIC) approach, I recommended using the best cost information currently available to the extent that information was developed consistent with the TSLRIC/TELRIC methodology. That alternative is the updated Hatfield Model.[4] This model produces data fully consistent with the TSLRIC/TELRIC principles. The estimates are long run, forward-looking, based on least cost available technology and reflect cost causation. In addition, it provides data by density zone (six density zones) for each state. Therefore, the Hatfield Model meets both the TELRIC methodology requirement and the requirement that costs be deaveraged geographically.

Q. YOU MENTIONED THE FCC PROXY CEILING. PLEASE EXPLAIN WHAT THAT NUMBER IS AND HOW THE FCC PROPOSED THAT THE NUMBER BE USED.

A. As noted, the FCC required that rates for unbundled elements must be cost based. The FCC established proxy costs for specific network elements to be used in the event that the necessary cost data are not yet available. These proxies take the form of ranges or for some elements, such as the loop, a ceiling. For purposes of determining whether

[4]See Testimony of Marvin H. Kahn, pp. 8-9 and Section V.

deaveraged rates for unbundled loop elements comply with the proxy cost ceiling, those actual, geographically deaveraged rates must be less than or equal to the FCC proxy when combined on a weighted average basis.[5] States may set prices below these ceilings if the record before them supports a lower price.[6] The default proxies established by the FCC serve merely as presumptive ceilings.

States may set rates above the price ceiling only if the state commission has given full and fair effect to cost data based on the methodology prescribed in the FCC Order, i.e., a properly structured TELRIC.

Q. HOW DO THE COST ESTIMATES PRODUCED BY THE HATFIELD MODEL COMPARE WITH THE FCC ESTABLISHED PROXIES?

A. Yes. The Hatfield Model assigns a portion of joint and common costs to each network element. Even with this, the Hatfield cost estimates are below the FCC estimates. Attachment 1 provides a comparison of the FCC proxy and the current Hatfield estimates on a statewide basis and Hatfield estimates for 6 geographically deaveraged zones.

In addition, Attachment 1 displays Hatfield estimates for 3 geographically deaveraged density zones. These figures are based on the weighted average of the combined zones. For simplicity, I combined the

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[5]First Report and Order, Appendix B-Final Rules, §51.513(b).

[6]First Report and Order, ¶768.

two most dense, the two middle, and the two least dense zones in the Hatfield Model. It may be appropriate in particular circumstances to combine zones differently.

Q. IS THE MANNER IN WHICH THE HATFIELD MODEL DEAVERAGES LOOP COST INFORMATION BEING UPDATED?

A. Yes. The current release of the Hatfield Model defines density zones based upon households per square mile. However, the Hatfield Model is expected to be rereleased shortly with zones defined by loop density. I will be providing the revised Hatfield results to the commission as an update to my testimony once they are available. The changes will not affect the validity of the approach I recommend here, and will merely reflect a refinement in the presentation.

Q. HAVE LECS PROVIDED COST INFORMATION ON A GEOGRAPHICALLY DEAVERAGED BASIS?

A. No. ILECs are generally incorporating geographic deaveraging into their unbundled loop cost elements only now, in response to the FCC directive. In the event that the ILEC provides cost information that it proposes the Commission rely on in establishing deaveraged rates, ACSI reserves the opportunity to review and respond to such information and supplement testimony, as appropriate.

<u>Reasonable Allocation of Joint and Common Costs</u>

Q. YOU ALSO MENTIONED THAT THE FCC RULES INCLUDE A MARK-UP FOR JOINT AND COMMON COSTS IN THE

DETERMINATION OF FORWARD-LOOKING ECONOMIC COSTS. WHAT CRITERIA HAS THE FCC ESTABLISHED FOR DETERMINING THAT MARK-UP?

A. The FCC set two general criteria for the mark-up over TELRIC. First, it required a mark-up to allow for the recovery of forward-looking joint and common costs. At the same time, the FCC required that the mark-up be consistent with the behavior in competitive markets (cite) and be limited to a "reasonable allocation" of "forward-looking" costs.[7] Forward-looking common costs are defined as economic costs efficiently incurred in providing a group of elements or services (which may include all elements or services offered by the LEC) that cannot be attributed directly to an individual element or service.[8] In determining what is a "reasonable" allocation the FCC imposes two criteria on the allocation of common costs.

(1) The sum of TELRIC plus the "reasonable" allocation of common cost cannot exceed the stand-alone cost of producing the element, and

(2) The sum of the allocations for all elements and services (excluding retail costs) must equal the total forward-looking common costs attributable to operating the incumbent LEC's total network.

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[7]First Report and Order, ¶698.

[8]*Id.*, Appendix B - Final Rules, §51.505(c)

One reasonable allocation method mentioned in the order is to allocate common costs using a fixed allocator, such as a certain percentage mark-up over the directly attributable forward-looking costs. Another reasonable allocation method proposed by the FCC would be to allocate only a relatively small share of common costs to certain critical network elements, such as the local loop and collocation, since these are facilities that are the most difficult for competitors to duplicate,[9] i.e., those facing the greatest barriers to entry. An allocation of common costs on that basis ensures that the price of network elements that are subject to the least competition are not "artificially inflated by a large allocation of common costs."[10]

Q. WHAT IS YOUR RECOMMENDATION FOR ESTABLISHING THIS MARK-UP OVER TELRIC?

A. In my testimony, I proposed that the Commission establish a mark-up for unbundled local loops that is no greater than the mark-up which the ILEC realizes on its competitive network services.

Q. IS YOUR PROPOSAL FOR A MARK-UP IN THE PRICING OF UNBUNDLED LOOPS CONSISTENT WITH THE FCC'S RULINGS IN CC DOCKET NO. 96-98?

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[9] *Id.* ¶696. The FCC refers to facilities such as the loop as bottleneck facilities in this paragraph.

[10] *Id.*

A. Yes. In my testimony, I indicated that a mark-up over TSLRIC was appropriate. For the reasons given in my testimony, the FCC required a mark-up over incremental common costs. Second, the FCC limited the mark-up to a 'reasonable level'. The mark-up proposed in my testimony, which would be limited to the mark-up accepted by the ILEC on its most competitive services, is consistent with the FCC mandated limits. A mark-up limit (defined as) the voluntarily accepted return on a competitive service is consistent with the criteria which limits the allocation of common costs to that which could be earned on a stand alone basis and restricts the total or "sum of the allocation" for all elements to the total of forward-looking common costs less retail costs.

