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Guy M. Hicks
General Counsel

'99 OCT 15 PM 2 02

EXECUTIVE SECRETARY

October 15, 1999

VIA HAND DELIVERY

David Waddell, Executive Secretary
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37238

Re: *Petition for Arbitration of ITC^DeltaCom Communications, Inc. with BellSouth Telecommunications, Inc. pursuant to the Telecommunications Act of 1996*
Docket No. 99-00430

Dear Mr. Waddell:

Enclosed are the original and thirteen copies of the following non-proprietary testimony being filed on behalf of BellSouth Telecommunications, Inc.

Daonne Caldwell	Ronald Pate
Keith Milner	William Taylor
David Scollard	Al Varner
David Coon	

Copies of the enclosed are being provided to counsel of record for all parties.

Very truly yours,

Guy M. Hicks

Guy M. Hicks

GMH/ch
Enclosure

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182530

CERTIFICATE OF SERVICE

I hereby certify that on October 15, 1999, a copy of the foregoing document was served on the parties of record, via the method indicated:

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Richard Collier, Esquire
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243-0500

[✓] Hand
[ ] Mail
[ ] Facsimile
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H. LaDon Baltimore, Esquire
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General Counsel

REC'D TN REGULATORY AUTH.
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OFFICE OF THE EXECUTIVE SECRETARY

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BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF D. DAONNE CALDWELL

BEFORE THE TENNESSEE REGULATORY AUTHORITY

DOCKET NO. 99-00430

OCTOBER 15, 1999

Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

A. My name is D. Daonne Caldwell. My business address is 675 W. Peachtree St., N.E., Atlanta, Georgia. I am a Director in the Finance Department of BellSouth Telecommunications, Inc. (hereinafter referred to as "BellSouth" or "the Company"). My area of responsibility relates to economic costs.

Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. I attended the University of Mississippi, graduating with a Master of Science Degree in mathematics. I have attended numerous Bell Communications Research, Inc. ("Bellcore") courses and outside seminars relating to service cost studies and economic principles.

My initial employment was with South Central Bell in 1976 in the Tupelo, Mississippi, Engineering Department where I was responsible for Outside Plant Planning. In 1983, I transferred to BellSouth Services, Inc. in Birmingham,

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Alabama, and was responsible for the Centralized Results System Database. I moved to the Pricing and Economics Department in 1984 where I developed methodology for service cost studies until 1986 when I accepted a rotational assignment with Bellcore. While at Bellcore, I was responsible for development and instruction of the Service Cost Studies Curriculum including courses such as "Concepts of Service Cost Studies", "Network Service Costs", "Nonrecurring Costs", and "Cost Studies for New Technologies". In 1990, I returned to BellSouth and was appointed to a position in the cost organization, which is now a part of the Finance Department, with the responsibility of managing the development of cost studies for transport facilities, both loop and interoffice. My current responsibilities encompass testifying in cost-related dockets, cost methodology development, and the coordination of cost study filings.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to respond to the cost aspects of the following issue:

Issue 6 (d): What should be the appropriate recurring and nonrecurring charges for cageless and shared collocation in light of the recent FCC Advanced Services Order No. FCC 99-48, issued March 31, 1999, in Docket No. CC 98-147?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY ON THIS ISSUE?

A. The Authority should adopt the cost studies BellSouth has submitted in this proceeding in establishing rates for the collocation elements that are not at issue in the generic cost docket, Petition to Convene a Contested Proceeding to Establish Permanent Prices for Interconnection and Unbundled Network Elements, Docket No. 97-01262. These collocation elements are fiber cross-connects and fiber POT (point of termination) bays, which DeltaCom may request in connection with cageless or shared collocation.

Q. PLEASE PROVIDE AN OVERVIEW OF YOUR TESTIMONY.

A. In my testimony I describe the underlying cost methodology used in BellSouth's cost study that has been submitted in this proceeding. Attached to this testimony, as Exhibit DDC-1, is BellSouth's cost study in both a paper format and on a CD-ROM. Included in the study are an executive overview, a summary of results, element descriptions, factor development, TELRIC Calculator©[1] input and outputs, and investment development work papers. Because the study contains proprietary information, the study is being submitted subject to the terms of a protective order. BellSouth witness, Mr. Al Varner, addresses the rates BellSouth is proposing.

Q. IS NOT THE TRA ADDRESSING ISSUES CONCERNING UNBUNDLED NETWORK ELEMENT COSTS IN DOCKET NO. 97-01262?

[1] ©1997 BellSouth Corporation. All Rights Reserved.

A. Yes. The TRA published an Interim Order in Phase I[2] on January 25, 1999, and on February 24, 1999, BellSouth filed compliant cost studies based on BellSouth's understanding of the TRA's decisions. However, subsequent to release of the Interim Order, several parties, including BellSouth, asked for reconsideration and clarification on a number of issues. Although the TRA addressed these issues at its April 20, 1999 Directors' Conference, a written order has not yet been entered resolving the motions for reconsideration and clarification.

Furthermore, there are certain network capabilities that are not being addressed by the TRA in Docket 97-01262. For example, the parties did not submit cost studies for fiber cross-connects and fiber POT (point of termination) bays, and as a result, it is not expected that the TRA will establish rates for these collocation elements. Because DeltaCom may request fiber cross-connects and fiber POT bays in connection with cageless or shared collocation, it is necessary for the TRA to review cost studies and establish rates for these elements.

Q. DID NOT THE TRA DECIDE IN DOCKET 97-01262 TO ADOPT THE AT&T/MCI COLLOCATION MODEL IN DETERMINING COLLOCATION COSTS? IF SO, WHY NOT USE THAT MODEL FOR DETERMINING THE COST OF FIBER CROSS-CONNECTS AND FIBER

---

[2] In Phase I, the TRA determined the adjustments for each cost model presented. In Phase II, the TRA will determine the prices for interconnection and unbundled network elements based on the cost studies filed in compliance with the Interim Order.

POT BAYS AT ISSUE IN THIS PROCEEDING?

A. In response to Issue 19 in Docket 97-01262 ("What approach should be adopted for calculating prices for physical collocation"), the TRA adopted the AT&T/MCI collocation model. However, the AT&T/MCI collocation model failed to produce costs for fiber cross-connects or fiber POT bays. As a result, if the TRA is going to establish cost-based rates for these collocation elements, the TRA must use a different collocation cost model. BellSouth has submitted its TELRIC Calculator© to produce the costs for fiber cross-connects and fiber POT bays.

Q. WHAT TYPES OF COSTS ARE REFLECTED IN BELLSOUTH'S COST STUDY?

A. The cost study reflects both recurring and nonrecurring costs. Recurring costs include both capital and non-capital costs. Capital costs are associated with the purchase of an item of plant, i.e., an investment. They consist of depreciation, cost of money, and income tax. Non-capital recurring costs are expenses associated with the use of an investment. These operating expenses consist of plant-specific expenses, such as maintenance, ad valorem taxes and gross receipts taxes.

Nonrecurring costs are one-time expenses associated with provisioning, installing and disconnecting the network capability. These costs typically include five major categories of activity: service inquiries, service order, engineering, connect and test, and technician travel time.

Q. WHAT COST METHODOLOGY IS USED IN BELLSOUTH'S COST STUDY SUBMITTED IN THIS DOCKET?

A. The TRA's response to Issue 1 in the Interim Order[3] established the cost methodology that should provide the foundation for both the cost models and the inputs. Page 8 of the Interim Order states: "The Authority finds that prices should be established using the forward-looking economic cost methodology as defined by the FCC's TELRIC methodology, including an appropriate markup for the recovery of shared and common costs. This methodology ensures that costs used to set prices for UNEs will reflect the inputs, quantities, and prices faced by an efficient firm using the least-cost technology." In establishing the pricing standard as TELRIC economic cost, the TRA has also determined that the TELRIC economic cost methodology should be followed for developing the costs.

Q. IN YOUR OPINION, IS BELLSOUTH'S COST STUDY CONSISTENT WITH THE FEDERAL COMMUNICATIONS COMMISSION'S ("FCC's") COSTING METHODOLOGY?

A. Yes. BellSouth's cost study is consistent with the FCC's costing methodology as set forth in FCC Rule 51.505 (Forward-looking economic cost) which defines the FCC's cost methodology for Unbundled Network Elements ("UNEs"). Pursuant to the FCC's rules, such costs must be developed using an efficient network

[3] Issue 1: What cost methodology should the TRA use in setting interconnection and Unbundled Network Elements ("UNE") prices?

configuration that uses the existing location of the Incumbent Local Exchange Carrier's ("ILEC's") wire centers. Further, the costs should be developed using a forward-looking cost of capital and economic depreciation rates, and a reasonable allocation of forward-looking common costs is appropriate. The forward-looking economic costs may not include embedded costs, retail costs, opportunity costs or revenues to subsidize other services.

The recent Supreme Court ruling that resulted in reinstatement of the FCC's pricing rules does not impact the underlying cost methodology, i.e., TELRIC methodology. The same guidelines are still in place:

- Costs should reflect forward-looking, efficient network architecture, engineering and materials and equipment.
- Costs should be developed individually for each unbundled network element.
- Costs should be based on the particular materials, equipment, and installation requirements associated with provisioning a specific unbundled network element, to the greatest extent possible.
- Costs should be complete, reflecting the full costs of installation as well as the inclusion of shared and common costs.

BellSouth used these FCC guidelines in the cost study filed in this docket.

Q. PLEASE PROVIDE SOME BACKGROUND TO DOCKET NO. 97-01262.

A. BellSouth filed cost studies to support permanent prices for various network elements that were contained in BellSouth's interconnection agreements or for which the TRA had previously established interim rates. The studies were filed electronically with complete documentation. With these studies, BellSouth introduced a new cost model, the TELRIC Calculator©. The TELRIC Calculator© converts material prices and labor work times to cost. The TRA has not issued a final ruling as to the acceptability of BellSouth's TELRIC Calculator©. Page 7 of the Interim Order states: "The Authority does not choose a cost model in Phase I, but orders adjustments to both BST's TELRIC Calculator and the Hatfield model".

Q. ARE THE ADJUSTMENTS TO BELLSOUTH'S INPUTS ORDERED BY THE TRA INCORPORATED IN THE COST STUDY RESULTS PRESENTED IN THIS DOCKET?

A. Yes. The TRA-ordered inputs that are relevant to the cost elements in this proceeding are included. For example, the cost study includes the TRA-ordered cost of money, depreciation lives, and shared and common factors.

Q. PLEASE ELABORATE ON THE ADJUSTMENTS BELLSOUTH INCORPORATED IN THE COST STUDY TO FULFILL THE TRA'S INTERIM ORDER IN DOCKET NO. 97-01262.

A. I will address each of the adjustments included in this filing and reference the issue

and the appropriate discussion from the TRA's Interim Order in Docket No. 97-01262. The cost study attached to this testimony follows the intent of each TRA adjustment. Where appropriate, the inputs have been updated to reflect the study period, 1998-2000.

First, the TRA adopted ACSI's recommended markup of 15% to account for shared and common costs. (Page 11 of the Interim Order.) This adjustment was "hard coded" into BellSouth's TELRIC Calculator's© Shared and Common cost module included in this filing.

Second, the TRA mandated that the models use Tennessee-specific depreciation lives, salvage values and other inputs used in calculating the depreciation rates as established by the former Tennessee Public Service Commission in Docket No. 92-13527. [4] (Page 13 of the Interim Order) The ordered depreciation rates were incorporated into the study included in this docket.

Third, BellSouth's cost study reflects the following adjustments ordered by the TRA: (1) overall cost of capital of 10.46%; (2) debt ratio of 40%; (3) 7.30% cost of debt; (4) equity ratio of 60%; (5) 12.46% cost of equity. (Page 15 of the Interim Order)

Fourth, the TRA directed that BellSouth's normalized 1996 plant specific expense should be reduced by 22.5% for calculating network maintenance expense. (Page

[4] BellSouth's request for reconsideration on this issue was denied during the April 20, 1999 Director's conference.

17 of the Interim Order) However, in the April 20, 1999 Director's Conference, the TRA reconsidered this aspect of the Interim Order and limited the 22.5% reduction to network operations expenses only. (Page 10 of the Transcript) The April 20th adjustment is reflected in this filing.

Fifth, the TRA adjusted the ad valorem tax to reflect the actual 1998 tax rate of .0116. (Page 17 of the Interim Order) This adjustment was included in this filing.

Sixth, the TRA concluded that unbundled network elements should be priced in a manner that considers the time value of money by employing monthly compounding in calculating the monthly rate from an annual cost. (Page 18 of the Interim Order) In other words, BellSouth was ordered to reflect monthly compounding using the approved overall cost of money of 10.46%. This methodology was reflected in BellSouth's cost study.

Seventh, the TRA concluded that only direct costs should be recovered through nonrecurring charges. (Page 31 of the Interim Order) Thus, BellSouth has removed shared and common costs from the calculation of nonrecurring costs. Because of this aspect of the Interim Order, BellSouth had to make two computer runs. A run was made using a common cost factor of 15% (which the TRA established in response to Issue 3) to calculate recurring costs. Then another run was made using a common cost factor of zero to calculate nonrecurring costs. Both runs are contained on the CD-ROM, one labeled Recurring (15% common cost factor) and the other Nonrecurring (0% common cost factor).

Eighth, the TRA ordered a fallout rate of 7% and three minutes of work activity by the Local Customer Service Center ("LCSC"). (Page 33 of the Interim Order) However, in response to BellSouth request for reconsideration at the April 20, 1999 Director's Conference, the TRA decided that "BellSouth's model should be adjusted to reflect 15 minutes of work time to resolve a fallout situation that will occur 7 percent of the time." (Page 18 of the Transcript) The April 20th clarification was included in this filing.

Ninth, the TRA determined that disconnect costs should be separated from installation costs and should be assessed at the time of disconnect. (Page 35 of the Interim Order). BellSouth removed disconnect costs from installation costs and calculated the disconnect costs as separate elements.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. The cost study filed in this proceeding determines Tennessee-specific TELRIC economic costs for fiber cross-connects and fiber POT bays. The costs were developed using the basic study methodology and approved input values previously outlined by the TRA in its Interim Order in Docket No. 97-01262 and the reconsideration granted at the April 20, 1999 Director's Conference.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

AFFIDAVIT

STATE OF: Georgia
COUNTY OF: Fulton

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared D. Daonne Caldwell-Director-Finance, BellSouth Telecommunications, Inc., who, being by me first duly sworn deposed and said that:

He is appearing as a witness before the Tennessee Regulatory Authority in Docket No. 99-00430 on behalf of BellSouth Telecommunications, Inc., and if present before the Authority and duly sworn, his testimony would be set forth in the annexed testimony consisting of 11 pages and 1 exhibit(s).

D. Daonne Caldwell

D. Daonne Caldwell

Sworn to and subscribed
before me this 15th
day of October, 1999

NOTARY PUBLIC

MICHEALE F. HOLCOMB
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2001

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Electronic copies of filing, models, spreadsheets and instructions (Proprietary and Nonproprietary)

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SECTION 1
STUDY METHODOLOGY

STATEMENT OF PURPOSE

ITC^DeltaCom filed a Petition for Arbitration with the Tennessee Regulatory Authority (TRA). That petition requested the settlement of rates for some network capabilities for which the TRA has not previously established rates. BellSouth Telecommunications, Inc. (hereinafter referred to as BellSouth or the Company) is filing cost studies for the requested network capabilities.

Included in this document are Total Element Long Run Incremental Cost (TELRIC) studies, including common costs, which comply with the orders and regulations established by the TRA in the Interim Order On Phase 1 Of Proceeding To Establish Prices For Interconnection And Unbundled Network Elements, Docket 97-01262.

In accordance with this Interim Order, Shared factors have been set at 0%. The TRA also adopted a common cost factor of 15% for recurring costs and 0% for nonrecurring costs. Other factors and labor rates have been updated from the values presented in Docket 97-01262 to reflect a 1998 - 2000 study period. Based on the transcript of the Directors Conference dated April 20, 1999 concerning Issue 7, the updated plant specific expenses were not reduced by 22.5%.