Q. HAS ACSI SOUGHT THE INFORMATION BY WHICH A COMPETITIVE MARKET MARK-UP CAN BE DETERMINED?

A. Yes. Data on BellSouth's competitive contracts are being sought in data requests.

Q. IF THE INFORMATION TO DETERMINE COMPETITIVE MARK-UPS IS NOT AVAILABLE, WHAT ALTERNATIVES ARE AVAILABLE TO THE COMMISSION?

A. The Commission may choose to rely on information from other jurisdictions, such as Pennsylvania and California, where mark-ups of

approximately 15 percent have been identified.[11] Alternatively, the Commission may select the Hatfield Model cost estimate, which includes an allocation of common cost.

Q. DOES THIS COMPLETE YOUR SUPPLEMENTAL TESTIMONY?

A. Yes. It does.

[11]See R.93-04-003, I.93-04-002, Rebuttal Testimony of Dr. Marvin H. Kahn (Revised), July 25, 1996, Tables III and IV and Opinion and Order, Short Form, Application of MFS Intelenet of Pennsylvania, Inc., Docket No. A-310203F0002, Application of TCG Pittsburg, Docket No. A-310213F0002; Application of MCI Metro Access Transmission Services, Inc., Docket No. A-310236F0002; and; and Application of Eastern Telelogic Corp. Docket No. A-320258F0002, page 13.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 960916-TP

REBUTTAL TESTIMONY OF DR. MARVIN H. KAHN

Q. PLEASE STATE YOUR NAME.

A. My name is Marvin H. Kahn.

Q. ARE YOU THE SAME DR. KAHN THAT EARLIER PREPARED DIRECT TESTIMONY AND SUPPLEMENTAL TESTIMONY THAT WAS FILED ON BEHALF OF AMERICAN COMMUNICATIONS SERVICES, INC.?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. In this rebuttal testimony, I am responding to the major issues raised in the Direct Testimony filed on behalf of BellSouth Telecommunications, Inc. (BellSouth). The testimony of BellSouth's witnesses, D. Daonne Caldwell, Dr. Richard D. Emmerson, and Robert C. Scheye, set out the Company's position on the pricing of unbundled network elements pursuant to the Federal Telecommunications Act of 1996 (1996 Act). My rebuttal focuses on these witnesses' views about how TELRIC[1] studies relate to TSLRIC[2] studies, how forward-looking joint and common costs

[1] Total Element Long Run Incremental Cost.

[2] Total Service Long Run Incremental Cost.

should be identified and allocated, the consistency of Florida's loop rates adopted in Docket No. 950984-TP (Order No. PSC-96-0444-FOF-TP) with the pricing standards of the 1996 Act, in addition to other matters.

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS.

A. BellSouth has not provided TELRIC and joint and common cost studies which satisfy the criteria established in the Federal Communications Commission's August 8, 1996, *Interconnection Order* (CC Docket No. 96-98) for pricing unbundled elements. Once these studies are made available, a time period of at least three weeks would be required to properly evaluate and respond to the studies.

Messrs. Caldwell and Emmerson, however, take the position that using TSLRIC as a basis for setting rates does not violate the FCC mandates because TSLRIC will yield lower rates than TELRIC. There is no *a priori* reason to believe that TSLRIC will yield lower rates than TELRIC. In fact, as I show, the opposite is likely to be the case.

I also show that the BellSouth assertions with respect to the mark-up of joint and common costs are inappropriate and inconsistent with the requirements of the *Interconnection Order*.

Finally, I discuss why the $17.00 interim loop rate authorized by the Florida Public Service Commission (PSC) in Docket No. 950984-TP is not an appropriate interim rate.

Q. HAS BELLSOUTH PERFORMED TELRIC STUDIES AND PROVIDED THEM TO YOU FOR REVIEW?

A. No. As the FCC said repeatedly in its August 8, 1996, *Interconnection Order* in Docket No. 96-98, the 1996 Act requires prices for unbundled network elements to be set at TELRIC plus a reasonable allocation of forward-looking joint and common costs. Thus, BellSouth must prepare TELRIC studies which satisfy the FCC standards and conform to the methodology promulgated in the *Interconnection Order* to support loop rates. Once such studies are prepared, at least three weeks will be needed to conduct an adequate review and response. If the studies are not prepared sufficiently in advance of the deadline for completing this arbitration, then interim rates based upon the best available cost information consistent with the proxy ceilings established in the FCC's *Interconnection Order* (i.e., the Hatfield Model) must be established. Further, as I explained in my Supplemental Testimony filed on September 6, 1996, the "statewide" rate which must not exceed the FCC's proxy ceiling is to represent a weighted average, based on rates in at least three density-zones.

Q. HAS BELLSOUTH PROVIDED ACSI WITH ANY COST INFORMATION REGARDING UNBUNDLED LOOPS AND RELATED ELEMENTS?

A. No. BellSouth has stated that it will now provide ACSI with access to LRIC[3] and TSLRIC studies it has completed for unbundled loops (2-Wire Analog, 4-Wire Analog, and 2-Wire ISDN Digital), all Unbundled Loop Channelization Systems and Central Office Channel Interfaces. However, ACSI has not been provided with any cost studies to date, and I have thus not yet had a chance to review BellSouth's cost information. BellSouth's witness states in his testimony (Caldwell p.3) that cost studies for other loop types requested by ACSI and for the loop cross connect are not yet completed. As a result, the comments contained herein necessarily are then based upon the testimony of Messrs. Caldwell and Emmerson.

Q. WITH RESPECT TO THE COST STUDIES PRODUCED BY BELLSOUTH TO DATE, DO THESE STUDIES FORM AN ADEQUATE BASIS FOR PRICES THAT WOULD BE CONSISTENT WITH THE 1996 ACT?

A. No. As stated earlier, under the *Interconnection Order* implementing the interconnection and unbundling provisions of the 1996 Act, prices for unbundled network elements must be set at TELRIC plus a reasonable allocation of joint and common costs. In the absence of the appropriate TELRIC information, rates are to be set at or below proxy rate ceilings established by the FCC in its *Interconnection Order*. For Florida, this

[3] Long Run Incremental Costs.

proxy has been set at $13.68. The FCC also required geographic deaveraging, wi n rates based on at least three density zones.[4] This rate represents a weighted average. Because BellSouth has not performed TELRIC cost studies, permanent rates cannot be established.

Q. WITNESSES CALDWELL AND EMMERSON SUGGEST THAT TSLRIC IS NECESSARILY LOWER THAN TELRIC AND THAT TSLRIC STUDIES CAN THEREFORE BE USED TO ESTABLISH PERMANENT RATES FOR UNBUNDLED ELEMENTS. DO YOU AGREE?

A. No. There are two major differences between TELRIC and TSLRIC that prevent one from stating *a priori* that TELRIC is always higher. In fact, the opposite is much more likely to be the case.

Q. WHAT ARE THE MAJOR DIFFERENCES BETWEEN TELRIC AND TSLRIC?

A. First, all retail-related costs are eliminated in TELRIC studies because the focus is the incremental cost of producing an unbundled element, *not* a service. TSLRIC studies, by comparison, will include retail-related costs. Because all retail activities are eliminated, TELRIC should never exceed TSLRIC for that reason alone.

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[4] As noted in my Supplemental Testimony filed on September 6, ACSI has modified its original loop rate proposal to make it consistent with these requirements.

Second, in its discussion of the TELRIC and TSLRIC methodologies, the FCC states:

> The costs of local loops and their associated line cards in local switches, for example, are common with respect to interstate access service and local exchange service because once these facilities are installed to provide one service they are able to provide the other at no additional cost. By contrast, the network elements, as we have defined them, largely correspond to distinct network facilities. *Therefore, the amount of joint and common costs that must be allocated among separate offerings is likely to be much smaller using a TELRIC methodology rather than a TSLRIC approach that measures the costs of conventional services.*

Interconnection Order, ¶ 678 (emphasis added). The FCC's finding does not support Mr. Caldwell's and Mr. Emmerson's suggestion that a TSLRIC rate is necessarily lower than a TELRIC rate.

In addition, there is no reason, as witnesses Caldwell and Emmerson assume, that lower joint and common costs are necessarily correlated with an increase in the *direct* costs of providing a network element. Instead, because certain activities associated with the production of services may be unnecessary in the production of elements, direct costs will probably be reduced as well.

Q. WHAT IS YOUR OVERALL CONCLUSION ON THE RELATIONSHIP OF TELRIC VS. TSLRIC?

A. There is no *a priori* reason to conclude that a TELRIC study would yield a higher rate than a TSLRIC study. In fact, the opposite is more likely. The

only way to determine the relationship is to have both studies completed. There is no theoretical relationship between them that allows for the generalization made by BellSouth's witnesses, certainly none than can assure that TELRIC will exceed TSLRIC as BellSouth suggests. If anything, one would expect, as I have explained, that TELRIC is below TSLRIC. Thus, until such time as BellSouth can complete TELRIC studies, only interim rates consistent with the FCC's proxies can be established.

Q. HOW IS THE REASONABLE ALLOCATION OF FORWARD-LOOKING JOINT AND COMMON COSTS TO BE ESTABLISHED?

A. As I stated in my initial testimony, one appropriate way to set an *upper bound* for the reasonable allocation of forward-looking joint and common costs would be to determine what allocations BellSouth itself has accepted in setting prices for services that have experienced some measure of actual competition. Such services include Centrex, PBX trunk service, and special access.

Q. WITNESS EMMERSON STATES THAT A "REASONABLE CONTRIBUTION" IS THAT "WHICH WOULD BE OBTAINED ACCORDING TO EFFECTIVELY COMPETITIVE MARKET CONDITIONS." DO YOU AGREE WITH THIS STATEMENT?

A. A market-determined allocation is entirely consistent with the approach I have advocated for allocating joint and common costs. Indeed, witness

Emmerson goes on to state (p. 8, fn. 5) that the contribution could be "minimal or even zero if market conditions so indicate." While he continues by declaring categorically that BellSouth does not experience such conditions, his testimony does not support this declaration. ACSI has asked to review BellSouth's contract prices for its more competitive services, so as to develop some sense as to the mark-up BellSouth affords itself on such services. There is no better way to gauge an upper bound to how much allocation of forward-looking shared costs would be reasonable, assuming competitive market conditions existed. However, as I discuss below, Mr. Emmerson's unique concept of market-determined rates is not consistent with the FCC's mandates in the *Interconnection Order* pursuant to the 1996 Act.

Q. WITNESS SCHEYE STATES THAT "MARKET" PRICING IS APPROPRIATE ONLY FOR COMPETITIVE SERVICES -- IMPLYING THAT ABOVE-MARKET PRICING IS APPROPRIATE FOR MONOPOLY ELEMENTS -- SO AS TO PROVIDE REVENUE SUPPORT FOR LESS COMPETITIVE SERVICES. DO YOU AGREE?

A. No. Indeed, witness Emmerson explains that even competitive services in virtually all cases will include a pricing mark-up above direct costs, allowing for appropriate recovery of shared costs. In other words, competition will not deny the revenue support necessary for economic viability. The market in non-regulated industries will not permit firms to

provide this kind of revenue support for competitive services. BellSouth should not have this luxury. In the wake of the 1996 Act and its requirement of a universal service funding mechanism, there is no longer any need for such a "monopolistic" approach, assuming there ever was.

Q. SHOULD THE MARK-UP OF FORWARD-LOOKING JOINT AND COMMON COSTS BE EQUAL ACROSS ALL ELEMENTS?

A. From the standpoint of policy, there are strong reasons to require approximately equal marks-up on network elements that are provided principally by a single provider, *i.e.*, BellSouth. Theoretically, competitive conditions could lead to different mark-ups for different elements. Indeed, the FCC itself, in its *Interconnection Order*, states that there may be good reasons for some network elements, including unbundled loops, to be allocated a smaller share of common costs over and above what is already incorporated into the measure of TELRIC. *Interconnection Order*, ¶ 696. Certainly, where, as under the 1996 Act, the clear goal is to introduce competition from carriers that take these elements to provide telecommunications services in competition with BellSouth and other incumbent providers, an equal mark-up rule is appropriate. Such a rule (which could allow for minor variations from strict equality, as appropriate) would limit the extent to which joint and common costs could be recovered from any one element. As a result, the rule would prevent cross-subsidies (lowering the mark-up for an element

that the Company provides in competition with other suppliers and increasing the mark-up for other less competitive or monopolistic elements) and provide BellSouth with additional incentives to make more efficient use of overhead. In other words, if BellSouth is able to reduce its overheads through more efficient operating techniques because of the mark-up methodology, it can improve its bottom line.