BellSouth's TELRIC Calculator© Model, used to produce the studies submitted in this filing, does not have the capability to include more than one common cost factor, that is one for recurring and one for nonrecurring. In order to comply with the TRA requirements to apply a 15% common factor to recurring costs and a 0% factor to nonrecurring costs, BellSouth is including in its electronic filing, a recurring cost version of the model and a separate nonrecurring cost version of the model.

BellSouth TELRIC Calculator
Unbundled Network Cost Elements Summary Report
Tennessee
Base Case - Recurring And Nonrecurring

8/19/99

	Cost Element	Recurring	Non Recurring	Non-Recurring First	Non-Recurring Additional	Non-Recurring Initial	Non-Recurring Subsequent
H.0	COLLOCATION						
H.1	PHYSICAL COLLOCATION						
H.1.31	Physical Collocation - 2-fiber Cross Connect	$15.64		$41.56	$29.82		
H.1.32	Physical Collocation - 4-fiber Cross Connect	$28.11		$50.53	$38.78		
H.1.33	Physical Collocation - 2-fiber POT Bay	$38.79					
H.1.34	Physical Collocation - 4-fiber POT Bay	$52.31					
H.1.35	Physical Collocation - 2-fiber Cross Connect -Incremental Cost - Manual Svc Order vs. Electronic			$2.69	$2.69		
H.1.36	Physical Collocation - 4-fiber Cross Connect - Incremental Cost - Manual Svc Order vs. Electronic			$2.69	$2.69		
H.1.3199	Physical Collocation - 2-fiber Cross Connect - Disconnect			$12.96	$10.34		
H.1.3299	Physical Collocation - 4-fiber Cross Connect - Disconnect			$16.97	$14.35		
H.1.3599	Physical Collocation - 2-fiber Cross Connect -Incremental Cost - Manual Svc Order vs. Electronic - Disconnect			$1.56	$1.56		
H.1.3699	Physical Collocation - 4-fiber Cross Connect - Incremental Cost - Manual Svc Order vs. Electronic - Disconnect			$1.56	$1.56		
H.2	VIRTUAL COLLOCATION						
H.2.16	Virtual Collocation - 2-Fiber Cross Connects	$3.03		$41.56	$29.82		
H.2.17	Virtual Collocation - 4-Fiber Cross Connects	$6.06		$50.53	$38.78		
H.2.18	Virtual Collocation - 2-Fiber Cross Connects - Incremental Cost - Manual Svc Order vs. Electronic			$2.69	$2.69		
H.2.19	Virtual Collocation - 4-Fiber Cross Connects - Incremental Cost - Manual Svc Order vs. Electronic			$2.69	$2.69		
H.2.1699	Virtual Collocation - 2-Fiber Cross Connects - Disconnect			$12.96	$10.34		
H.2.1799	Virtual Collocation - 4-Fiber Cross Connects - Disconnect			$16.97	$14.35		
H.2.1899	Virtual Collocation - 2-Fiber Cross Connects - Incremental Cost - Manual Svc Order vs. Electronic - Disconnect			$1.56	$1.56		
H.2.1999	Virtual Collocation - 4-Fiber Cross Connects - Incremental Cost - Manual Svc Order vs. Electronic - Disconnect			$1.56	$1.56		

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SECTION 2
STUDY METHODOLOGY

TOTAL ELEMENT LONG RUN INCREMENTAL COST (TELRIC)

The studies submitted with this filing adhere to the Total Element Long Run Incremental Cost (TELRIC) methodology as envisioned by the Federal Communications Commission (FCC). The basic guidelines that form the foundation of a TELRIC study are:

1) The studies should reflect a long-run perspective. Long run implies a period long enough that all costs are variable. In other words, this principle assumes all costs are avoidable in the long run.

2) Cost causation is a key concept in incremental costing. Thus, only those costs that are directly caused by the particular item being studied are considered. This principle mandates the identification of costs directly attributable to providing a "service" (network capability).

3) The increment being studied should be the entire quantity of service. This point recognizes that costs normally thought of as shared in a service-specific study, would be included in a study of a network capability. For example, in a service study, the planning engineer's costs associated with loops would be shared across many product lines, e.g. ESSX, coin, business. In an unbundled network element study, this cost would be directly attributable to the loop element.

4) Any function necessary to produce a service must have an associated cost. In essence, this guideline states that no sunk costs should be included.

5) Common overheads are not part of a long run incremental cost study. However, the FCC's TELRIC methodology allows for the recovery of "a reasonable allocation of forward-looking common costs". Thus, BellSouth has considered common costs to produce the TELRIC economic cost.

6) The technology used should reflect the least cost, most efficient technology.

7) Costs should be forward-looking.

There are two generic types of costs that have been studied: recurring and nonrecurring.

RECURRING COSTS

The monthly costs resulting from capital investments deployed to provision network elements are called recurring costs. Recurring costs include capital and

operating costs. Capital costs include depreciation, cost of money and income tax. Operating costs include the expenses for maintenance, ad valorem and other taxes and represent ongoing costs associated with upkeep of the initial capital investment. Gross receipts tax (which includes municipal license taxes and PSC fees) is added.

The first step in developing recurring TELRIC studies is to determine the forward-looking network architecture that, when deployed, represents the most efficient design to provision the network element. The material prices for the equipment necessary to implement the forward-looking design are gathered. Next, account specific Telephone Plant Indexes (TPIs) are applied, when necessary, to trend material prices to the base study period. Telecommunications equipment and plant placements are typically "lumpy". Thus, utilization (or fill) factors are applied to the material prices to reflect BellSouth's forward-looking actual utilization of the plant. Also, when multiple vendors are used, it is necessary to determine the average material price for a typical element based on the probability of occurrence. Inflation Factors, by plant account code, are then applied to the material prices to trend the base-year material price to levelized amounts that are valid for a three-year planning period. In order to convert the material prices to installed investments account specific inplant loadings are applied to the material prices. The inplant loadings include engineering and installation labor (both BellSouth and vendor), exempt material and sales taxes.

Supporting equipment and power loadings are added, as appropriate to specific investment accounts. Next, supporting structure investments for land, building, poles and conduit are developed. These supporting structure investments are identified by their relationship to the respective item of plant being supported. For example, applying a pole-loading factor against the aerial cable investment develops the pole investment.

1998 - 2000 level Annual Cost Factors are used to calculate the direct cost of capital, plant specific expenses and taxes. Account specific factors for each Uniform System of Accounts – Field Reporting Code (USOA-FRC) are applied to the investment by account code, yielding an annual cost per account code. Account specific shared cost factors are applied to produce forward-looking TELRIC costs. Then the common cost allocation factor and the gross receipts tax factor are applied. The result is the economic cost.

The generic steps for developing recurring cost can be summarized as shown below. The unique technical characteristics and physical makeup of each service cost element must be taken into consideration.

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SECTION 2
STUDY METHODOLOGY

Step 1: Determine the forward looking network designs (architectures) which will be used in deployment of the network element.

Step 2: Determine current material prices for the items of plant used in each design. Material prices are obtained from BellSouth contracts with various vendors.

Step 3: Apply material Telephone Plant Indexes (TPIs) as appropriate to determine the base year material prices. Material TPIs estimate the changes in material prices over time.

Step 4: Adjust the material prices for utilization to account for spare capacity using a reasonable projection of actual total usage.

Step 5: Weight the material prices, as appropriate, to determine the average material price for a typical element by USOA-FRC, i.e., plant account.

Step 6: Apply material inflation factors, referred to as levelization factors, to the material prices to convert the utilized base year material prices to material prices representative of a three year planning period.

Step 7: Apply inplant loadings to the levelized material prices to convert the material prices to an installed investment, which includes the cost of material, engineering labor and installation labor.

Step 8: Apply support loadings to the investments to determine investments for support equipment and power, land, buildings, poles and conduit as appropriate.

Step 9: Convert the investments by FRC to annual costs by applying account specific TELRIC annual cost factors to the various investments. The annual cost factors calculate the capital costs (depreciation, cost of money, and income tax) and operating expenses (plant specific expense, ad valorem taxes, and other taxes). Add the annual costs for the various FRCs. Next divide by 12 to determine the direct monthly cost.

Step 10: Apply the shared cost (account specific) factors. Then apply the gross receipts tax factor. The result is TELRIC.

Step 11: Apply the common cost allocation factor to determine economic costs.

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SECTION 2
STUDY METHODOLOGY

NONRECURRING COSTS

Nonrecurring costs are one-time expenses associated with provisioning, installing and disconnecting a network capability. These costs include five major categories of activity: service order inquiry, service order processing, engineering, connect and test, and technician travel time. Examples of the work activities in each of these categories are:

Service Order Inquiry – Verify that facilities are available to provide service
Service Order Processing - Prepare and issue service orders
Engineering - Assign cable and pair; design circuit; order plug-in; perform translations in the switch
Connect and Test - Install circuit; test circuit; disconnect
Technician Travel Time - Travel to the customer's premises

The first step in developing nonrecurring costs is to determine the cost elements associated with the network capability. These cost elements are then described by the individual activities required to provision the cost element. Individuals familiar with the network capability identify which activities are applicable. Subject matter experts identify the amount of time required to perform the task and also determine the probability that the activity will occur. Provisioning costs are developed by multiplying the work time for each work function by the labor rate for the work group performing the function.

Utilizing work functions, work times, and labor rates, disconnect costs are calculated in the same manner as the installation costs.

The generic steps for developing nonrecurring costs are summarized in the following steps:

Step 1: Determine the cost elements to be developed.
Step 2: Define the work functions.
Step 3: Establish work flows.
Step 4: Determine work times for each work function.
Step 5: Develop labor costs for each work function (labor rate x work time).
Step 6: Accumulate work function costs to determine the total nonrecurring costs for each cost element. Add gross receipts tax. The result is TELRIC.
Step 7: Apply the Common Cost Allocation factor to determine the economic costs.

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SECTION 2
STUDY METHODOLOGY

The TELRIC Calculator©, a model developed by BellSouth, produces long run incremental cost studies. The model was designed to accept variable inputs that are applied according to a user-controlled matrix. The TELRIC Calculator© was used to produce the TELRIC studies included in this filing. Additionally, this is the same model presented to the TRA in Docket 97-01262.

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SECTION 3
DESCRIPTION OF MODELS AND PRICE CALCULATORS

1. TELRIC Calculator©

The TELRIC Calculator© consists of three Microsoft Excel templates. The templates consist of twenty-one sheets each, eight for receiving input data and thirteen for calculations. All templates perform calculations in exactly the same manner and differ only in the number of decimal places displayed. It should be noted that no rounding is done in any of the sheets.

The TELRIC Calculator© User Interface takes information from the default data sources or from the user-modified sources and inputs them into the appropriate template depending on the cost element selected. Investments are entered by Field Reporting Code (FRC), Sub Field Reporting Code (Sub-FRC), and cost element number into the sheet called "Investments". The sub-FRC is used by the TELRIC Calculator© to determine the appropriate application of factors and loadings, which are applied based on a matrix contained in "Factor Matrix". Factors and loadings are placed by FRC on the sheet labeled "Factors". Recurring and nonrecurring work times are placed by function and Job Function Code (JFC) or Payband into the sheets labeled "Recurring Labor" and "Nonrecurring Labor", respectively. Other recurring and nonrecurring expenses are entered by description into the sheet called "Additives". Lastly, direct labor rates are placed by JFC or Payband into the sheet called "Labor Rates".

The inputs then flow automatically through the "calculator" portions of the template. These sheets are labeled TELRIC Recurring Summary, INVEST-VS, INVEST-VI, LBPC-VS, LBPC-VI, FRCTELRIC-VS, FRCTELRIC-VI, RECEXP, TELRIC NRC Summary A, NR-NR, TELRIC NRC Summary B, NR-1A, and NR-IS. The function and detail of these sheets are outlined in the following narrative.

TELRIC Calculator© Recurring Worksheets

Investment Development (Excluding Land, Building, Pole, & Conduit)
Investment development begins in the worksheets INVEST-VS and INVEST-VI, where volume sensitive and volume insensitive investments by FRC and sub-FRC flow from the input sheets. The inflation factors, inplant loadings and supporting equipment and/or power loadings are applied, if applicable. As stated previously, the application of these factors/loadings is driven by a matrix contained within the template. If the factor/loading is not applicable to the FRC and sub-FRC, the investment is multiplied by the default value of one. All calculations are detailed above each cell. These investments flow to the Land, Building, Pole, & Conduit Development sheet and to the Recurring Cost Development sheet.

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Land, Building, Pole, & Conduit Investment Development
Investments from the Investment Development sheets flow into the sheets LBPC-VS and LBPC-VI. These worksheets apply land, building, pole, and conduit loadings to the investments. Land, building, pole, and conduit investments carried from the Investment Development sheets are multiplied by a factor of one. If one or all of these factors do not apply to an FRC, excluding land, building, pole, and conduit FRCs, the factor defaults to zero. The results are then summed and totaled at the top of the sheet and flow to the next sheet. All calculations are detailed above each cell.

Recurring Cost Development
The investments from the Investment Development and the Land, Building, Pole, and Conduit Investment Development sheets are summed to the FRC level and flow into the sheets called FRCTELRIC-VS and FRCTELRIC-VI. These sheets apply depreciation, cost of money (COM), income tax, plant specific, and ad valorem tax factors to the investments. If a factor does not apply, the default is zero. These results are then summed to produce direct cost. All calculations are detailed above each cell. The shared cost factor is applied to the investments to produce shared cost and then added to direct cost to produce TELRIC. The user has the option of designating the type of cost produced, e.g. whether the final cost is billed on a monthly basis or on a per minute of use (MOU) basis. Thus, if the input investments are annual investments, the resulting cost outputs are divided by twelve to produce monthly costs. The results then flow to the summary sheet. The common cost factor is applied on the summary sheet to produce economic cost.

Recurring Labor Expense Development
Recurring labor work times flow to the worksheet called RECEXP. The times are associated with a work function and a JFC or Payband. The associated direct labor rates, and TELRIC labor rates, determined by the JFC or Payband, are applied to the work times to produce both the direct expenses and TELRIC expenses. These expenses flow to the summary sheet. All calculations are detailed above each cell.

Recurring Cost Development
Recurring direct costs from sheets FRCTELRIC-VS and FRCTELRIC-VI, recurring direct expenses from sheet RECEXP, and other expenses from the input sheet "Additives" flow to the sheet called TELRIC Recurring Summary. All costs and expenses are summed to a total cost. This cost is then multiplied by Gross Receipts Tax and Common Cost factors to obtain the volume sensitive

and volume insensitive recurring costs. These two costs are summed to produce economic costs.

All, some, or none of the previously described recurring cost development sheets will be included with a cost element, depending on their applicability.

TELRIC Calculator© Nonrecurring Worksheets

Nonrecurring Cost Development
Installation and disconnect work times by work function and JFC or Payband flow from the input sheet "Nonrecurring Labor" to the three nonrecurring cost development sheets called NR-NR, NR-1A, and NR-IS. The three sheets exist to accommodate different types of nonrecurring charge structures. The sheet NR-NR develops cost for a single nonrecurring charge, the sheet NR-1A develops cost for charges which are first and additional, and the sheet NR-IS develops cost for charges which are initial and subsequent. Only one of these three sheets is populated with actual work times for a cost element; the other sheets receive work time values of zero. The cost development methodology is the same for all three sheets.

The TELRIC Calculator© User Interface calculates the disconnect factor and places this factor into the "Factors" input sheet which causes it to flow to the three nonrecurring cost development sheets. Disconnect factors are used to develop the present value of a labor cost that will take place in the future. The interface develops this factor by first locating the factor associated with the study midpoint date in the working database. The end-point date is then determined by adding the cost element life, in months, to the midpoint date. The factor associated with this date is then divided by the midpoint factor. If there is no cost element life indicated (i.e., value equals zero), the disconnect factor is one. If the disconnect cost is to be collected at the time of disconnect, a future value is calculated. Disconnect cost is not converted to a present value.

To develop the direct cost, the appropriate direct labor rate for the JFC or Payband is applied to the installation and disconnect work times for each function to produce the install cost and the disconnect cost. The costs then flow to the appropriate summary sheet. All calculations are detailed above each cell.

To develop the TELRIC cost, the appropriate TELRIC labor rate for the JFC or Payband is applied to the installation and disconnect work times for each function to produce the install TELRIC and the disconnect TELRIC. The steps are then the same as those for developing the direct cost.

Nonrecurring Cost Development
Nonrecurring direct costs from sheets NR-NR, NR-1A, NR-IS, and other expenses from the input sheet "Additives" flow to the sheets called "TELRIC NRC Summary A" and "TELRIC NRC Summary B". The first sheet summarizes a single nonrecurring cost; the second sheet summarizes first and additional costs or initial and subsequent costs. Costs and expenses are summed to a total cost. This cost is then multiplied by Gross Receipts Tax and Common Cost factors to produce the Nonrecurring economic costs.

Depending on the structure of the nonrecurring cost, only two of the cost development sheets will be included with a cost element. The sheets NR-NR and TELRIC NRC Summary A will be included with the single cost structure. The sheets NR-1A and TELRIC NRC Summary B will be included with the first and additional cost structure. The sheets NR-IS and TELRIC NRC Summary B will be included with the initial and subsequent cost structure. The previously described nonrecurring cost development sheets will not be included with a cost element for which nonrecurring costs are not applicable.

2. Capital Cost Calculator

The Capital Cost Calculator is a Visual Basic model designed by BellSouth. It was developed to provide a process that is open, understandable and easily verifiable. The calculator output determines annual capital cost factors by FRC. The calculator produces depreciation, cost of money and income tax factors which are applied to investments to calculate the capital costs. See Section 4, Annual Cost Factors, for discussion of depreciation, cost of money and income tax factors.

The Capital Cost Calculator provides the user with the ability to use and modify a set of input variables. The input variables are: debt ratio, cost of money, debt interest rate, corporate income tax rate, net salvage ratio and economic life of assets. The calculator is designed with on-screen instructions and options which allow the user to view or modify the input section and view or print the calculations. Calculations are automatic when input variables are modified. Explanatory notes are included in each column heading and footnotes are included at the bottom of the calculations.

The overall cost of capital used in these studies was established by the TRA in Docket No. 97-01262.

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The approved capital structure is:

Percent equity	60.0%
Percent debt	40.0%
Cost of debt	7.3%
Cost of equity	12.46%
Overall Cost of Money	10.46%

BellSouth was also ordered to reflect monthly compounding using the approved overall cost of money. The Calculator is not designed to produce a monthly compounding so a rate was calculated which when divided by 12 is equivalent to a nominal monthly compounding rate. The nominal rate was calculated as follows:

	Annual	Monthly
Overall cost of money	10.46%	9.93%
Cost of debt	7.30%	7.07%

Formula: monthly rate = (1+.1046)^(1/12)-1 = 0.008279
Annual rate = .008279 *12 = .993

ILLUSTRATIVE CAPITAL COST CALCULATIONS:
The following is an illustrative calculation of capital costs, the inputs, and resulting capital cost factors:

CAPITAL COST ILLUSTRATIVE CALCULATION - UNDERGROUND CABLE METALLIC 5C

Inputs:
r = Debt Ratio = .40
i_d = Debt Interest Rate = .0650
t = Composite Income Taxes = .3857
Economic Life = 12 Years
i = Composite Cost of Money = .1125
n = Periods = 12
Net Salvage = -.08

1) Calculate Annuity of a Present Amount (A/P):

$$A/P = \frac{i(1+i)^n}{(1+i)^n - 1}$$

$$A/P = \frac{.1125(1+.1125)^{12}}{(1+.1125)^{12} - 1}$$

A/P = .1558662) Calculate Present Worth of Net Salvage (S_{pw}):

$$S_{pw} = \frac{\text{Net Salvage}}{(1+i)^n}$$

$$S_{pw} = \frac{-.08}{(1+.1125)^{12}}$$

$$S_{pw} = -.022258$$

3) Calculate PHI factor:

$$\Phi = \frac{t}{1-t} \times \left(1 - \frac{r(i_d)}{i}\right)$$

$$\Phi = \frac{.3857}{1-.3857} \times \left(1 - \frac{.40(.0650)}{.1125}\right)$$

$$\Phi = .482762$$

4) Calculate Depreciation Expense Factor:

Depreciation Expense Factor = (1 - Net Salvage)/Economic Life

Depreciation Expense Factor = (1 - (-.08))/12

Depreciation Expense Factor = .090000

5) Calculate Cost of Money Factor:

Cost of Money Factor=Annuity of a Present Amount X (1- S_{pw}) - Depreciation Exp Factor

Cost of Money Factor = .155866 X (1 - (-.022258)) - .090000

Cost of Money Factor = .069335

6) Calculate Income Tax Factor:

Income Tax Factor = Cost of Money Factor X PHI Factor

Income Tax Factor = .069335 X .482762

Income Tax Factor = .033472

7) Summary of Capital Cost Factors:

Depreciation Expense Factor	.090000
Cost of Money Factor	.069335
Income Tax Factor	.033472
Total Capital Cost Factors	.192807

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SECTION 4
INPUTS - LOADINGS AND FACTORS

BELLSOUTH REGION TELEPHONE PLANT INDEXES

The BellSouth Region Telephone Plant Indexes (TPIs) are used in cost studies to estimate the change in the material price and/or installed investment from one year to a future year. The TPIs are price indexes that measure the relative changes in the prices BellSouth pays for the construction of telephone plant between specific periods of time. A TPI is an average of prices, or of price relatives at specific points or periods of time, constructed for a specific purpose. It should also be noted that TPI forecasts are forecasts of price changes of equipment that is being installed. They are not intended to be forecasts of technology changes or productivity improvements.

Joel Popkin and Company, as BellSouth consultants, assists BellSouth's Network Department with the development of the TPIs. In general, the methodology uses econometric techniques to establish a mathematical relationship between the historical movement in each of the labor and materials components that make up the TPIs and the historical movement in the explanatory variables. The explanatory variables are usually aggregate measures of the U.S. economy, such as price deflators from the national income and product accounts, the U.S. union wage rate, copper prices and other macroeconomic variables. What these economic techniques provide is a systematic, quantifiable statement of what has happened in the past. Use of those relationships implicitly makes the assumption that history will more or less repeat itself. It is important to re-estimate the relationships as new index values are added each year.

A summary of Labor TPIs and TPIs by account is included in Appendix A.

INVESTMENT INFLATION FACTORS

Over the life of an investment, inflation causes fluctuations in the forward-looking investment amount. The investment amount should be levelized over the time period in which the study results will be used (i.e., over the planning period). Investment inflation factors by account are used to trend plant investment in base year dollars to a levelized amount that is valid for a specific planning period of either two or three years as appropriate. The investment inflation factors are the cumulative average of the years' projected inflation rates from the BellSouth Region TPIs. When the base year investment amount is multiplied by the investment inflation loading, the result is a forward-looking investment that is representative for the appropriate planning period.

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A worksheet showing the development of the levelized Investment Inflation Factors used in these studies is included in Appendix A.

INPLANT LOADINGS

The InPlant Loading adds engineering and installation labor and miscellaneous equipment to the material price and/or vendor installed price; that is, the InPlant Loading converts the material price to an installed investment. The installed investment is the dollar amount that is recorded in the capital accounts. InPlant loadings are account specific and are developed for each of the nine states. There are two types of inplant loadings used in these studies: 1) Material Loading and 2) Telco Loading. The Material Loading is applied to a material price and the Telco Loading to the vendor-installed investment. The data sources are the 1997 State and Local Sales Taxes and the Resource Tracking Analysis and Planning (RTAP) System.

A summary of the InPlant Loadings used in these studies and worksheets showing their development are included in Appendix A.

SUPPORTING EQUIPMENT AND POWER LOADINGS

Supporting Equipment and Power Loadings are used to calculate the incremental investment associated with such items as power equipment, ladders, tools, and test sets required to support an additional dollar of central office (CO) investment. When the central-office investment is multiplied by the Supporting Equipment and Power Loadings, the result reflects an investment loaded for support and power equipment.

The Supporting Equipment and Power Loadings are developed from investment data obtained from a 1997 Central Office Monthly Allocation Process (COMAP) extract for power. The COMAP extract identifies two types of supporting investment: 1) equipment that supports an entire central office (9C0); and 2) equipment that supports only a particular field reporting code (FRC) but supports all items of that FRC within that central office (9D0). 9C0 equipment includes the following: all types of power equipment used to provide current for central office equipment; distributing frames that are used to distribute circuits to more than one type of COE (typically the first frames that a cable is connected to when it leaves the cable vault and enters the CO); miscellaneous capitalized equipment that cannot be directly associated with COE in a single FRC (i.e., ladders and some types of aisle lighting); and capitalized tools and test sets that can be used

for several types of COE (e.g., an oscilloscope can be used to test any COE equipment that uses alternating current). 9D0 equipment includes the following: dedicated distributing frames used to supply circuit connections to only one type of COE (e.g., specialized distributing frames used to connect to circuit testing, alarm, and conditioning equipment); specialized tools and test sets (i.e., tools and test sets that have been specially designed by the manufacturer to perform tests on a very narrow range of COE).

A summary worksheet showing the development of Supporting Equipment and Power Loadings is included in Appendix A.

LAND AND BUILDING LOADINGS

Land and Building Loadings are translators used to determine the amount of investment in land and building associated with the central office and computer investment in each cost study. When an investment is multiplied by the land and building loadings, the result reflects the amount of land and building investment associated with the original investment.

The land loading for central office equipment is developed by comparing the investments in land that are associated with central office equipment and the investments in that central office equipment. A ratio is then developed that allows each dollar of central office investment to include a fraction of the land investment. The building loading is developed by comparing the investments in buildings that house central office equipment for the provision of service and the investments in that central office equipment. A ratio is then developed that allows each dollar of central office investment to include a fraction of the building investment. The Land and Building Loadings for Computer use the same methodology.

The regulated investment dollars used in developing these factors are taken from the Investment Over Accumulated Depreciation for June and December, 1997. The projected view of 1998 through 2000 received from Network is based on plant additions, less retirements, and is added to the 1997 cumulative historical year. The investments are averaged to get to midyear (MDY) amounts. Current Cost Factors are applied to 1997 MDY only. Averaged projected net additions for 1998 through 2000 are added to represent the current forward looking period. The investments for the three years are then summed and divided by three to obtain the average investment.

The 1998 through 2000 land and building average projected investments are multiplied by the percent of land and building associated with central office equipment, and each is respectively divided by the average total central office equipment to derive the loadings. The Land and Building Loadings for computers are similarly calculated.

Worksheets showing the development of Land and Building Loadings used in these cost studies are included in Appendix A.

ANNUAL COST FACTORS

GENERAL

Annual cost factors are translators used to determine the amount of recurring cost for one year associated with acquiring and using a particular piece of investment. Annual cost factors were developed for each category of plant investment (i.e. by FRC). When the dollar amount for an investment at the FRC-level is multiplied by the corresponding annual cost factor for that FRC, the product reflects the annual recurring cost incurred by the company for that investment. There are basically two types of cost associated with investment: capital related costs and operating related costs.

The initial purchase price of plant equipment and any installation costs are paid with a combination of investor-supplied funds and retained earnings. The investors who provide the "loan" may be either bondholders or stockholders. The plant placed must be able to generate enough revenues to cover capital costs associated with its placement and usage. Capital related costs consist of three major categories: depreciation, cost of money, and income tax. The capital related cost factors are developed using the Capital Cost Calculator that uses various financial data and plant investment characteristics to compute the annual capital costs by category of plant.

Plant investments must also be maintained to provide for continuing operations. Ordinary repairs and maintenance, as well as rearrangements and changes, are necessary costs for all categories of plant (except land) in order to provide proper service. These maintenance costs, as well as ad valorem taxes and other taxes must be covered by the revenues received from the use of the asset. The operating related cost factors are developed using various spreadsheets, which basically compute the annual operating related costs by category of plant, and divide that amount by the investment in that category of plant.

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INPUTS - LOADINGS AND FACTORS

CAPITAL RELATED COSTS

DEPRECIATION - the allocation of the initial plant investment over the number of years of service provided by the plant. Depreciation is determined by the total investment, less net salvage, divided by the estimated life of the investment. Depreciation lives and salvage values used in this filing were established by the TRA in it's Order in Docket 97-01262.

COST OF MONEY - the annual cost to the firm of the debt and equity on capital invested in the business. This annual cost is determined in the financial market as it represents the investors' expected return on their investment.

INCOME TAX - the composite of income taxes paid to the Federal and South Carolina State governments based on the taxable net income of the company.

OPERATING RELATED COSTS

PLANT SPECIFIC EXPENSE - the expense required to keep existing telephone plant, circuits, and service up to standards, as well as rents paid for facilities. This includes trouble clearing, rearrangements, and replacing defective elements.

AD VALOREM AND OTHER TAX - tax levied by city and county governments based on the assessed value of property. This includes property taxes, capital stock taxes, and other taxes.

FACTOR DEVELOPMENT - CAPITAL COST

Depreciation is the allocation of the initial plant investment over the years of service provided by the plant. The straight-line method requires that the difference between gross investment and net salvage be spread ratably over the life of the plant. The straight-line depreciation expense rate is calculated as follows:

$$\frac{\text{Initial Investment - (Gross Salvage - Cost of Removal)}}{\text{Life of Investment}}$$

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Cost of money is the amount of money that must be paid to investors for the use of investor supplied funds. This amount to be paid investors is the annual cost to the company of the debt and equity capital invested in the company. Cost of money is determined in part by the financial market and, as it represents the investors' expected return on their investment, and may differ considerably from the actual earnings a company generates. The overall cost of money rate provided by BellSouth Treasury depends on the cost of equity financing, the cost of debt financing, and the debt to equity ratio of the capital structure of the company.

Income tax expense reflects the federal and South Carolina state taxes levied on "taxable income." For income tax purposes, gross income and deductible expenses are defined by laws and codes. The income tax factor is developed using the PHI factor. The PHI factor assumes that tax depreciation equals book depreciation (i.e., no depreciation-related tax timing differences), but dividends paid to stockholders are not tax deductions (nor are they accounting expenses). Interest paid to bondholders is a booked expense and deductible for income tax purposes. A company must pay income taxes on the equity portion of return, but the debt portion is tax-exempt. The PHI factor is calculated as follows:

$$\Phi = \frac{\text{Composite Income Tax Rate}}{1 - \text{Composite Income Tax Rate}} \times \left(1 - \frac{\text{Debt Ratio x Debt Rate}}{\text{Cost of Money Rate}}\right)$$

The Capital Cost Calculator Model is described in Section 3 and the calculations are included in Appendix A.

FACTOR DEVELOPMENT - OPERATING RELATED

PLANT SPECIFIC EXPENSE

The plant specific expense factor, which includes the cost of material used and direct labor, is a ratio developed to reflect the expenses for plant category by the respective investment. The factor also includes maintenance-type expenses for existing plant that cannot be directly assigned to a given plant category, such as transmission power, when applicable. Certain amounts have been excluded from the appropriate categories of plant, specifically: subsequent Right-To-Use (RTU) fees and service order activity-related expense. These costs are excluded because: 1) they should be separately identified for each service, or 2) they should be included in nonrecurring cost studies. The maintenance

expenses used in calculating the Plant Specific Expense Factors include those associated with the following types of operations:

(a) Inspecting and reporting on the condition of plant investment to determine the need for repairs, replacements, rearrangements and changes

(b) Performing routine work to prevent trouble

(c) Replacing items of plant other than retirement units

(d) Rearranging and changing the location of plant not retired

(e) Repairing material for reuse

(f) Restoring the condition of plant damaged by storms, floods, fire and other casualties (other than the cost of replacing retirement units)

(g) Inspecting after repairs have been made

(h) Only salaries, wages and expense associated with plant craft and work reporting engineers, as well as their immediate supervision and office support.

The plant specific expense factors are developed in personal computer spreadsheets. The factors are based on three years of projected expense and investment data. The 1997 expenses used in the study were pulled from the Cost Separations System (CSS). Rent expense is excluded from building expense; net rent (rent revenue less rent expense) is included in pole and conduit expenses. Projected view data was obtained from the Finance Budget Group for the expenses for 1998 through 2000 and spread based on actual expenses. Right-To-Use and service order-related expenses were excluded from the study because such expenses are recovered in a direct manner rather than through the use of a factor. The 1998 through 2000 projected expense amounts are averaged to represent the projected annual expense.