Q. WHAT IS YOUR ANALYSIS OF THE ALLOCATION METHOD PROPOSED BY WITNESS EMMERSON?

A. In contrast to the (near) equal mark-up rule we propose, witness Emmerson suggests the application of what is known as the "inverse elasticity rule," or Ramsey pricing (p. 10). Under this pricing methodology, BellSouth would be free to increase the mark-up on its least competitive services, the demand for which is least affected by price. However, the FCC, in evaluating the pricing standards the states must follow under the 1996 Act when arbitrating prices for unbundled network elements, expressly rejected Ramsey pricing. The FCC concluded, at ¶ 696 of the *Interconnection Order*, that:

> an allocation methodology that relies exclusively on allocating common costs in inverse proportion to the sensitivity of demand for various network elements and services may not be used. We conclude that such an allocation could unreasonably limit the extent of entry into local exchange markets by allocating more costs to, and thus raising the prices of, the most critical bottleneck inputs, the demand for which tends to be relatively inelastic.

Such an allocation of these costs would undermine the pro-competitive objectives of the 1996 Act.

Q. DO YOU AGREE WITH WITNESS EMMERSON'S STATEMENT THAT THE JOINT AND COMMON COSTS OF A MULTISERVICE NETWORK-BASED LEC LIKE BELLSOUTH ARE SIGNIFICANT?

A. No, I do not concur in his estimate of the relative magnitude of efficiently incurred joint and common costs. At pages 11-12 of his testimony, Emmerson reports that in proceedings in Georgia and Kansas the monopoly incumbent LECS have reported shared and common costs accounting for up to 50 percent of total costs, *i.e.*, all costs over and above long-run incremental costs. My experience with LEC[5] pricing of competitive local services, has been that estimates of this nature result from comparison of LRIC -- not TSLRIC -- to total revenue or total revenue requirements.

Q. WHAT EFFECT DOES THIS APPROACH HAVE ON THE ESTIMATE OF JOINT AND COMMON COSTS AS A PERCENTAGE OF TOTAL COSTS?

A. Comparing LRIC to total revenue or total revenue requirements inflates the estimate of shared and common costs significantly for two reasons. First, by using LRIC as the "numerator," *i.e.*, the portion of costs that are not shared, one underestimates the level of element (or service) specific

[5] *I.e.*, Pacific Bell in California and Bell Atlantic in Pennsylvania.

costs. Specifically, TELRIC (or TSLRIC) equals LRIC *plus* element- (or service-) specific non-volume variable costs. Hence, LRIC is less than -- and never more than -- TELRIC (or TSLRIC).

Second, the "denominator," or total costs, are overestimated when total revenue instead of total cost, is used. The proper number for the present purposes is the sum of TELRIC plus efficiently incurred, forward-looking joint and common costs. By including all costs contained in the monopoly provider's revenue requirements, BellSouth would throw in the full complement of embedded costs, contrary to the requirements established by the 1996 Act and the FCC's *Interconnection Order*.

In sum, the appropriate indication of the direct to total cost is

$$\frac{\text{TELRIC}}{\text{EJCC + TELRIC}}$$

where "EJCC" is the reasonable measure of efficiently incurred joint and common costs, ***not***

$$\frac{\text{LRIC}}{\text{TOTAL REVENUE}}$$

My analysis in California and Pennsylvania, as I stated in my initial testimony, suggest that a mark-up in the vicinity of 10-15% would be more appropriate than an inflationary 100% indicated by BellSouth's witness. In short, the estimate provided by witness Emmerson is inappropriate and even meaningless.

Q. MR. EMMERSON INDICATES AT PAGE 19 OF HIS TESTIMONY THAT THERE IS A NATURAL MONOPOLY ASPECT OF LOOPS AND THAT THIS, IN TURN, SUGGESTS THE EXISTENCE OF LARGE QUANTITIES OF JOINT AND COMMON COSTS RELATIVE TO DIRECT COSTS. DO YOU AGREE WITH THIS CONCLUSION?

A. No. It is true that the existence of substantial economies of scale and scope would likely result in higher levels of common and shared costs than would be the case where economies of scale are not as significant, holding everything else constant. It does not follow, however, that if carriers are not prepared to supply their own loop facilities in this initial phase of opening the market to local competition, a conclusion that there are large quantities of joint and common relative to direct costs will necessarily follow. This is true for at least two reasons.

First, the 'bottleneck' or monopolistic aspect of loop provision may not be in the loop construction or provision itself, but largely may be due to access to the existing rights-of-way. There are no economies of scale or scope, per se, associated with access to rights-of-way. Consequently, the current "monopoly" aspect of the loop is not, in and of itself, a basis on which to draw conclusion with respect to the amount of joint and common costs relative to total costs. Secondly, under the FCC's prescribed methodology, all costs, including the incremental costs of shared facilities and operations, must be attributed to specific elements to the greatest

extent possible.[6] In discussing loops, for example, the FCC included not only the cost of installed copper wire and telephone poles but also the cost of payroll and other back office operations relating to the line technicians. Consequently, using the FCC's prescribed methodology, all relevant costs should be maximally attributable to particular elements.

Q. IS THE UNBUNDLED LOOP RATE ADOPTED BY THE FLORIDA PSC IN DOCKET NO. 950984-TP APPROPRIATE FOR ESTABLISHING INTERIM LOOP RATES?

A. No. As I noted earlier, the 1996 Act, which was enacted after Florida established its interim loop rate, requires that loop rates be set at TELRIC plus a reasonable allocation of forward-looking joint and common costs. In this case, BellSouth to date has provided neither TELRIC information nor sufficient shared and common cost information to establish a rate consistent with the FCC's applicable standards. Their rates in Docket 950984-TP were established only as an interim rate in the absence of appropriate cost analyses. The Florida PSC's discussion in the order authorizing the use of that rate on a interim basis clearly indicates that appropriate cost information was not available.[7] Further, the current

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[6] *Interconnection Order*, ¶ 682.