The investment dollars are 1997 actuals and projected 1998 through 2000 from Network. The 1997 dollars were taken from the Investment Over Accumulated Depreciation Report for mid-year and end-of-year and adjusted by applying a current cost to book cost ratio. The projected investments are based on plant additions less retirements. The projected net additions for each year are added to 1997 adjusted investment to determine the total projected investment. The projected investments for 1998 - 2000 are then summed and divided by three to

obtain the average annual investment. Expenses are then divided by the investments, resulting in the unloaded plant specific expense factors. Power expense loadings are then added to the factors for central office equipment investment. These plant specific expense factor calculations result in a factor for each category of plant representative of the average expense per investment expected in the future for each plant category.

Worksheets showing the development of the Plant Specific Expense Factors used in these studies are included in Appendix A.

AD VALOREM AND OTHER TAXES

The TRA adopted the 1998 ad valorem tax rate of 1.16% for use in BellSouth's TELRIC Calculator.

GROSS RECEIPTS TAX FACTOR

Some states and municipalities tax the revenues that a company receives from services provided within the state/municipality. The taxes may be designed to fund such things as PSC fees, franchise taxes, license taxes, or other similar items, but because the taxes are levied on the basis of revenues, they are commonly referred to as a gross receipts tax. Unlike some taxes that are billed to the customer and flowed through to the taxing authority, a gross receipts tax is a cost of doing business to BellSouth.

The BellSouth Tax Department provides the effective tax rate at which BellSouth is charged by the taxing authority and that rate is "grossed up" to reflect the following formula:

$$\frac{\text{GROSS RECEIPTS TAX RATE}}{(1 - \text{GROSS RECEIPTS TAX RATE})}$$

A summary of ad valorem and other tax and gross receipts tax factors used in these studies is included in Appendix A.

LABOR RATES

Labor rates for specific work groups are developed annually based on extracts of previous year's data from the Financial Processor. This extract collects labor

expense and hours and a PC application processes the information to produce labor rates. During processing, the actual costs for a given work group are accumulated by expenditure type (e.g., direct labor productive, premium, other employee, etc.). These actual costs are divided by the actual hours (classified productive hours for plant and engineering work groups and total productive hours for cost groups) reported by work group to determine the basic rates. A factor from the BellSouth Region TPIs is applied to inflate these rates to the study period 1998 - 2000.

LABOR RATE COMPONENTS:
The following are various cost components that make up labor rates:

DIRECT SALARIES AND WAGES

1. Direct Labor - Productive (EXPENDITURE TYPE CODE (EXTC) KP1
   Identifies the cost of the actual straight time wages paid to occupational work reporting employees during the month for regularly scheduled time and overtime spent performing productive work. Also includes the costs of salaries paid to management employees when performing productive work. Classified and unclassified productive hours are used as the basis for Direct Labor Costs.

2. Direct Labor - Premium (EXTC KP2)
   Identifies the cost of the actual wages paid to occupational work reporting employees during the month for premium hours.

3. Direct Labor - Other Employee (EXTC KP3)
   Identifies the cost of the actual wages and salaries paid to occupational work reporting employees during the month for allowances and special differentials, merit awards, wage adjustments, team incentive awards, pay in lieu of vacation, etc.

4. Direct Labor - Annualized Holidays, Vacations and Excused Days (EXTC KP5)
   Identifies the cost of a monthly prorata share of payments to be made over the year to occupational work reporting employees for accrued costs of holidays, vacations, and excused days.

5. Direct Administration (EXTC KP6)
   Identifies the costs of salaries paid during the month to the first level of supervision responsible for supervising occupational work reporting

employees, and salaries and wages paid to employees and immediate supervisors who perform basic office services for occupational work reporting employees. Also included are the wages paid to occupational work reporting employees loaned to perform supervisory or clerical functions.

6. Plant Other Work Equipment - Salaries and Wages (EXTC CQR)
Identifies the salary and wage portion of the costs associated with other work equipment used by Facilities and Network Services employees (4XX0-9).

7. Plant Motor Vehicle - Salary and Wage Distribution (EXTC CQM)
Identifies the salary and wage portion of the plant motor vehicle expenses for construction, removal or plant specific operations expense accounts based on the classified productive hours of the labor groups using the motor vehicles.

OTHER DIRECT

1. Direct Labor - Other Costs (EXTC KP4)
Identifies the costs incurred during the month for office, traveling and other costs of Facilities and Network Services employees whose wage and salary costs are direct labor or direct administration.

2. Direct Other Costs - Bellcore Billing (EXTC KP8)
Identifies the costs incurred during the month for Bellcore billing costs of Facilities and Network Services employees whose wage and salary costs are direct labor or direct administration.

3. Plant Other Work Equipment - Benefits (EXTC CQS)
Identifies the benefit costs associated with other work equipment used by Facilities and Network Services employees (4XX0-9).

4. Plant Other Work Equipment - Rents (EXTC CQK)
Identifies the rent costs associated with other work equipment used by Facilities and Network Services employees (4XX0-9).

5. Plant Other Work Equipment - Other Expenses (EXTC CQL)
Identifies the other expense costs associated with other work equipment used by Facilities and Network Services employees (4XX0-9).

6. Plant Motor Vehicle - Benefit Distribution (EXTC CQN)

Identifies the benefit portion of the plant motor vehicle expenses for construction, removal or plant specific operations expense accounts based on the classified productive hours of the labor groups using the motor vehicles.

7. Plant Motor Vehicle - Rent Distribution (EXTC CQP)
   Identifies the rent portion of the plant motor vehicle expenses for construction, removal or plant specific operation expense accounts based on the classified productive hours of the labor groups using the motor vehicle.

8. Plant Motor Vehicle - Other Costs Distribution (EXTC CQQ)
   Identifies the other cost portion of the plant motor vehicle expenses for construction, removal or plant specific operations expense accounts based on the classified productive hours of the labor groups using the motor vehicle.

9. Benefits (EXTC KPL)
   Identifies the costs of the payroll-related benefits and taxes for active Facilities and Network Services employees. These costs include pension accruals; company matching portion of savings plan; dental, medical, and group insurance plan reimbursements; and company portion of social security and unemployment payroll taxes.

TOTAL PRODUCTIVE HOURS

1. Classified Productive Hours
   Hours of work reporting employees which are reported to final accounting classifications.

2. Unclassified Productive Hours
   The working hours of plant work reporters devoted to activities of such a general nature as to not be assignable to specific accounting classifications. Unclassified activities include: attending conferences or meetings (including travel time) which are general in nature; attending first aid classes or safety meetings; paid time spent on union activities; paid time spent on quality of work life activities; time spent in a classroom (including travel time) for general or job specific training; and other unclassified activities such as attending assessment centers. This time will be work reported to special purpose function codes (SPFCs).

Labor Rate worksheets are included in Appendix A.

TENNESSEE DOCKET NO 99-00430
SECTION 4
INPUTS - LOADINGS AND FACTORS

SHARED AND COMMON COST ALLOCATION FACTORS

The Shared and Common Cost factors used in this filing were established by the TRA in Docket No. 97-01262.

TENNESSEE DOCKET NO 99-00430
SECTION 5
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

INTRODUCTION

This section contains a description of cost elements and an overview of the study process. Additionally, inputs and work papers for each cost element are provided.

The studies included in this filing are all based on a three-(3) year study period (1998 - 2000). All long run costs associated with providing the network capabilities are identified and included in the cost studies.

The following page contains a list of the unbundled network cost elements provided in this filing package. Each cost element is represented by a cost element number. This designation is referenced throughout the studies.

Following the element list are the narratives for each category of cost elements describing the elements, study technique, and specific study assumptions. After the narratives are the TELRIC Calculator© outputs. Following the TELRIC Calculator© outputs, are Microsoft Excel spreadsheets containing the inputs and associated work papers.

TENNESSEE DOCKET NO 99-00430
SECTION 5
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

		Type	Filename	Proprietary
H.0	**COLLOCATION**			
H.1	***PHYSICAL COLLOCATION***			
H.1.31	Physical Collocation - 2-fiber Cross Connect	5	TNPHCOLL.XLS	PROP
H.1.3199	Physical Collocation - 2-fiber Cross Connect - Disconnect	5	TNPHCOLL.XLS	PROP
H.1.32	Physical Collocation - 4-fiber Cross Connect	5	TNPHCOLL.XLS	PROP
H.1.3299	Physical Collocation - 4-fiber Cross Connect - Disconnect	5	TNPHCOLL.XLS	PROP
H.1.33	Physical Collocation - 2-fiber POT Bay	5	TNPHCOLL.XLS	PROP
H.1.34	Physical Collocation - 4-fiber POT Bay	5	TNPHCOLL.XLS	PROP
H.1.35	Physical Collocation - 2-fiber Cross Connect -Incremental Cost - Manual Svc Order vs. Electronic	5	TNPHCOLL.XLS	PROP
H.1.3599	Physical Collocation - 2-fiber Cross Connect -Incremental Cost - Manual Svc Order vs. Electronic - Disconnect	5	TNPHCOLL.XLS	PROP
H.1.36	Physical Collocation - 4-fiber Cross Connect - Incremental Cost - Manual Svc Order vs. Electronic	5	TNPHCOLL.XLS	PROP
H.1.3699	Physical Collocation - 4-fiber Cross Connect - Incremental Cost - Manual Svc Order vs. Electronic - Disconnect	5	TNPHCOLL.XLS	PROP
H.2	***VIRTUAL COLLOCATION***			
H.2.16	Virtual Collocation - 2-Fiber Cross Connects	5	TNVICOLL.XLS	PROP
H.2.1699	Virtual Collocation - 2-Fiber Cross Connects - Disconnect	5	TNVICOLL.XLS	PROP
H.2.17	Virtual Collocation - 4-Fiber Cross Connects	5	TNVICOLL.XLS	PROP
H.2.1799	Virtual Collocation - 4-Fiber Cross Connects - Disconnect	5	TNVICOLL.XLS	PROP
H.2.18	Virtual Collocation - 2-Fiber Cross Connects - Incremental Cost - Manual Svc	5	TNVICOLL.XLS	PROP

TENNESSEE DOCKET NO 99-00430
SECTION 5
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

	Order vs. Electronic			
H.2.1899	Virtual Collocation - 2-Fiber Cross Connects - Incremental Cost - Manual Svc Order vs. Electronic - Disconnect	5	TNVICOLL.XLS	PROP
H.2.19	Virtual Collocation - 4-Fiber Cross Connects - Incremental Cost - Manual Svc Order vs. Electronic	5	TNVICOLL.XLS	PROP
H.2.1999	Virtual Collocation - 4-Fiber Cross Connects - Incremental Cost - Manual Svc Order vs. Electronic - Disconnect	5	TNVICOLL.XLS	PROP

TENNESSEE DOCKET NO 99-00430
SECTION 5
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

H.0	COLLOCATION
H.1	PHYSICAL COLLOCATION
H.1.31	PHYSICAL COLLOCATION – 2 FIBER CROSS CONNECT
H.1.32	PHYSICAL COLLOCATION – 4 FIBER CROSS CONNECT
H.1.33	PHYSICAL COLLOCATION – 2 FIBER POT BAY
H.1.34	PHYSICAL COLLOCATION – 4 FIBER POT BAY
H.1.35	PHYSICAL COLLOCATION – 2 FIBER CROSS CONNECT - INCREMENTAL COST – MANUAL SERVICE ORDER VS. ELECTRONIC
H.1.36	PHYSICAL COLLOCATION – 4 FIBER CROSS CONNECT - INCREMENTAL COST - MANUAL SERVICE ORDER VS. ELECTRONIC
H.1.3199	PHYSICAL COLLOCATION – 2 FIBER CROSS CONNECT - DISCONNECT
H.1.3299	PHYSICAL COLLOCATION – 4 FIBER CROSS CONNECT - DISCONNECT
H.1.3599	PHYSICAL COLLOCATION – 2 FIBER CROSS CONNECT - INCREMENTAL COST – MANUAL SERVICE ORDER VS. ELECTRONIC - DISCONNECT
H.1.3699	PHYSICAL COLLOCATION – 4 FIBER CROSS CONNECT - INCREMENTAL COST - MANUAL SERVICE ORDER VS. ELECTRONIC - DISCONNECT

Element Description

Physical Collocation provides for the installation of collocator-owned equipment and facilities within leased floor space in BellSouth central offices for the purpose of connecting to the BellSouth network, to the extent such collocation is technically feasible and space is available. The collocator places their equipment in leased floor space and connects to BellSouth offerings. A Point of Termination bay (POT bay) will serve as the official demarcation point between the collocator's equipment and BellSouth's network.

Study Technique

Microsoft Excel spreadsheets were used to calculate the utilized unit material prices and/or investments for these UNEs. Each element was analyzed to determine the components required, and that the appropriate quantities were applied in order to develop the utilized unit material prices.

Specific Study Assumptions

- This study addresses each POT bay element separately, with individual utilizations for each piece.

- The Collocation costs do not consider route diversity for cross-connects because there are no requirements to provide diversity. Collocation performance monitoring is the responsibility of the collocator and no costs have been included in this study.

TENNESSEE DOCKET NO 99-00430
SECTION 5
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

H.2	**VIRTUAL COLLOCATION**
H.2.16	**VIRTUAL COLLOCATION – 2 FIBER CROSS CONNECT**
H.2.17	**VIRTUAL COLLOCATION – 4 FIBER CROSS CONNECT**
H.2.18	**VIRTUAL COLLOCATION – 2 FIBER CROSS CONNECT – INCREMENTAL COST – MANUAL SERVICE ORDER VS. ELECTRONIC**
H.2.19	**VIRTUAL COLLOCATION – 4 FIBER CROSS CONNECT – INCREMENTAL COST – MANUAL SERVICE ORDER VS. ELECTRONIC**
H.2.1699	**VIRTUAL COLLOCATION – 2 FIBER CROSS CONNECT – DISCONNECT**
H.2.1799	**VIRTUAL COLLOCATION – 4 FIBER CROSS CONNECT – DISCONNECT**
H.2.1899	**VIRTUAL COLLOCATION – 2 FIBER CROSS CONNECT – INCREMENTAL COST – MANUAL SERVICE ORDER VS. ELECTRONIC - DISCONNECT**
H.2.1999	**VIRTUAL COLLOCATION – 4 FIBER CROSS CONNECT – INCREMENTAL COST – MANUAL SERVICE ORDER VS. ELECTRONIC - DISCONNECT**

Element Description

In addition to Physical Collocation, BellSouth also provides Virtual Collocation. A collocation arrangement provides an CLEC with an efficient means for connection to the BellSouth network.

Virtual Collocation provides for the installation of collocator-owned equipment and facilities in BellSouth Central Offices for the purpose of connecting to the BellSouth network. The virtual collocator arrangements are located in the BellSouth equipment line-up. As part of the equipment installation, collocators will place a private fiber entrance facility from outside the central office to an interconnection point designated by BellSouth. The wiring between the collocator equipment and BellSouth equipment is completed by a certified vendor.

Study Technique

Microsoft Excel spreadsheets were used to calculate the utilized unit material prices and/or investments for these UNEs. Each element was analyzed to determine the components required, and that the appropriate quantities were applied in order to develop the utilized unit material prices.

Recurring Cost Summary

Tennessee
H.1.31 - Physical Collocation - 2-fiber Cross Connect

8/19/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$13.5575	$0.0000	$13.5575			$0.0000
Total Monthly Cost	$13.5575	$0.0000	$13.5575	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0032			X 1.0032
Cost (including Gross Receipts Tax)			$13.6012			$0.0000
Common Cost Factor			X 1.1500			X 1.1500
Monthly Economic Cost			$15.6414			$0.0000

Total Monthly Economic Cost : $15.6414

000031

Investment Development (Excluding Land, Building, Pole, and Conduit)
Volume Sensitive

Tennessee
H.1.31 - Physical Collocation - 2-fiber Cross Connect

8/19/99

	FRC	Sub FRC	A Material	B Inflation Factor	C=AxB Adjusted Material	D1 Plug-in Inventory Factor	D2 Mat'l Factor	D3 Telco Factor	D4 Plug-in Factor	D5 Hardwire Factor	E=Cx(D1xD2 x...xD5) In-Plant Investment	F Supporting Equipment &/or Power Loading	G=ExF Total Investment
						In-Plant Factors (Default = 1)							
Digtl Circ - Other - C.O. - Hardwired - Power Only	357C	01	$213.1346	0.9635	$205.3622	1.0000	1.0000	1.0000	1.0000	3.2421	$665.8122	1.0278	$684.3217

000032

Land, Building, Pole, and Conduit Investment Development
Volume Sensitive

Tennessee
H.1.31 - Physical Collocation - 2-fiber Cross Connect

	FRC	Investment	
Land - COE	20C	$3.9006	= Sum of Col C
Buildings - COE	10C	$88.6197	= Sum of Col E

8/19/99

	FRC	Sub FRC	A=Prev Page Col G Investment	B Land Factor	C=(AxB) Land Investment	D Building Factor	E=(AxD) Building Investment	F Pole Factor	G=(AxF) Pole Investment	H Conduit Factor	I=(AxH) Conduit Investment
Digtl Circ - Other - C.O. - Hardwired - Power Only	357C	01	$684.3217	0.0057	$3.9006	0.1295	$88.6197	0.0000	$0.0000	0.0000	$0.0000
					$3.9006		$88.6197		$0.0000		$0.0000

000033

Recurring Cost Development
Volume Sensitive

Tennessee
H.1.31 - Physical Collocation - 2-fiber Cross Connect

8/19/99		A=Prev Page Col A	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)	J	K=(AxJ)	L=(C+E+G+ I+K)	M	N=(AxM)	O=(L+N)
	FRC	Investment	Depreciation Factor	Depreciation	Cost of Money Factor	Cost of Money	Income Tax Factor	Income Tax	Plant Specific Factor	Plant Specific Expense	Ad Valorem Factor	Ad Valorem Expense	Direct Cost	Shared Cost Factor	Shared Cost	TELRIC
Land - COE	20C	$3.9006	0.0000	$0.0000	0.0993	$0.3873	0.0449	$0.1750	0.0000	$0.0000	0.0116	$0.0454	$0.6078	0.0000	$0.0000	$0.6078
Buildings - COE	10C	$88.6197	0.0230	$2.0403	0.0780	$6.9108	0.0352	$3.1230	0.0696	$6.1681	0.0116	$1.0318	$19.2741	0.0000	$0.0000	$19.2741
Digtl Circ - Other	357C	$684.3217	0.0909	$62.2111	0.0626	$42.8100	0.0283	$19.3461	0.0153	$10.4729	0.0116	$7.9676	$142.8075	0.0000	$0.0000	$142.8075
Annual Total		$776.8420											$162.6894		$0.0000	$162.6894
Monthly Total (Annual Total / 12)													$13.5575		$0.0000	$13.5575

000034

Nonrecurring Cost Summary

Tennessee
H.1.31 - Physical Collocation - 2-fiber Cross Connect

8/19/99

Nonrecurring Cost

	First				Additional			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$41.4295	$0.0000		$41.4295	$29.7266	$0.0000		$29.7266
Total Cost	$41.4295	$0.0000		$41.4295	$29.7266	$0.0000		$29.7266
Gross Receipts Tax Factor			X	1.0032			X	1.0032
Cost (including Gross Receipts Tax)				$41.5631				$29.8225
Common Cost Factor			X	1.0000			X	1.0000
Nonrecurring Economic Cost				**$41.5631**				**$29.8225**

000035

Nonrecurring Cost Development

Tennessee
H.1.31 - Physical Collocation - 2-fiber Cross Connect

8/19/99

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes			Install Cost		Disconnect Cost			Discounted Disconnect Cost			
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Direct Labor Rate	First	Additional	First	Additional	Disconnect Discount Factor	First	Additional	Direct Cost First	Direct Cost Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0070	0.0070	0.0000	0.0000	$44.86	$0.3140	$0.3140	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.3140	$0.3140
Service Order	31XX	Ntwk & Eng Planning (FG20)	0.2500	0.0833	0.0000	0.0000	$56.20	$14.0500	$4.6833	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$14.0500	$4.6833
Service Order	470X	Circuit Provisioning Group (CPG)	0.0167	0.0000	0.0000	0.0000	$37.06	$0.6177	$0.0000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.6177	$0.0000
Service Order	4WXX	Work Management Center (WMC)	0.0500	0.0000	0.0000	0.0000	$34.37	$1.7185	$0.0000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$1.7185	$0.0000
Service Order	471X	Acc Cust Advocate Cntr (ACAC)	0.0111	0.0111	0.0000	0.0000	$38.31	$0.4257	$0.4257	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.4257	$0.4257
Engineering	470X	Circuit Provisioning Group (CPG)	0.0167	0.0167	0.0000	0.0000	$37.06	$0.6177	$0.6177	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.6177	$0.6177
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.4167	0.4167	0.0000	0.0000	$42.88	$17.8667	$17.8667	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$17.8667	$17.8667
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.1519	0.1519	0.0000	0.0000	$38.31	$5.8193	$5.8193	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$5.8193	$5.8193
														Total	41.42947567	29.72664233

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0070	0.0070	0.0000	0.0000	$44.86	$0.3140	$0.3140	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.3140	$0.3140
Service Order	31XX	Ntwk & Eng Planning (FG20)	0.2500	0.0833	0.0000	0.0000	$56.20	$14.0500	$4.6833	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$14.0500	$4.6833
Service Order	470X	Circuit Provisioning Group (CPG)	0.0167	0.0000	0.0000	0.0000	$37.06	$0.6177	$0.0000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.6177	$0.0000
Service Order	4WXX	Work Management Center (WMC)	0.0500	0.0000	0.0000	0.0000	$34.37	$1.7185	$0.0000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$1.7185	$0.0000
Service Order	471X	Acc Cust Advocate Cntr (ACAC)	0.0111	0.0111	0.0000	0.0000	$38.31	$0.4257	$0.4257	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.4257	$0.4257
Engineering	470X	Circuit Provisioning Group (CPG)	0.0167	0.0167	0.0000	0.0000	$37.06	$0.6177	$0.6177	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.6177	$0.6177
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.4167	0.4167	0.0000	0.0000	$42.88	$17.8667	$17.8667	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$17.8667	$17.8667
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.1519	0.1519	0.0000	0.0000	$38.31	$5.8193	$5.8193	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$5.8193	$5.8193
														Total	41.42947567	29.72664233

000036

Recurring Cost Summary

Tennessee
H.1.32 - Physical Collocation - 4-fiber Cross Connect

8/19/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$24.3672	$0.0000	$24.3672			$0.0000
Total Monthly Cost	$24.3672	$0.0000	$24.3672	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0032			X 1.0032
Cost (including Gross Receipts Tax)			$24.4458			$0.0000
Common Cost Factor			X 1.1500			X 1.1500
Monthly Economic Cost			$28.1126			$0.0000

Total Monthly Economic Cost : $28.1126

000037

Investment Development (Excluding Land, Building, Pole, and Conduit)
Volume Sensitive

Tennessee
H.1.32 - Physical Collocation - 4-fiber Cross Connect

8/19/99

	FRC	Sub FRC	A Material	B Inflation Factor	C=AxB Adjusted Material	D1 Plug-in Inventory Factor	D2 Mat'l Factor	D3 Telco Factor	D4 Plug-in Factor	D5 Hardwire Factor	E=Cx(D1xD2 x...xD5) In-Plant Investment	F Supporting Equipment &/or Power Loading	G=ExF Total Investment
						In-Plant Factors (Default = 1)							
Digtl Circ - Other - C.O. - Hardwired - Power Only	357C	01	$383.0722	0.9635	$369.1027	1.0000	1.0000	1.0000	1.0000	3.2421	$1,196.6811	1.0278	$1,229.9489

000038

Land, Building, Pole, and Conduit Investment Development
Volume Sensitive

Tennessee
H.1.32 - Physical Collocation - 4-fiber Cross Connect

	FRC	Investment	
Land - COE	20C	$7.0107	= Sum of Col C
Buildings - COE	10C	$159.2784	= Sum of Col E

8/19/99

	FRC	Sub FRC	A=Prev Page Col G Investment	B Land Factor	C=(AxB) Land Investment	D Building Factor	E=(AxD) Building Investment	F Pole Factor	G=(AxF) Pole Investment	H Conduit Factor	I=(AxH) Conduit Investment
Digtl Circ - Other - C.O. - Hardwired - Power Only	357C	01	$1,229.9489	0.0057	$7.0107	0.1295	$159.2784	0.0000	$0.0000	0.0000	$0.0000
					$7.0107		$159.2784		$0.0000		$0.0000

000039

Recurring Cost Development
Volume Sensitive

Tennessee
H.1.32 - Physical Collocation - 4-fiber Cross Connect

8/19/99

	FRC	Investment	Depreciation Factor	Depreciation	Cost of Money Factor	Cost of Money	Income Tax Factor	Income Tax	Plant Specific Factor	Plant Specific Expense	Ad Valorem Factor	Ad Valorem Expense	Direct Cost	Shared Cost Factor	Shared Cost	TELRIC
		A=Prev Page Col A	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)	J	K=(AxJ)	L=(C+E+G+ I+K)	M	N=(AxM)	O=(L+N)
Land - COE	20C	$7.0107	0.0000	$0.0000	0.0993	$0.6962	0.0449	$0.3146	0.0000	$0.0000	0.0116	$0.0816	$1.0924	0.0000	$0.0000	$1.0924
Buildings - COE	10C	$159.2784	0.0230	$3.6671	0.0780	$12.4210	0.0352	$5.6131	0.0696	$11.0861	0.0116	$1.8545	$34.6418	0.0000	$0.0000	$34.6418
Digtl Circ - Other	357C	$1,229.9489	0.0909	$111.8135	0.0626	$76.9434	0.0283	$34.7712	0.0153	$18.8231	0.0116	$14.3203	$256.6716	0.0000	$0.0000	$256.6716
Annual Total		$1,396.2380											$292.4058		$0.0000	$292.4058
Monthly Total (Annual Total / 12)													$24.3672		$0.0000	$24.3672

000040

Nonrecurring Cost Summary

Tennessee
H.1.32 - Physical Collocation - 4-fiber Cross Connect

8/19/99

Nonrecurring Cost

	First			Additional		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Nonrecurring Cost Development Sheet Col H	$50.3628	$0.0000	$50.3628	$38.6600	$0.0000	$38.6600
Total Cost	$50.3628	$0.0000	$50.3628	$38.6600	$0.0000	$38.6600
Gross Receipts Tax Factor			X 1.0032			X 1.0032
Cost (including Gross Receipts Tax)			$50.5253			$38.7847
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$50.5253**			**$38.7847**

0000041

Nonrecurring Cost Development

Tennessee
H.1.32 - Physical Collocation - 4-fiber Cross Connect

8/19/99

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes			Install Cost		Disconnect Cost			Discounted Disconnect Cost			
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Direct Labor Rate	First	Additional	First	Additional	Disconnect Discount Factor	First	Additional	Direct Cost First	Direct Cost Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0070	0.0070	0.0000	0.0000	$44.86	$0.3140	$0.3140	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.3140	$0.3140
Service Order	31XX	Ntwk & Eng Planning (FG20)	0.2500	0.0833	0.0000	0.0000	$56.20	$14.0500	$4.6833	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$14.0500	$4.6833
Service Order	470X	Circuit Provisioning Group (CPG)	0.0167	0.0000	0.0000	0.0000	$37.06	$0.6177	$0.0000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.6177	$0.0000
Service Order	4WXX	Work Management Center (WMC)	0.0500	0.0000	0.0000	0.0000	$34.37	$1.7185	$0.0000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$1.7185	$0.0000
Service Order	471X	Acc Cust Advocate Cntr (ACAC)	0.0111	0.0111	0.0000	0.0000	$38.31	$0.4257	$0.4257	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.4257	$0.4257
Engineering	470X	Circuit Provisioning Group (CPG)	0.0167	0.0167	0.0000	0.0000	$37.06	$0.6177	$0.6177	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.6177	$0.6177
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.6250	0.6250	0.0000	0.0000	$42.88	$26.8000	$26.8000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$26.8000	$26.8000
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.1519	0.1519	0.0000	0.0000	$38.31	$5.8193	$5.8193	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$5.8193	$5.8193
														Total	50.362809	38.65997567

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0070	0.0070	0.0000	0.0000	$44.86	$0.3140	$0.3140	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.3140	$0.3140
Service Order	31XX	Ntwk & Eng Planning (FG20)	0.2500	0.0833	0.0000	0.0000	$56.20	$14.0500	$4.6833	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$14.0500	$4.6833
Service Order	470X	Circuit Provisioning Group (CPG)	0.0167	0.0000	0.0000	0.0000	$37.06	$0.6177	$0.0000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.6177	$0.0000
Service Order	4WXX	Work Management Center (WMC)	0.0500	0.0000	0.0000	0.0000	$34.37	$1.7185	$0.0000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$1.7185	$0.0000
Service Order	471X	Acc Cust Advocate Cntr (ACAC)	0.0111	0.0111	0.0000	0.0000	$38.31	$0.4257	$0.4257	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.4257	$0.4257
Engineering	470X	Circuit Provisioning Group (CPG)	0.0167	0.0167	0.0000	0.0000	$37.06	$0.6177	$0.6177	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.6177	$0.6177
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.6250	0.6250	0.0000	0.0000	$42.88	$26.8000	$26.8000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$26.8000	$26.8000
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.1519	0.1519	0.0000	0.0000	$38.31	$5.8193	$5.8193	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$5.8193	$5.8193
														Total	50.362809	38.65997567

0000042

Recurring Cost Summary

Tennessee
H.1.33 - Physical Collocation - 2-fiber POT Bay

8/19/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$33.6259	$0.0000	$33.6259			$0.0000
Total Monthly Cost	$33.6259	$0.0000	$33.6259	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0032			X 1.0032
Cost (including Gross Receipts Tax)			$33.7344			$0.0000
Common Cost Factor			X 1.1500			X 1.1500
Monthly Economic Cost			$38.7945			$0.0000

Total Monthly Economic Cost : $38.7945

0000043

Investment Development (Excluding Land, Building, Pole, and Conduit)
Volume Sensitive

Tennessee
H.1.33 - Physical Collocation - 2-fiber POT Bay

8/19/99

	FRC	Sub FRC	A Material	B Inflation Factor	C=AxB Adjusted Material	In-Plant Factors (Default = 1) D1 Plug-in Inventory Factor	D2 Mat'l Factor	D3 Telco Factor	D4 Plug-in Factor	D5 Hardwire Factor	E=Cx(D1xD2 x...xD5) In-Plant Investment	F Supporting Equipment &/or Power Loading	G=ExF Total Investment
Digtl Circ - Other - C.O. - Hardwired - Power Only	357C	01	$528.6275	0.9635	$509.3500	1.0000	1.0000	1.0000	1.0000	3.2421	$1,651.3821	1.0278	$1,697.2905

000044

Land, Building, Pole, and Conduit Investment Development
Volume Sensitive

Tennessee
H.1.33 - Physical Collocation - 2-fiber POT Bay

	FRC	Investment	
Land - COE	20C	$9.6746	= Sum of Col C
Buildings - COE	10C	$219.7991	= Sum of Col E

8/19/99

	FRC	Sub FRC	A=Prev Page Col G Investment	B Land Factor	C=(AxB) Land Investment	D Building Factor	E=(AxD) Building Investment	F Pole Factor	G=(AxF) Pole Investment	H Conduit Factor	I=(AxH) Conduit Investment
Digtl Circ - Other - C.O. - Hardwired - Power Only	357C	01	$1,697.2905	0.0057	$9.6746	0.1295	$219.7991	0.0000	$0.0000	0.0000	$0.0000
					$9.6746		$219.7991		$0.0000		$0.0000