[7] Order No. PSC-96-0444-FOF-TP, Docket No. 9500984-TP, p. 15-16. "Although cost information was filed for two elements, we are unable to determine whether the cost information is appropriate . . . ."

Florida interim rate exceeds the FCC's proxy rate ceiling by more than $3.00 and does not employ at least three density zones as required by the FCC's *Interconnection Order*. Under that decision, rates for unbundled network elements may not exceed the established proxy ceiling (on a weighted average basis) unless supported by cost studies based on TELRIC plus a reasonable allocation of joint and common costs. In the absence of such cost information, the Florida PSC should use the information derived from the best, publicly available cost model that best approximates the methodologies laid out in the *Interconnection Order*. For the reasons set forth in my Direct and Supplemental Testimony, the best available model is the Hatfield Study, which supports a weighted statewide average below both the $17.00 interim rate and the FCC's $13.68 proxy. In short, the current Florida interim loop rate of $17.00 can neither serve as an interim rate or a permanent state-wide rate or rate average.

Q. ARE THERE ANY OTHER FLAWS IN THE LOOP COST INFORMATION CURRENTLY ON FILE WITH THE FLORIDA PUBLIC SERVICE COMMISSION?

A. Yes. Witness Caldwell (p. 7) explains that BellSouth's loop cost study includes the Network Interface Device ("NID"). In its *Interconnection Order*, the FCC required the NID to be unbundled from the loop. (¶¶ 392-96). The result is that BellSouth's existing cost study necessarily

overstates the costs for the unbundled network element, ignoring any analysis of the cost study methodology itself.

Q. WHAT IS YOUR RESPONSE TO BELLSOUTH'S CRITICISM OF ACSI'S PROPOSAL FOR A SINGLE LOOP RATE FOR ALL LOOP TYPES?

A. BellSouth has mischaracterized ACSI's proposal. First, while ACSI's initial petition proposed a single rate, ACSI noted that higher prices for conditioned loops were to be expected, but that they would have to be supported by BellSouth's cost information. Second, ACSI's single price proposal was for the "most dense" zone. As indicated in my Supplemental Testimony, ACSI has modified its proposal to advocate zone-density pricing in at least three density zones, as the *Interconnection Order* requires. Once again, higher rates for conditioned loops, with the difference based on TELRIC differences, would be appropriate under such zone density pricing.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

Q (By Mr. Horton) Dr. Kahn, do you have a brief summary of your testimony?

A I do. I was retained by ACSI to identify the -- on their behalf to identify the relevant economic costs associated with providing particular unbundled elements that were subject to their application for arbitration. My testimony addresses the issues involved in identifying those costs, and furthermore, to determine how such costs should be used in setting rates for unbundled elements.

I discuss in my testimony three cost-and-pricing standards that I believe should be drawn upon by this Commission in reviewing costs and establishing rates. First, the Commission should recognize that, in a competitive market, prices are price signals, and that they send information into the market. Prices for unbundled elements signal the advisability to any potential entrant as to what kind of entry should take place and where geographically that entry should occur.

It indicates as to whether or not participants in the market should expand and seek additional market share. These price signals will affect the extent to which the market will act efficiently and will respond to customer preferences, and actually the efficiency of

the actual participants in the market in determining market share.

In that regard, it suggests that because these are price signals, that the Commission in its deliberation should focus on the impact on the market itself rather than the impact of any decision on the role of any particular participant in that market.

The cost study established in this regard is one that should be long run, and by that I mean it should reflect the opportunity of the provider of service to adjust the size of the operation, have variable costs involved in meeting capacity requirements, changes in costs, changes in technologies and changes in demands. It should be total service in there and it should be incremental. And the latter point, incremental, meaning it should not reflect the embedded cost of the company, but rather reflect changes in operations.

The second standard that I think the Commission should recognize is that any price established should allow full recovery of all reasonably incurred, efficient, forward-looking costs that any of the service providers realize. In doing this, however, the Commission has to recognize that the services, the unbundled elements we're talking about, are being

provided generally in a monopoly environment. So the issue is not only seeing that the costs are being recovered, but it's seeing that only the costs incurred are being recover, and that monopoly pricing does not result.

The Commission must also recognize that, given the language of the Act, that in fact this cost recovery is not to occur in the context of a rate case, and that is to say, it should not reflect simply the embedded books and the embedded costs on the company's books.

Finally, the final standard is that any cost study adopted, in my opinion, should be open. By that I mean the cost study itself and the data used should be open and subject to public review. Any cost used and the data drawn upon should be subject to public verification. The issue is not the methodology used. Any methodology can be used and should be allowed to be submitted by any party. It's just that the method used and the data relied upon must be open and public to such inspection and review.

Applying those standards to the BellSouth information provided, the conclusions I arrived at is the cost studies provided simply do not meet the test that I've identified and cannot be relied upon by this Commission in establishing the rates that it is

attempting to do for purposes of unbundled network elements.

Information was not provided to us in time to be included in our analysis at prefiled. And based upon the information made available since that time, my bottom line conclusion has not changed.

In my testimony I provide the Commission with two alternatives that it may use when in fact there is insufficient information provided by BellSouth for this purpose. First, I make reference to what's been referred to as the Hatfield Model. The Hatfield Model is an open model. It's based on long run incremental costing concepts and in fact can be used for this purpose.

Secondarily, I make reference to the FCC proxy costs. Those are costs that have been established. Those are costs that have been identified by the FCC for purposes of arbitration proceedings such as these that may be used in lieu of any other information provided by or approved by the company.

In my supplemental testimony -- if I may back up for a moment, in my direct testimony, I focus primarily on economic principles and the requirements of the Act. And basically what I've described to this point, with the exception of reference to the FCC

proxies, was drawn from those two sources.

In my supplemental testimony, I made reference to the fact that we had before us at that time an FCC order, and I drew from that order what we could, with regard to the same standards and the issues before us. Based upon that, I made reference to the concept of FCC proxies and its role as I described a moment ago.

There is one other issue identified in the FCC order that I believe the Commission must address, and that's the issue of geographic deaveraging. It's my opinion that some geographic deaveraging is both appropriate, and quite candidly, will occur.

The issue is what role and what fashion in the Commission's opinion, should it take, given the other policy matters before this Commission.