000045

Recurring Cost Development
Volume Sensitive

Tennessee
H.1.33 - Physical Collocation - 2-fiber POT Bay

8/19/99		A=Prev Page Col A	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)	J	K=(AxJ)	L=(C+E+G+ I+K)	M	N=(AxM)	O=(L+N)
	FRC	**Investment**	**Depreciation Factor**	**Depreciation**	**Cost of Money Factor**	**Cost of Money**	**Income Tax Factor**	**Income Tax**	**Plant Specific Factor**	**Plant Specific Expense**	**Ad Valorem Factor**	**Ad Valorem Expense**	**Direct Cost**	**Shared Cost Factor**	**Shared Cost**	**TELRIC**
Land - COE	20C	$9.6746	0.0000	$0.0000	0.0993	$0.9607	0.0449	$0.4341	0.0000	$0.0000	0.0116	$0.1126	$1.5075	0.0000	$0.0000	$1.5075
Buildings - COE	10C	$219.7991	0.0230	$5.0605	0.0780	$17.1406	0.0352	$7.7459	0.0696	$15.2985	0.0116	$2.5591	$47.8046	0.0000	$0.0000	$47.8046
Digtl Circ - Other	357C	$1,697.2905	0.0909	$154.2991	0.0626	$106.1795	0.0283	$47.9831	0.0153	$25.9753	0.0116	$19.7616	$354.1987	0.0000	$0.0000	$354.1987
Annual Total		$1,926.7642											$403.5108		$0.0000	$403.5108
Monthly Total (Annual Total / 12)													$33.6259		$0.0000	$33.6259

000046

Recurring Cost Summary

Tennessee
H.1.34 - Physical Collocation - 4-fiber POT Bay

8/19/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$45.3434	$0.0000	$45.3434			$0.0000
Total Monthly Cost	$45.3434	$0.0000	$45.3434	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0032			X 1.0032
Cost (including Gross Receipts Tax)			$45.4897			$0.0000
Common Cost Factor			X 1.1500			X 1.1500
Monthly Economic Cost			$52.3131			$0.0000

Total Monthly Economic Cost : $52.3131

000047

Investment Development (Excluding Land, Building, Pole, and Conduit)
Volume Sensitive

Tennessee
H.1.34 - Physical Collocation - 4-fiber POT Bay

8/19/99

	FRC	Sub FRC	A Material	B Inflation Factor	C=AxB Adjusted Material	D1 Plug-in Inventory Factor	D2 Mat'l Factor	D3 Telco Factor	D4 Plug-in Factor	D5 Hardwire Factor	E=Cx(D1xD2 x...xD5) In-Plant Investment	F Supporting Equipment &/or Power Loading	G=ExF Total Investment
						In-Plant Factors (Default = 1)							
Digtl Circ - Other - C.O. - Hardwired - Power Only	357C	01	$712.8367	0.9635	$686.8417	1.0000	1.0000	1.0000	1.0000	3.2421	$2,226.8340	1.0278	$2,288.7400

000048

Land, Building, Pole, and Conduit Investment Development
Volume Sensitive

Tennessee
H.1.34 - Physical Collocation - 4-fiber POT Bay

	FRC	Investment	
Land - COE	20C	$13.0458	= Sum of Col C
Buildings - COE	10C	$296.3918	= Sum of Col E

8/19/99

	FRC	Sub FRC	A=Prev Page Col G Investment	B Land Factor	C=(AxB) Land Investment	D Building Factor	E=(AxD) Building Investment	F Pole Factor	G=(AxF) Pole Investment	H Conduit Factor	I=(AxH) Conduit Investment
Digtl Circ - Other - C.O. - Hardwired - Power Only	357C	01	$2,288.7400	0.0057	$13.0458	0.1295	$296.3918	0.0000	$0.0000	0.0000	$0.0000
					$13.0458		$296.3918		$0.0000		$0.0000

000049

Recurring Cost Development
Volume Sensitive

Tennessee
H.1.34 - Physical Collocation - 4-fiber POT Bay

8/19/99

	FRC	Investment	Depreciation Factor	Depreciation	Cost of Money Factor	Cost of Money	Income Tax Factor	Income Tax	Plant Specific Factor	Plant Specific Expense	Ad Valorem Factor	Ad Valorem Expense	Direct Cost	Shared Cost Factor	Shared Cost	TELRIC
		A=Prev Page Col A	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)	J	K=(AxJ)	L=(C+E+G+I+K)	M	N=(AxM)	O=(L+N)
Land - COE	20C	$13.0458	0.0000	$0.0000	0.0993	$1.2954	0.0449	$0.5854	0.0000	$0.0000	0.0116	$0.1519	$2.0328	0.0000	$0.0000	$2.0328
Buildings - COE	10C	$296.3918	0.0230	$6.8239	0.0780	$23.1135	0.0352	$10.4451	0.0696	$20.6295	0.0116	$3.4509	$64.4629	0.0000	$0.0000	$64.4629
Digtl Circ - Other	357C	$2,288.7400	0.0909	$208.0673	0.0626	$143.1795	0.0283	$64.7037	0.0153	$35.0269	0.0116	$26.6478	$477.6252	0.0000	$0.0000	$477.6252
Annual Total		$2,598.1777											$544.1209		$0.0000	$544.1209
Monthly Total (Annual Total / 12)													$45.3434		$0.0000	$45.3434

000050

Nonrecurring Cost Summary

Tennessee
H.1.35 - Physical Collocation - 2-fiber Cross Connect -Incremental Cost - Manual Svc Order vs. Electronic

8/19/99

Nonrecurring Cost

	First				Additional			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$2.6766	$0.0000		$2.6766	$2.6766	$0.0000		$2.6766
Total Cost	$2.6766	$0.0000		$2.6766	$2.6766	$0.0000		$2.6766
Gross Receipts Tax Factor			X	1.0032			X	1.0032
Cost (including Gross Receipts Tax)				$2.6853				$2.6853
Common Cost Factor			X	1.0000			X	1.0000
Nonrecurring Economic Cost				**$2.6853**				**$2.6853**

000051

Nonrecurring Cost Development

Tennessee

H.1.35 - Physical Collocation - 2-fiber Cross Connect -Incremental Cost - Manual Svc Order vs. Electronic

8/19/99

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes			Install Cost		Disconnect Cost						
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Direct Labor Rate	First	Additional	First	Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	Direct Cost First	Direct Cost Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0597	0.0597	0.0000	0.0000	$44.86	$2.6766	$2.6766	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$2.6766	$2.6766
														Total	2.676646667	2.676646667

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional		First	Additional	First	Additional					
Service Order	2300	Customer Point Of Contact - ICSC	0.0597	0.0597	0.0000	0.0000	$44.86	$2.6766	$2.6766	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$2.6766	$2.6766
														Total	2.676646667	2.676646667

250052

Nonrecurring Cost Summary

Tennessee

H.1.36 - Physical Collocation - 4-fiber Cross Connect - Incremental Cost - Manual Svc Order vs. Electronic

8/19/99

Nonrecurring Cost

	First				Additional			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$2.6766	$0.0000		$2.6766	$2.6766	$0.0000		$2.6766
Total Cost	$2.6766	$0.0000		$2.6766	$2.6766	$0.0000		$2.6766
Gross Receipts Tax Factor			X	1.0032			X	1.0032
Cost (including Gross Receipts Tax)				$2.6853				$2.6853
Common Cost Factor			X	1.0000			X	1.0000
Nonrecurring Economic Cost				**$2.6853**				**$2.6853**

000053

Nonrecurring Cost Development

Tennessee
H.1.36 - Physical Collocation - 4-fiber Cross Connect - Incremental Cost - Manual Svc Order vs. Electronic

8/19/99

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0597	0.0597	0.0000	0.0000	$44.86	$2.6766	$2.6766	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$2.6766	$2.6766
														Total	2.676646667	2.676646667

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0597	0.0597	0.0000	0.0000	$44.86	$2.6766	$2.6766	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$2.6766	$2.6766
														Total	2.676646667	2.676646667

000054

Nonrecurring Cost Summary

Tennessee
H.1.3199 - Physical Collocation - 2-fiber Cross Connect - Disconnect

8/19/99

Nonrecurring Cost

	First				Additional			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$12.9193	$0.0000		$12.9193	$10.3058	$0.0000		$10.3058
Total Cost	$12.9193	$0.0000		$12.9193	$10.3058	$0.0000		$10.3058
Gross Receipts Tax Factor			X	1.0032			X	1.0032
Cost (including Gross Receipts Tax)				$12.9610				$10.3391
Common Cost Factor			X	1.0000			X	1.0000
Nonrecurring Economic Cost				**$12.9610**				**$10.3391**

000055

Nonrecurring Cost Development

Tennessee
H.1.3199 - Physical Collocation - 2-fiber Cross Connect - Disconnect

8/19/99

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0000	0.0000	0.0023	0.0023	$44.86	$0.0000	$0.0000	$0.1047	$0.1047	1.1187	$0.1171	$0.1171	$0.1171	$0.1171
Service Order	470X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0167	0.0000	$37.06	$0.0000	$0.0000	$0.6177	$0.0000	1.1187	$0.6910	$0.0000	$0.6910	$0.0000
Service Order	4WXX	Work Management Center (WMC)	0.0000	0.0000	0.0500	0.0000	$34.37	$0.0000	$0.0000	$1.7185	$0.0000	1.1187	$1.9225	$0.0000	$1.9225	$0.0000
Service Order	471X	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.0111	0.0111	$38.31	$0.0000	$0.0000	$0.4257	$0.4257	1.1187	$0.4762	$0.4762	$0.4762	$0.4762
Engineering	470X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0167	0.0167	$37.06	$0.0000	$0.0000	$0.6177	$0.6177	1.1187	$0.6910	$0.6910	$0.6910	$0.6910
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.1667	0.1667	$42.88	$0.0000	$0.0000	$7.1467	$7.1467	1.1187	$7.9951	$7.9951	$7.9951	$7.9951
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.0240	0.0240	$38.31	$0.0000	$0.0000	$0.9175	$0.9175	1.1187	$1.0264	$1.0264	$1.0264	$1.0264
														Total	12.91931993	10.30581699

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0000	0.0000	0.0023	0.0023	$44.86	$0.0000	$0.0000	$0.1047	$0.1047	1.1187	$0.1171	$0.1171	$0.1171	$0.1171
Service Order	470X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0167	0.0000	$37.06	$0.0000	$0.0000	$0.6177	$0.0000	1.1187	$0.6910	$0.0000	$0.6910	$0.0000
Service Order	4WXX	Work Management Center (WMC)	0.0000	0.0000	0.0500	0.0000	$34.37	$0.0000	$0.0000	$1.7185	$0.0000	1.1187	$1.9225	$0.0000	$1.9225	$0.0000
Service Order	471X	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.0111	0.0111	$38.31	$0.0000	$0.0000	$0.4257	$0.4257	1.1187	$0.4762	$0.4762	$0.4762	$0.4762
Engineering	470X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0167	0.0167	$37.06	$0.0000	$0.0000	$0.6177	$0.6177	1.1187	$0.6910	$0.6910	$0.6910	$0.6910
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.1667	0.1667	$42.88	$0.0000	$0.0000	$7.1467	$7.1467	1.1187	$7.9951	$7.9951	$7.9951	$7.9951
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.0240	0.0240	$38.31	$0.0000	$0.0000	$0.9175	$0.9175	1.1187	$1.0264	$1.0264	$1.0264	$1.0264
														Total	12.91931993	10.30581699

000056

Nonrecurring Cost Summary

Tennessee
H.1.3299 - Physical Collocation - 4-fiber Cross Connect - Disconnect

8/19/99

Nonrecurring Cost

	First				Additional			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$16.9169	$0.0000		$16.9169	$14.3034	$0.0000		$14.3034
Total Cost	$16.9169	$0.0000		$16.9169	$14.3034	$0.0000		$14.3034
Gross Receipts Tax Factor			X	1.0032			X	1.0032
Cost (including Gross Receipts Tax)				$16.9714				$14.3495
Common Cost Factor			X	1.0000			X	1.0000
Nonrecurring Economic Cost				**$16.9714**				**$14.3495**

000057

Nonrecurring Cost Development

Tennessee
H.1.3299 - Physical Collocation - 4-fiber Cross Connect - Disconnect

8/19/99

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0000	0.0000	0.0023	0.0023	$44.86	$0.0000	$0.0000	$0.1047	$0.1047	1.1187	$0.1171	$0.1171	$0.1171	$0.1171
Service Order	470X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0167	0.0000	$37.06	$0.0000	$0.0000	$0.6177	$0.0000	1.1187	$0.6910	$0.0000	$0.6910	$0.0000
Service Order	4WXX	Work Management Center (WMC)	0.0000	0.0000	0.0500	0.0000	$34.37	$0.0000	$0.0000	$1.7185	$0.0000	1.1187	$1.9225	$0.0000	$1.9225	$0.0000
Service Order	471X	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.0111	0.0111	$38.31	$0.0000	$0.0000	$0.4257	$0.4257	1.1187	$0.4762	$0.4762	$0.4762	$0.4762
Engineering	470X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0167	0.0167	$37.06	$0.0000	$0.0000	$0.6177	$0.6177	1.1187	$0.6910	$0.6910	$0.6910	$0.6910
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2500	0.2500	$42.88	$0.0000	$0.0000	$10.7200	$10.7200	1.1187	$11.9926	$11.9926	$11.9926	$11.9926
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.0240	0.0240	$38.31	$0.0000	$0.0000	$0.9175	$0.9175	1.1187	$1.0264	$1.0264	$1.0264	$1.0264
														Total	16.91685884	14.3033559

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0000	0.0000	0.0023	0.0023	$44.86	$0.0000	$0.0000	$0.1047	$0.1047	1.1187	$0.1171	$0.1171	$0.1171	$0.1171
Service Order	470X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0167	0.0000	$37.06	$0.0000	$0.0000	$0.6177	$0.0000	1.1187	$0.6910	$0.0000	$0.6910	$0.0000
Service Order	4WXX	Work Management Center (WMC)	0.0000	0.0000	0.0500	0.0000	$34.37	$0.0000	$0.0000	$1.7185	$0.0000	1.1187	$1.9225	$0.0000	$1.9225	$0.0000
Service Order	471X	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.0111	0.0111	$38.31	$0.0000	$0.0000	$0.4257	$0.4257	1.1187	$0.4762	$0.4762	$0.4762	$0.4762
Engineering	470X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0167	0.0167	$37.06	$0.0000	$0.0000	$0.6177	$0.6177	1.1187	$0.6910	$0.6910	$0.6910	$0.6910
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2500	0.2500	$42.88	$0.0000	$0.0000	$10.7200	$10.7200	1.1187	$11.9926	$11.9926	$11.9926	$11.9926
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.0240	0.0240	$38.31	$0.0000	$0.0000	$0.9175	$0.9175	1.1187	$1.0264	$1.0264	$1.0264	$1.0264
														Total	16.91685884	14.3033559

000058

Nonrecurring Cost Summary

Tennessee

H.1.3599 - Physical Collocation - 2-fiber Cross Connect -Incremental Cost - Manual Svc Order vs. Electronic - Disconnect

8/19/99

Nonrecurring Cost

	First				Additional			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$1.5558	$0.0000		$1.5558	$1.5558	$0.0000		$1.5558
Total Cost	$1.5558	$0.0000		$1.5558	$1.5558	$0.0000		$1.5558
Gross Receipts Tax Factor			X	1.0032			X	1.0032
Cost (including Gross Receipts Tax)				$1.5608				$1.5608
Common Cost Factor			X	1.0000			X	1.0000
Nonrecurring Economic Cost				**$1.5608**				**$1.5608**

650000

Nonrecurring Cost Development

Tennessee

H.1.3599 - Physical Collocation - 2-fiber Cross Connect -Incremental Cost - Manual Svc Order vs. Electronic - Disconnect

8/19/99

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes			Install Cost		Disconnect Cost						
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Direct Labor Rate	First	Additional	First	Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	Direct Cost First	Direct Cost Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0000	0.0000	0.0310	0.0310	$44.86	$0.0000	$0.0000	$1.3907	$1.3907	1.1187	$1.5558	$1.5558	$1.5558	$1.5558
														Total	1.555751158	1.555751158

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional		First	Additional	First	Additional		First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0000	0.0000	0.0310	0.0310	$44.86	$0.0000	$0.0000	$1.3907	$1.3907	1.1187	$1.5558	$1.5558	$1.5558	$1.5558
														Total	1.555751158	1.555751158

090060

Nonrecurring Cost Summary

Tennessee
H.1.3699 - Physical Collocation - 4-fiber Cross Connect - Incremental Cost - Manual Svc Order vs. Electronic - Disconnect

8/19/99

Nonrecurring Cost

	First				Additional			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$1.5558	$0.0000		$1.5558	$1.5558	$0.0000		$1.5558
Total Cost	$1.5558	$0.0000		$1.5558	$1.5558	$0.0000		$1.5558
Gross Receipts Tax Factor			X	1.0032			X	1.0032
Cost (including Gross Receipts Tax)				$1.5608				$1.5608
Common Cost Factor			X	1.0000			X	1.0000
Nonrecurring Economic Cost				**$1.5608**				**$1.5608**

000061

Nonrecurring Cost Development

Tennessee

H.1.3699 - Physical Collocation - 4-fiber Cross Connect - Incremental Cost - Manual Svc Order vs. Electronic - Disconnect

8/19/99

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0000	0.0000	0.0310	0.0310	$44.86	$0.0000	$0.0000	$1.3907	$1.3907	1.1187	$1.5558	$1.5558	$1.5558	$1.5558
														Total	1.555751158	1.555751158

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0000	0.0000	0.0310	0.0310	$44.86	$0.0000	$0.0000	$1.3907	$1.3907	1.1187	$1.5558	$1.5558	$1.5558	$1.5558
														Total	1.555751158	1.555751158

290062

Recurring Cost Summary

Tennessee
H.2.16 - Virtual Collocation - 2-Fiber Cross Connects

8/19/99

	Volume Sensitive				Volume Insensitive			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$2.6275	$0.0000		$2.6275				$0.0000
Total Monthly Cost	$2.6275	$0.0000		$2.6275	$0.0000	$0.0000		$0.0000
Gross Receipts Tax Factor			X	1.0032			X	1.0032
Cost (including Gross Receipts Tax)				$2.6360				$0.0000
Common Cost Factor			X	1.1500			X	1.1500
Monthly Economic Cost				$3.0314				$0.0000

Total Monthly Economic Cost : $3.0314

000063

Investment Development (Excluding Land, Building, Pole, and Conduit)
Volume Sensitive

Tennessee
H.2.16 - Virtual Collocation - 2-Fiber Cross Connects

8/19/99

	FRC	Sub FRC	A Material	B Inflation Factor	C=AxB Adjusted Material	D1 Plug-in Inventory Factor	D2 Mat'l Factor	D3 Telco Factor	D4 Plug-in Factor	D5 Hardwire Factor	E=Cx(D1xD2 x...xD5) In-Plant Investment	F Supporting Equipment &/or Power Loading	G=ExF Total Investment
						In-Plant Factors (Default = 1)							
Digtl Circ - Other - C.O. - Hardwired - Power Only	357C	01	$41.3071	0.9635	$39.8007	1.0000	1.0000	1.0000	1.0000	3.2421	$129.0393	1.0278	$132.6266

000064

Land, Building, Pole, and Conduit Investment Development
Volume Sensitive

Tennessee
H.2.16 - Virtual Collocation - 2-Fiber Cross Connects

	FRC	Investment	
Land - COE	20C	$0.7560	= Sum of Col C
Buildings - COE	10C	$17.1751	= Sum of Col E

8/19/99

	FRC	Sub FRC	A=Prev Page Col G Investment	B Land Factor	C=(AxB) Land Investment	D Building Factor	E=(AxD) Building Investment	F Pole Factor	G=(AxF) Pole Investment	H Conduit Factor	I=(AxH) Conduit Investment
Digtl Circ - Other - C.O. - Hardwired - Power Only	357C	01	$132.6266	0.0057	$0.7560	0.1295	$17.1751	0.0000	$0.0000	0.0000	$0.0000
					$0.7560		$17.1751		$0.0000		$0.0000

S90065

Recurring Cost Development
Volume Sensitive

Tennessee
H.2.16 - Virtual Collocation - 2-Fiber Cross Connects

8/19/99

	FRC	Investment	Depreciation Factor	Depreciation	Cost of Money Factor	Cost of Money	Income Tax Factor	Income Tax	Plant Specific Factor	Plant Specific Expense	Ad Valorem Factor	Ad Valorem Expense	Direct Cost	Shared Cost Factor	Shared Cost	TELRIC
		A=Prev Page Col A	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)	J	K=(AxJ)	L=(C+E+G+I+K)	M	N=(AxM)	O=(L+N)
Land - COE	20C	$0.7560	0.0000	$0.0000	0.0993	$0.0751	0.0449	$0.0339	0.0000	$0.0000	0.0116	$0.0088	$0.1178	0.0000	$0.0000	$0.1178
Buildings - COE	10C	$17.1751	0.0230	$0.3954	0.0780	$1.3394	0.0352	$0.6053	0.0696	$1.1954	0.0116	$0.2000	$3.7355	0.0000	$0.0000	$3.7355
Digtl Circ - Other	357C	$132.6266	0.0909	$12.0570	0.0626	$8.2969	0.0283	$3.7494	0.0153	$2.0297	0.0116	$1.5442	$27.6772	0.0000	$0.0000	$27.6772
Annual Total		$150.5578											$31.5304		$0.0000	$31.5304
Monthly Total (Annual Total / 12)													$2.6275		$0.0000	$2.6275

990000

Nonrecurring Cost Summary

Tennessee
H.2.16 - Virtual Collocation - 2-Fiber Cross Connects

8/19/99

Nonrecurring Cost

	First				Additional			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$41.4295	$0.0000		$41.4295	$29.7266	$0.0000		$29.7266
Total Cost	$41.4295	$0.0000		$41.4295	$29.7266	$0.0000		$29.7266
Gross Receipts Tax Factor			X	1.0032			X	1.0032
Cost (including Gross Receipts Tax)				$41.5631				$29.8225
Common Cost Factor			X	1.0000			X	1.0000
Nonrecurring Economic Cost				**$41.5631**				**$29.8225**

090067

Nonrecurring Cost Development

Tennessee
H.2.16 - Virtual Collocation - 2-Fiber Cross Connects

8/19/99

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0070	0.0070	0.0000	0.0000	$44.86	$0.3140	$0.3140	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.3140	$0.3140
Service Order	31XX	Ntwk & Eng Planning (FG20)	0.2500	0.0833	0.0000	0.0000	$56.20	$14.0500	$4.6833	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$14.0500	$4.6833
Service Order	470X	Circuit Provisioning Group (CPG)	0.0167	0.0000	0.0000	0.0000	$37.06	$0.6177	$0.0000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.6177	$0.0000
Service Order	4WXX	Work Management Center (WMC)	0.0500	0.0000	0.0000	0.0000	$34.37	$1.7185	$0.0000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$1.7185	$0.0000
Service Order	471X	Acc Cust Advocate Cntr (ACAC)	0.0111	0.0111	0.0000	0.0000	$38.31	$0.4257	$0.4257	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.4257	$0.4257
Engineering	470X	Circuit Provisioning Group (CPG)	0.0167	0.0167	0.0000	0.0000	$37.06	$0.6177	$0.6177	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.6177	$0.6177
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.4167	0.4167	0.0000	0.0000	$42.88	$17.8667	$17.8667	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$17.8667	$17.8667
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.1519	0.1519	0.0000	0.0000	$38.31	$5.8193	$5.8193	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$5.8193	$5.8193
														Total	41.42947567	29.72664233

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0070	0.0070	0.0000	0.0000	$44.86	$0.3140	$0.3140	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.3140	$0.3140
Service Order	31XX	Ntwk & Eng Planning (FG20)	0.2500	0.0833	0.0000	0.0000	$56.20	$14.0500	$4.6833	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$14.0500	$4.6833
Service Order	470X	Circuit Provisioning Group (CPG)	0.0167	0.0000	0.0000	0.0000	$37.06	$0.6177	$0.0000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.6177	$0.0000
Service Order	4WXX	Work Management Center (WMC)	0.0500	0.0000	0.0000	0.0000	$34.37	$1.7185	$0.0000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$1.7185	$0.0000
Service Order	471X	Acc Cust Advocate Cntr (ACAC)	0.0111	0.0111	0.0000	0.0000	$38.31	$0.4257	$0.4257	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.4257	$0.4257
Engineering	470X	Circuit Provisioning Group (CPG)	0.0167	0.0167	0.0000	0.0000	$37.06	$0.6177	$0.6177	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.6177	$0.6177
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.4167	0.4167	0.0000	0.0000	$42.88	$17.8667	$17.8667	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$17.8667	$17.8667
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.1519	0.1519	0.0000	0.0000	$38.31	$5.8193	$5.8193	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$5.8193	$5.8193
														Total	41.42947567	29.72664233

890000

Recurring Cost Summary

Tennessee
H.2.17 - Virtual Collocation - 4-Fiber Cross Connects

8/19/99

	Volume Sensitive				Volume Insensitive			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$5.2551	$0.0000		$5.2551				$0.0000
Total Monthly Cost	$5.2551	$0.0000		$5.2551	$0.0000	$0.0000		$0.0000
Gross Receipts Tax Factor			X	1.0032			X	1.0032
Cost (including Gross Receipts Tax)				$5.2720				$0.0000
Common Cost Factor			X	1.1500			X	1.1500
Monthly Economic Cost				$6.0628				$0.0000

Total Monthly Economic Cost : $6.0628

690000

Investment Development (Excluding Land, Building, Pole, and Conduit)
Volume Sensitive

Tennessee
H.2.17 - Virtual Collocation - 4-Fiber Cross Connects

8/19/99

	FRC	Sub FRC	A Material	B Inflation Factor	C=AxB Adjusted Material	D1 Plug-in Inventory Factor	D2 Mat'l Factor	D3 Telco Factor	D4 Plug-in Factor	D5 Hardwire Factor	E=Cx(D1xD2 x...xD5) In-Plant Investment	F Supporting Equipment &/or Power Loading	G=ExF Total Investment
						In-Plant Factors (Default = 1)							
Digtl Circ - Other - C.O. - Hardwired - Power Only	357C	01	$82.6141	0.9635	$79.6014	1.0000	1.0000	1.0000	1.0000	3.2421	$258.0787	1.0278	$265.2533

070000

Land, Building, Pole, and Conduit Investment Development
Volume Sensitive

Tennessee
H.2.17 - Virtual Collocation - 4-Fiber Cross Connects

	FRC	Investment	
Land - COE	20C	$1.5119	= Sum of Col C
Buildings - COE	10C	$34.3503	= Sum of Col E

8/19/99

	FRC	Sub FRC	A=Prev Page Col G Investment	B Land Factor	C=(AxB) Land Investment	D Building Factor	E=(AxD) Building Investment	F Pole Factor	G=(AxF) Pole Investment	H Conduit Factor	I=(AxH) Conduit Investment
Digtl Circ - Other - C.O. - Hardwired - Power Only	357C	01	$265.2533	0.0057	$1.5119	0.1295	$34.3503	0.0000	$0.0000	0.0000	$0.0000
					$1.5119		$34.3503		$0.0000		$0.0000

000071

Recurring Cost Development
Volume Sensitive

Tennessee
H.2.17 - Virtual Collocation - 4-Fiber Cross Connects

8/19/99		A=Prev Page Col A	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)	J	K=(AxJ)	L=(C+E+G+I+K)	M	N=(AxM)	O=(L+N)
	FRC	Investment	Depreciation Factor	Depreciation	Cost of Money Factor	Cost of Money	Income Tax Factor	Income Tax	Plant Specific Factor	Plant Specific Expense	Ad Valorem Factor	Ad Valorem Expense	Direct Cost	Shared Cost Factor	Shared Cost	TELRIC
Land - COE	20C	$1.5119	0.0000	$0.0000	0.0993	$0.1501	0.0449	$0.0678	0.0000	$0.0000	0.0116	$0.0176	$0.2356	0.0000	$0.0000	$0.2356
Buildings - COE	10C	$34.3503	0.0230	$0.7909	0.0780	$2.6787	0.0352	$1.2105	0.0696	$2.3908	0.0116	$0.3999	$7.4709	0.0000	$0.0000	$7.4709
Digtl Circ - Other	357C	$265.2533	0.0909	$24.1139	0.0626	$16.5938	0.0283	$7.4988	0.0153	$4.0594	0.0116	$3.0883	$55.3543	0.0000	$0.0000	$55.3543
Annual Total		$301.1155											$63.0608		$0.0000	$63.0608
Monthly Total (Annual Total / 12)													$5.2551		$0.0000	$5.2551

000072

Nonrecurring Cost Summary

Tennessee
H.2.17 - Virtual Collocation - 4-Fiber Cross Connects

8/19/99

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$50.3628	$0.0000	$50.3628	$38.6600	$0.0000	$38.6600
Total Cost	$50.3628	$0.0000	$50.3628	$38.6600	$0.0000	$38.6600
Gross Receipts Tax Factor			X 1.0032			X 1.0032
Cost (including Gross Receipts Tax)			$50.5253			$38.7847
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$50.5253**			**$38.7847**

000073

Nonrecurring Cost Development

Tennessee
H.2.17 - Virtual Collocation - 4-Fiber Cross Connects

8/19/99

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0070	0.0070	0.0000	0.0000	$44.86	$0.3140	$0.3140	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.3140	$0.3140
Service Order	31XX	Ntwk & Eng Planning (FG20)	0.2500	0.0833	0.0000	0.0000	$56.20	$14.0500	$4.6833	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$14.0500	$4.6833
Service Order	470X	Circuit Provisioning Group (CPG)	0.0167	0.0000	0.0000	0.0000	$37.06	$0.6177	$0.0000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.6177	$0.0000
Service Order	4WXX	Work Management Center (WMC)	0.0500	0.0000	0.0000	0.0000	$34.37	$1.7185	$0.0000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$1.7185	$0.0000
Service Order	471X	Acc Cust Advocate Cntr (ACAC)	0.0111	0.0111	0.0000	0.0000	$38.31	$0.4257	$0.4257	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.4257	$0.4257
Engineering	470X	Circuit Provisioning Group (CPG)	0.0167	0.0167	0.0000	0.0000	$37.06	$0.6177	$0.6177	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.6177	$0.6177
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.6250	0.6250	0.0000	0.0000	$42.88	$26.8000	$26.8000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$26.8000	$26.8000
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.1519	0.1519	0.0000	0.0000	$38.31	$5.8193	$5.8193	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$5.8193	$5.8193
														Total	50.362809	38.65997567

Function	JFC/ Payband	JFC/Payband Description	Installation Worktimes First	Installation Worktimes Additional	Disconnect Worktimes First	Disconnect Worktimes Additional	TELRIC Labor Rate	Install Cost First	Install Cost Additional	Disconnect Cost First	Disconnect Cost Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0070	0.0070	0.0000	0.0000	$44.86	$0.3140	$0.3140	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.3140	$0.3140
Service Order	31XX	Ntwk & Eng Planning (FG20)	0.2500	0.0833	0.0000	0.0000	$56.20	$14.0500	$4.6833	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$14.0500	$4.6833
Service Order	470X	Circuit Provisioning Group (CPG)	0.0167	0.0000	0.0000	0.0000	$37.06	$0.6177	$0.0000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.6177	$0.0000
Service Order	4WXX	Work Management Center (WMC)	0.0500	0.0000	0.0000	0.0000	$34.37	$1.7185	$0.0000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$1.7185	$0.0000
Service Order	471X	Acc Cust Advocate Cntr (ACAC)	0.0111	0.0111	0.0000	0.0000	$38.31	$0.4257	$0.4257	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.4257	$0.4257
Engineering	470X	Circuit Provisioning Group (CPG)	0.0167	0.0167	0.0000	0.0000	$37.06	$0.6177	$0.6177	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$0.6177	$0.6177
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.6250	0.6250	0.0000	0.0000	$42.88	$26.8000	$26.8000	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$26.8000	$26.8000
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.1519	0.1519	0.0000	0.0000	$38.31	$5.8193	$5.8193	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$5.8193	$5.8193
														Total	50.362809	38.65997567

000074

Nonrecurring Cost Summary

Tennessee

H.2.18 - Virtual Collocation - 2-Fiber Cross Connects - Incremental Cost - Manual Svc Order vs. Electronic