We propose that whatever geographic deaveraging does occur -- and we propose a geographic deaveraging is ordered at this time -- that it should be cost-based and not based on the market inclinations and strategic marketing desires of the incumbent LEC. We understand that there are both administrative and policy issues involved in doing so. We believe that the number of geographic zones should not be huge, but rather should be manageable. We identify six, and alternatively three, geographic zones in this context in

our testimony.

Finally, my testimony focuses on the issue of a markup for the services. The FCC order recognizes, explicitly, that setting price at incremental cost, in all probability, will not result in the telephone company's recovering total cost of operations, and any participant in a competitive market would be expected to do just that.

We have proposed that such a markup exist, but that the markup not be based on the books of the company. Instead, we propose a competitive market surrogate. The issue with regard to how much more than the incremental cost the telephone company should recur is based upon a measurement of forward-looking, economically efficient joint and common costs. If according to the Act that is not to be done in the context of a rate case, we suggest that it be done by making use of a market surrogate.

We report on information generated in that exact context by our firm in California with regard to the operations of Pacific Bell and GTE Telephone Companies, and of a proposal made by Bell Atlantic of Pennsylvania using the exact same concept in a case in that jurisdiction, in Pennsylvania in particular. In both instances it suggests a markup of approximately 15

percent over TSLRIC.

Finally, I should note that the markup that I'm making reference to, despite the description made by Dr. Emmerson, is not the lowest markup available based on the operations of these companies. The analysis that we perform, the markup that we identified, was a median. And by being a median, it meant that half of the observations of the markup were lower than the 15 percent figure that we were using.

That's a summary of my testimony.

MR. HORTON: Madam Chairman, I would like to ask Dr. Kahn a couple short questions with respect to TELRIC study.

Q (By Mr. Horton) Dr. Kahn, have you reviewed the TELRIC cost study which was recently filed by BellSouth?

A I have.

Q And do you have some comments with respect to that study, brief comments?

A I do. First of all, I would like to make an overall observation, and a few very specific observations. The TELRIC study provided by the Company most recently includes both updates to its TSLRIC analysis, as well as modifications based on TELRIC. Putting aside what it claims to be the modifications

based on TELRIC, in my opinion, causes me some pause in terms of the reliability of the underlying cost study.

Simple passage of time of several months, and based on simple updating of what is claimed to be a forward-looking study, has resulted in substantial changes in the underlying costs simply on a TSLRIC basis. That simply brings into question the simple reliability of that study to be used for setting prices in what is probably going to be a sensitive area with regard to competition and the pricing of monopoly service elements.

For that reason, if only for that reason, I could not recommend to any party to rely on that study, because the number is a very rapidly moving target, and it's not something that could be relied upon.

More specifically, with regard to the cost study, I have to echo the words that Dr. Cornell used, and it is a step backward. The Company has changed the way in which it's measuring spare capacity, from going to some forward-looking to an embedded-based measure. The Company includes a concept now that it's referring to as bridge tap, which is really something that should be included in spare capacity, but it's simply doing that in a manner of increasing the investment in that. It's almost as if that, when in doubt, simply increase

the cost of the loop, which is a mechanism that I think has been in place in the telephone industry for some time.

The Company has included common costs, recovery of joint and -- excuse me, the recovery of joint and common costs as prescribed by the FCC order with regard to TELRIC.

First of all, the measure it used is strictly embedded, not forward-looking. Secondly, whatever amount it included it is assigning disproportionately to the local loop. It is allocating the cost on investment, not as a markup to cost, but simply as a markup to investment. The loop is critically one of the most capital intensive components of the network. The Company did adjust the cost of money, and in that regard I believe it saved the Commission an effort.

Finally, the Company has proposed changes in the depreciation rates used. The initial set of depreciation rates were that which it viewed as appropriate, as I understand it, not the ones that have been approved by either this Commission or the FCC. The Company has simply now indicated that it would like yet a different set of depreciation rates, and has included those.

For those reasons, and if only for those

reasons, I would suggest that the Commission not adopt what the Company has referred to as TELRIC, and for the reasons I indicated, I would suggest that it have some hesitation and pause before adopting what the Company has referred to as TSLRIC.

MR. HORTON: Thank you. Dr. Kahn is available for questions.

MS. DUNSON: No questions.

MS. McMILLIN: No questions.

CHAIRMAN CLARK: Mr. Lackey?

MR. LACKEY: Thank you, Madam Chairman.

CROSS EXAMINATION

BY MR. LACKEY:

Q Dr. Kahn, I'm Doug Lackey appearing on behalf of BellSouth Telecommunications. Your revised Exhibit MHK-1 is the only place where I've found any recommended rates in your testimony. Is there someplace I've missed, or is that the only place where I can find them?

A No, these are the rates that we have put before the Commission and asked the Commission to consider because there is no alternative cost information that we believe is acceptable before the Commission at this time.

Q Now as I understand it, these are the output of the Hatfield Model?

A The vast majority of them are, except for the last number on the page.

Q And the last number is the FCC proxy ceiling?

A That is correct.

Q Now did you run these numbers yourself?

A We did not.

Q Okay, what I'm trying to find out, and I'll ask you as directly as I can, are you holding yourself out as an expert on the Hatfield Model?

A Not to the extent that -- not at this time, and for purposes of this testimony, to the extent that Mr. Wood did. What I have done is reviewed the model. I've made myself competent and comfortable about the way the model is put together, conceptually, the way it works, and what it both tries to and does accomplish in that regard.

Q Well, if I wanted to talk to you about Exhibit 35 and the length of the distribution cable and the census block groups, that sort of thing, would you be familiar with that?

A To some limited degree, but again, not necessarily at the same level of detail at this time, for instance, that Mr. Wood held himself out to be.

Q Do you know anything about Euclidean geometry?

A I probably knew more than I do now.

Q Let me just ask you one or two questions, and if you don't know anything about it, we'll just quit, okay?

Do you have a copy of Exhibit 35? Everybody is routing for you to say you don't know anything about it, by the way. Do you have a copy of Exhibit 35 there?

A I do not.

Q And do you have a copy of the Hatfield description? It's -- well, it was DJW-4.

A Not with me.

Q Do you know enough about the Hatfield Model to know that the way the length of the distribution cable is determined is by taking five-eighths of the side of the square that represents the census block group?

A I do remember the equation and the discussion of the equation in there. I will accept your description for the moment that that's what it boils down to.

Q And do you know enough about the model to know that the number of distribution cables are dependent upon the density of the lines per square mile?

A That's my recollection.

Q Now you -- do you have in front of you Exhibit 35?

A Yes.

Q And that was posed as an exhibit having four lines per square mile density; is that correct?

A That's what it says on it.

Q Do you recall that that generated two distribution loops, 3.125 miles long?

A I don't.

Q So if I were to ask you how many of those distribution cables resulted when the density went to two and a half thousand lines per square mile, you wouldn't know the answer?

A That's correct.

Q Do you know enough about the model in geometry to know whether a square is the most efficient way to measure -- whether the square gives the shortest cable lengths of any geometric figure that would be available in a Hatfield type model?

A I've got a couple of questions built in together in that. You're asking questions about the properties of a square, and then you're asking questions about the property of the square in the context specifically of a Hatfield Model.

Q Let's talk about the properties of the square first?

A I feel confident that when one looks at the Hatfield Model you can answer that question explicitly.

I could not answer it while sitting here.

Q Okay. Well, if it turns out that the output of the Hatfield Model as reflected on your schedule 1 is wrong because there's some fundamental flaw in the Hatfield Model's treatment of distribution cable, you have nothing else to offer the Commission today in terms of rates; is that correct?

A No, I'm not sure that's totally accurate. You are correct that if the output of the Hatfield Model is incorrect, that in fact it should be changed, and the incorrectness in the Hatfield Model is reflected on the numbers on his page. As I did comment, however, in my opinion one of the greatest attributes of the Hatfield Model is that we can identify an error in it because it is open, it is fixable. Unfortunately, I'm not sure we can say that about the alternative.

Q Well, if there's a fundamental mathematical error or if there's a fundamental error in the assumptions that squares actually represent census block groups, that can't be fixed, can it?

A Well, whether or not squares accurately represent census block groups is one question. Whether or not that's an error in the model is a different question.

Q I'm sorry. I asked the question in the wrong

way. You understand there is an assumption that says every census block group looks like a square for purposes of these calculations?

A It's treated as a square, that's correct.

Q If that assumption won't hold, or if that assumption leads to invalid results, then there's nothing you can do to fix that, is there?

A First of all, that's testable. And again, simply because a census block group may not be a square does not make the assumption incorrect. I don't know of a model that has no assumptions in its construct, and by the way that includes the BellSouth models.

So the issue is not whether or not the assumption matches reality, whatever that is, perfectly. That's far different than the question of whether it's right or wrong. But if in fact the model is not any good, then, yes, the numbers will follow from that and the numbers themselves will be in danger.

Q Now in your zones, I take it that -- do you happen to know what the highest 1-FR rate is in Florida, or will you accept, subject to check, that it's $10.65?

A I'll accept your characterization.

Q If I understand the way you've got your zones broken down here, except in the zone where you've got more than 850 lines per square mile, the cost of the

loop that you're assigning on average exceeds the greatest or the highest 1-FR rate charged in the state of Florida; is that correct?

A All those numbers are above $10.65.

MR. LACKEY: That's all I have. Thank you, Madam Chairman.

CHAIRMAN CLARK: Staff.

CROSS EXAMINATION

BY MS. BARONE:

Q Good evening, Dr. Kahn.

A Good evening.

Q My name is Monica Barone. I'll be asking you questions on behalf of Commission Staff. Sir, would you agree that the FCC's TELRIC's cost methodology is the same as a TSLRIC cost methodology of a specific network element?

A Yes.

Q In your rebuttal testimony on Page 2, at Lines 13 through 15, you state that there is no reason to believe TSLRIC will yield lower rates than TELRIC, and in fact the opposite is likely. Would you explain your position for me?

A Yes, and I'm going to assume that your question is at least in part based upon your preceding question.

Q Yes.

A Unfortunately, in the context of the last two months, we have contributed to the English language, and we have expanded it unmercifully. Many of us are using the words "service" and "element" interchangeably and very loosely, and using the words "TSLRIC" and "TELRIC" very loosely also. And I'm assuming your question is really in that spirit or as a result of that.

With that in mind, when I'm talking about TSLRIC in this context, I'm talking about the studies that have traditionally been done by the LECs, as opposed to any theoretically correct TSLRIC that you may have been referencing, for instance, in your preceding question.

And most specifically, what I'm saying here is that as we move from the logic of those studies and focusing on services to a study that focuses on elements rather than the underlying services, the changes that I'm describing here is what I'm making reference to, and that simply when we focus on elements, we're going to come up with a different set of numbers. And there are a lot of different things we're going to be doing than when we focused on services.

Nevertheless, as I said in a preceding question, the underlying cost study logic is the same.

We're attempting to identify something in a long run, we're looking at an incremental change, and we're looking at it on a total service or element basis. But because the object of the cost investigation differs, we're going to capture and identify things in one that we will not capture and identify in the other.

Q Sir, could you provide us with an example?

A Certainly. Quite often -- and telephone companies produce, quote, "TSLRICS" of local exchange service on a regular basis. They produce them independent of how regularly they do. One of the components of that study, as put together by a telephone company, will be the local loop.

We have before us an issue of TELRICs with regard to the local loop. It is my view, when properly constructed, the TELRIC of the local loop is not simply the loop component of that local exchange service. There are a number of differences that will take place. There are a number of maintenance functions, I suggest, that are probably associated with providing local exchange service that may not be necessary when providing simply the loop.

Mr. Stipe, for instance, made reference to a number of functions in that regard. There are a number of aspects of provisioning, thus service, that will not

be necessary for provisioning the element. There are also a number of things that have fallen under the rubric of "retail" in the context of avoided cost, as dealt with in resale, for instance, in this proceeding, that will also be present when we look at the service that will not be present when we look at the element.

Finally -- there is a flip side as well. There are things involved in focusing on elements that are considered joint and common and not included when we focus on services. So that's what I mean that there is an underlying object of identifying the cost and the method that's the same, but there nevertheless still will be differences.

Q On Page 5 of your direct testimony at Lines 14 through 17, you propose a markup over TSLRIC for the recovery of joint and common costs, but limited to what the ILEC elects by its own activities in competitive markets. Would you please explain what you mean by limited to what the ILEC elects by its own activities?

A Certainly. The markup that we currently have over cost, on average, for an ILEC, really reflects the difference between its incremental cost and its revenue requirements. If we're interested in identifying the price that would exist in a competitive market, or attempting to monitor the competitive outcome, what I am

suggesting here is we examine the activities of the telephone company itself, the LEC itself, in that segment of its operations which can be classified as competitive.

In most jurisdictions, as I understand in Florida also, there are customer-specific contracts that are allowed. Those contracts are off-tariff provisions. The rates involved in those are off the tariff and subject to negotiation in a competitive market.

My recommendation is turning to that for information as to what it is that the Company considers to be a reasonable markup in a competitive environment, a reasonable attempt to recover those costs which are generally referred to as joint and common.

Q What type of information do you need from BellSouth to determine the appropriate markup?

A I can tell you specifically the information that we use in our research in California. And what we did in that regard is that we had the contracts themselves and the rates involved in those contracts. With every contract in California, the Company was required to provide cost information in order to justify the contract to see to it that rate was above cost, and cross-subsidy did not result. And finally, we had the

cost studies that the LEC had performed for that generic service. So that we also had that cost information to rely upon in case there were any holes in the information that was provided by looking at the contracts.

That information was made available for both Pacific Bell and for GTE, and we examined that information on -- for one company for 1995 and for another company for 1995 and 1996 contracts. So we, in essence, had every contract that the companies had entered into over that period of time.

Q Are you suggesting that's what you need from BellSouth?

A Depending on the number of contracts, one can use a sampling technique. We were also provided by the companies, I should add, a summary listing of that information, with access to the individual contracts. But to answer your question, yes, I would suggest getting that information. I should add, just to complete it, our attention focused most specifically on contracts dealing with Centrex, though not necessarily unique to Centrex.

Q Sir, have you asked BellSouth during the negotiations to get copies of contracts?

A We served a data request when the application for arbitration was filed with the Commission. We

served the data request seeking that information.

Q Did you get that information?

A To my knowledge, we did not.

Q Sir, what you were just describing, do you believe that's consistent with the FCC's TELRIC and forward-looking economic cost methodology?

A Absolutely.

Q Would you explain why you believe it's consistent?

A Certainly. The FCC, when it made reference to the recovery of joint and common costs, indicated that that should be restricted to the forward-looking, economically efficient joint and common costs and should not be based on embedded costs. The FCC also acknowledged that it could be difficult for a commission to make a determination as to exactly what volume of joint and common costs met that description. It's my view that a competitive market surrogate provides all the information necessary, identifies what a reasonable recovery of those costs would be, allowing the company to recover both that volume of costs and to earn a reasonable return, again a requirement of the Act, and also limits the recovery to those that are reasonable. We're allowing the market to determine reasonableness. Actually, we're allowing the ILEC to determine what

volume is reasonableness. And consistent with the Act, we're not doing it in a rate of return investigation.

Q Sir, why do you believe the ILEC should determine that?

A My point is not so much that the ILEC should. My point is that we have that opportunity.

Q Sir, do you believe that the Hatfield Model meets both the TELRIC principles and the TSLRIC methodology discussed in your testimony?

A I believe it meets the -- from the point of view of network elements, the answer is yes.

Q As opposed to what?

A Pardon me?

Q From the point of --?

A Services themselves. I've only focused on the model from the point of view of costing out network elements.

Q Does ACSI want this Commission to use the Hatfield Model results or the FCC's $13.68 proxy?

A Being a participant in the market, I feel confident that the preferences of Hatfield in terms of whether it would -- excuse me, the preferences of ACSI, whether it would like a higher or lower number, should be fairly obvious.

But to answer the question, I think, much more

specifically from the point of view of the legitimacy, I think what we've got here is that what we do have is we have a proxy established by the FCC, and the proxy established by the FCC is set with an understanding that one can go above that if, and only if, it is justified by a properly structured TELRIC study. But one can go beneath it with good cost information. In that context, it's my opinion that Hatfield provides the necessary data to be able to establish a rate that differs from the proxy.

Q BellSouth's witness, Mr. Emmerson, proposes the inverse elasticity rule for determining the appropriate mark of the amount. Are you familiar with that concept?

A I'm familiar with that concept and I'm familiar with Dr. Emmerson's testimony on that matter.

Q Do you agree with this method?

A No. His recommendation literally is a recipe for price discrimination. Literally, it is a recipe for protecting Bell's current position in the market by allowing Bell to charge as much as possible for network elements when they are under monopoly circumstances, and to reduce the price, if and only if the market requires that. I don't believe that's consistent with the reason why regulation was put in place to begin with, and it's

not consistent with what I believe the goals of this commission are, as it has expressed regularly to date.

Q Sir, are you familiar with Don Wood's testimony?

A Generally.

Q Do you know whether the Hatfield results contained in your exhibit marked MHK-1 are consistent with the results provided by MCI Witness Wood, Don Wood?

A I did not look at any of the exhibits attached to his testimony. I do not know.

Q Sir, can you briefly explain the concept of geographic deaveraging, as described by the FCC?

A I think what the FCC was making reference to is the fact that the cost of providing certain network elements is not going to be constant across the state. And it's in that context it was talking geography.

I believe, however, the FCC went one step further than that, and indicated its preference, and in fact its very strong preference, that to the extent there are differences, the differences that are reflected in prices charged should be cost-based. There is plenty of language in the FCC's order where it indicates its absolute concern about price discrimination. And to the extent that price cost differentials vary, it believes there is an incredible

burden upon anybody who proposes such variation.

With that in mind, I believe that what the FCC is indicating, is to the extent that there are material differences in cost, across a state, for providing any unbundled network element, that in fact those cost differences should be reflected in price differences, and that cost should be the base of those differences in prices.

Q Does the Hatfield Model provide geographically deaveraged rates?

A Yes, it does.

Q Do you know if any of BellSouth's cost studies contain geographically deaveraged rates?

A The studies filed in Florida do not.

Q Sir, I would like to turn your attention to Page 11 of your rebuttal testimony where you state that you do not agree with BellSouth Witness Emmerson's statement that the joint and common costs of a multiservice network-based LEC are significant.

A I have that.

Q Would you explain your position, please?

A Certainly. To be clear, are you talking about more or less what is on the top half of that page?

(Transcript continues in sequence in Volume 10.)