8/19/99

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$2.6766	$0.0000	$2.6766	$2.6766	$0.0000	$2.6766
Total Cost	$2.6766	$0.0000	$2.6766	$2.6766	$0.0000	$2.6766
Gross Receipts Tax Factor			X 1.0032			X 1.0032
Cost (including Gross Receipts Tax)			$2.6853			$2.6853
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$2.6853**			**$2.6853**

000075

Nonrecurring Cost Development

Tennessee

H.2.18 - Virtual Collocation - 2-Fiber Cross Connects - Incremental Cost - Manual Svc Order vs. Electronic

8/19/99

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes			Install Cost		Disconnect Cost						
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Direct Labor Rate	First	Additional	First	Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	Direct Cost First	Direct Cost Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0597	0.0597	0.0000	0.0000	$44.86	$2.6766	$2.6766	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$2.6766	$2.6766
														Total	2.676646667	2.676646667

			Installation Worktimes		Disconnect Worktimes			Install Cost		Disconnect Cost						
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	TELRIC Labor Rate	First	Additional	First	Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0597	0.0597	0.0000	0.0000	$44.86	$2.6766	$2.6766	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$2.6766	$2.6766
														Total	2.676646667	2.676646667

92000

Nonrecurring Cost Summary

Tennessee

H.2.19 - Virtual Collocation - 4-Fiber Cross Connects - Incremental Cost - Manual Svc Order vs. Electronic

8/19/99

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$2.6766	$0.0000	$2.6766	$2.6766	$0.0000	$2.6766
Total Cost	$2.6766	$0.0000	$2.6766	$2.6766	$0.0000	$2.6766
Gross Receipts Tax Factor			X 1.0032			X 1.0032
Cost (including Gross Receipts Tax)			$2.6853			$2.6853
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$2.6853**			**$2.6853**

000077

Nonrecurring Cost Development

Tennessee

H.2.19 - Virtual Collocation - 4-Fiber Cross Connects - Incremental Cost - Manual Svc Order vs. Electronic

8/19/99

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes			Install Cost		Disconnect Cost						
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Direct Labor Rate	First	Additional	First	Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	Direct Cost First	Direct Cost Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0597	0.0597	0.0000	0.0000	$44.86	$2.6766	$2.6766	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$2.6766	$2.6766
														Total	**2.676646667**	**2.676646667**

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor Rate	Install Cost		Disconnect Cost		Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional		First	Additional	First	Additional					
Service Order	2300	Customer Point Of Contact - ICSC	0.0597	0.0597	0.0000	0.0000	$44.86	$2.6766	$2.6766	$0.0000	$0.0000	1.0000	$0.0000	$0.0000	$2.6766	$2.6766
														Total	**2.676646667**	**2.676646667**

000078

Nonrecurring Cost Summary

Tennessee
H.2.1799 - Virtual Collocation - 4-Fiber Cross Connects - Disconnect

8/19/99

Nonrecurring Cost

	First			Additional		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Nonrecurring Cost Development Sheet Col H	$16.9169	$0.0000	$16.9169	$14.3034	$0.0000	$14.3034
Total Cost	$16.9169	$0.0000	$16.9169	$14.3034	$0.0000	$14.3034
Gross Receipts Tax Factor			X 1.0032			X 1.0032
Cost (including Gross Receipts Tax)			$16.9714			$14.3495
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$16.9714**			**$14.3495**

620079

Nonrecurring Cost Development

Tennessee
H.2.1799 - Virtual Collocation - 4-Fiber Cross Connects - Disconnect

8/19/99

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0000	0.0000	0.0023	0.0023	$44.86	$0.0000	$0.0000	$0.1047	$0.1047	1.1187	$0.1171	$0.1171	$0.1171	$0.1171
Service Order	470X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0167	0.0000	$37.06	$0.0000	$0.0000	$0.6177	$0.0000	1.1187	$0.6910	$0.0000	$0.6910	$0.0000
Service Order	4WXX	Work Management Center (WMC)	0.0000	0.0000	0.0500	0.0000	$34.37	$0.0000	$0.0000	$1.7185	$0.0000	1.1187	$1.9225	$0.0000	$1.9225	$0.0000
Service Order	471X	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.0111	0.0111	$38.31	$0.0000	$0.0000	$0.4257	$0.4257	1.1187	$0.4762	$0.4762	$0.4762	$0.4762
Engineering	470X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0167	0.0167	$37.06	$0.0000	$0.0000	$0.6177	$0.6177	1.1187	$0.6910	$0.6910	$0.6910	$0.6910
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2500	0.2500	$42.88	$0.0000	$0.0000	$10.7200	$10.7200	1.1187	$11.9926	$11.9926	$11.9926	$11.9926
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.0240	0.0240	$38.31	$0.0000	$0.0000	$0.9175	$0.9175	1.1187	$1.0264	$1.0264	$1.0264	$1.0264
														Total	**16.91685884**	**14.3033559**

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0000	0.0000	0.0023	0.0023	$44.86	$0.0000	$0.0000	$0.1047	$0.1047	1.1187	$0.1171	$0.1171	$0.1171	$0.1171
Service Order	470X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0167	0.0000	$37.06	$0.0000	$0.0000	$0.6177	$0.0000	1.1187	$0.6910	$0.0000	$0.6910	$0.0000
Service Order	4WXX	Work Management Center (WMC)	0.0000	0.0000	0.0500	0.0000	$34.37	$0.0000	$0.0000	$1.7185	$0.0000	1.1187	$1.9225	$0.0000	$1.9225	$0.0000
Service Order	471X	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.0111	0.0111	$38.31	$0.0000	$0.0000	$0.4257	$0.4257	1.1187	$0.4762	$0.4762	$0.4762	$0.4762
Engineering	470X	Circuit Provisioning Group (CPG)	0.0000	0.0000	0.0167	0.0167	$37.06	$0.0000	$0.0000	$0.6177	$0.6177	1.1187	$0.6910	$0.6910	$0.6910	$0.6910
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.0000	0.0000	0.2500	0.2500	$42.88	$0.0000	$0.0000	$10.7200	$10.7200	1.1187	$11.9926	$11.9926	$11.9926	$11.9926
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.0000	0.0000	0.0240	0.0240	$38.31	$0.0000	$0.0000	$0.9175	$0.9175	1.1187	$1.0264	$1.0264	$1.0264	$1.0264
														Total	**16.91685884**	**14.3033559**

080000

Nonrecurring Cost Summary

Tennessee

H.2.1899 - Virtual Collocation - 2-Fiber Cross Connects - Incremental Cost - Manual Svc Order vs. Electronic - Disconnect

8/19/99

Nonrecurring Cost

	First			Additional		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Nonrecurring Cost Development Sheet Col H	$1.5558	$0.0000	$1.5558	$1.5558	$0.0000	$1.5558
Total Cost	$1.5558	$0.0000	$1.5558	$1.5558	$0.0000	$1.5558
Gross Receipts Tax Factor			X 1.0032			X 1.0032
Cost (including Gross Receipts Tax)			$1.5608			$1.5608
Common Cost Factor			X 1.0000			X 1.0000
Nonrecurring Economic Cost			**$1.5608**			**$1.5608**

000081

Nonrecurring Cost Development

Tennessee

H.2.1899 - Virtual Collocation - 2-Fiber Cross Connects - Incremental Cost - Manual Svc Order vs. Electronic - Disconnect

8/19/99

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes		Direct Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		Direct Cost	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0000	0.0000	0.0310	0.0310	$44.86	$0.0000	$0.0000	$1.3907	$1.3907	1.1187	$1.5558	$1.5558	$1.5558	$1.5558
														Total	1.555751158	1.555751158

			Installation Worktimes		Disconnect Worktimes		TELRIC Labor	Install Cost		Disconnect Cost		Disconnect Discount	Discounted Disconnect Cost		TELRIC	
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Rate	First	Additional	First	Additional	Factor	First	Additional	First	Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0000	0.0000	0.0310	0.0310	$44.86	$0.0000	$0.0000	$1.3907	$1.3907	1.1187	$1.5558	$1.5558	$1.5558	$1.5558
														Total	1.555751158	1.555751158

280000

Nonrecurring Cost Summary

Tennessee

H.2.1999 - Virtual Collocation - 4-Fiber Cross Connects - Incremental Cost - Manual Svc Order vs. Electronic - Disconnect

8/19/99

Nonrecurring Cost

	First				Additional			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$1.5558	$0.0000		$1.5558	$1.5558	$0.0000		$1.5558
Total Cost	$1.5558	$0.0000		$1.5558	$1.5558	$0.0000		$1.5558
Gross Receipts Tax Factor			X	1.0032			X	1.0032
Cost (including Gross Receipts Tax)				$1.5608				$1.5608
Common Cost Factor			X	1.0000			X	1.0000
Nonrecurring Economic Cost				**$1.5608**				**$1.5608**

0000083

Nonrecurring Cost Development

Tennessee
H.2.1999 - Virtual Collocation - 4-Fiber Cross Connects - Incremental Cost - Manual Svc Order vs. Electronic - Disconnect

8/19/99

			A		B		C	D=AxC		E=BxC		F	G=ExF		H=D+G	
			Installation Worktimes		Disconnect Worktimes			Install Cost		Disconnect Cost						
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	Direct Labor Rate	First	Additional	First	Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	Direct Cost First	Direct Cost Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0000	0.0000	0.0310	0.0310	$44.86	$0.0000	$0.0000	$1.3907	$1.3907	1.1187	$1.5558	$1.5558	$1.5558	$1.5558
														Total	1.555751158	1.555751158

			Installation Worktimes		Disconnect Worktimes			Install Cost		Disconnect Cost						
Function	JFC/ Payband	JFC/Payband Description	First	Additional	First	Additional	TELRIC Labor Rate	First	Additional	First	Additional	Disconnect Discount Factor	Discounted Disconnect Cost First	Discounted Disconnect Cost Additional	TELRIC First	TELRIC Additional
Service Order	2300	Customer Point Of Contact - ICSC	0.0000	0.0000	0.0310	0.0310	$44.86	$0.0000	$0.0000	$1.3907	$1.3907	1.1187	$1.5558	$1.5558	$1.5558	$1.5558
														Total	1.555751158	1.555751158

0000084

	A	B	C	D	E	F	G	H
1		Cost					Sub	Recurring
2	State	Element #		Source	Inputs	FRC	FRC	Additive
3	TN	H.1	PHYSICAL COLLOCATION					
4								
5	TN	H.1.31	Physical Collocation - 2-Fiber Cross Connect			357C	01	
6			LGX Terminations					
7			Material Price	Network Planning & Support				
8			Projected Actual Utilization	Network Planning & Support				
9			Fiber Capacity	Network Planning & Support	648			
10			Number Required	Network Planning & Support	2			
11			2-Fiber Building Cable					
12			Material Price per Foot	Network Planning & Support				
13			Projected Actual Utilization	Network Planning & Support				
14			Number Feet	Network Planning & Support	315			
15			Number Required	Network Planning & Support	1			
16			Cable Rack					
17			Material Price per Foot	Network Planning & Support				
18			Projected Actual Utilization	Network Planning & Support				
19			Number Feet	Network Planning & Support	300			
20			Fiber Capacity	Network Planning & Support	1542			
21			Number Required	Network Planning & Support	2			
22			Connector Price					
23			Material Price	Network Planning & Support				
24			Projected Actual Utilization	Network Planning & Support				
25			Number Required	Network Planning & Support	4			
26								
27	TN	H.1.32	Physical Collocation - 4-Fiber Cross Connect			357C	01	
28			LGX Terminations					
29			Material Price	Network Planning & Support				
30			Projected Actual Utilization	Network Planning & Support				
31			Fiber Capacity	Network Planning & Support	648			
32			Number Required	Network Planning & Support	4			
33			4-Fiber Building Cable					
34			Material Price per Foot	Network Planning & Support				
35			Projected Actual Utilization	Network Planning & Support				
36			Number Feet	Network Planning & Support	315			
37			Number Required	Network Planning & Support	1			
38			Cable Rack					
39			Material Price per Foot	Network Planning & Support				
40			Projected Actual Utilization	Network Planning & Support				
41			Number Feet	Network Planning & Support	300			
42			Fiber Capacity	Network Planning & Support	2920			
43			Number Required	Network Planning & Support	4			
44			Connector Price					
45			Material Price	Network Planning & Support				
46			Projected Actual Utilization	Network Planning & Support				
47			Number Required	Network Planning & Support	8			
48								
49	TN	H.1.33	Physical Collocation - 2-Fiber POT Bay			357C	01	
50			POT Bay					
51			Material Price	Network Planning & Support				
52			Projected Actual Utilization	Network Planning & Support				
53			Shelf Capacity	Network Planning & Support	12			
54			Projected Actual Utilization	Network Planning & Support				

000085

PRIVATE/PROPRIETARY:
Not for use or disclosure outside BellSouth
except by written agreement

	A	B	C	D	E	F	G	H
55			Fiber Capacity per Shelf	Network Planning & Support	24			
56			Number Required	Network Planning & Support	2			
57			**POT Bay Shelf e/w Locks**					
58			Material Price	Network Planning & Support				
59			Projected Actual Utilization	Network Planning & Support				
60			Fiber Capacity	Network Planning & Support	24			
61			Number Required	Network Planning & Support	2			
62			**POT Bay Shelf Coupler Panel**					
63			Material Price	Network Planning & Support				
64			Projected Actual Utilization	Network Planning & Support				
65			Fiber Capacity	Network Planning & Support	6			
66			Number Required	Network Planning & Support	2			
67			**POT Bay SC Coupling**					
68			Material Price	Network Planning & Support				
69			Projected Actual Utilization	Network Planning & Support				
70			Number Required	Network Planning & Support	2			
71			**POT Bay Excess Fiber Cable Storage Shelf**					
72			Material Price	Network Planning & Support				
73			Projected Actual Utilization	Network Planning & Support				
74			Fiber Capacity	Network Planning & Support	48			
75			Number Required	Network Planning & Support	2			
76								
77	**TN**	**H.1.34**	**Physical Collocation - 4-Fiber POT Bay**			**357C**	**01**	
78			**POT Bay**					
79			Material Price	Network Planning & Support				
80			Projected Actual Utilization	Network Planning & Support				
81			Shelf Capacity	Network Planning & Support	12			
82			Projected Actual Utilization	Network Planning & Support				
83			Fiber Capacity per Shelf	Network Planning & Support	24			
84			Number Required	Network Planning & Support	4			
85			**POT Bay Shelf e/w Locks**					
86			Material Price	Network Planning & Support				
87			Projected Actual Utilization	Network Planning & Support				
88			Fiber Capacity	Network Planning & Support	24			
89			Number Required	Network Planning & Support	4			
90			**POT Bay Shelf Coupler Panel**					
91			Material Price	Network Planning & Support				
92			Projected Actual Utilization	Network Planning & Support				
93			Fiber Capacity	Network Planning & Support	6			
94			Number Required	Network Planning & Support	4			
95			**POT Bay SC Coupling**					
96			Material Price	Network Planning & Support				
97			Projected Actual Utilization	Network Planning & Support				
98			Number Required	Network Planning & Support	4			
99			**POT Bay Excess Fiber Cable Storage Shelf**					
100			Material Price	Network Planning & Support				
101			Projected Actual Utilization	Network Planning & Support				
102			Fiber Capacity	Network Planning & Support	48			
103			Number Required	Network Planning & Support	4			
104								
105								
106								
107								

PRIVATE/PROPRIETARY:
Not for use or disclosure outside BellSouth
except by written agreement

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1							Cost	(For use w/ one NR)		First		Additional		
2							Element	Install	Disconnect	Install	Disconnect	Install	Disconnect	
3		Cost					Life	Time	Time	Time	Time	Time	Time	
4	State	Element #			Source	JFC	(months)	(Hours)	Hours	(Hours)	Hours	(Hours)	Hours	Nonrecurring Additive
5														
6	TN	H.1	PHYSICAL COLLOCATION											
7	TN	H.1.31	Physical Collocation - 2-Fiber Cross Connect				0							
8			Service Order	Customer Point of Contact	Interconnection Operations	2300				0.0070	0.0000	0.0070	0.0000	
9			Service Order	Network Engineering & Planning	Advanced Networking Division	31XX				0.2500	0.0000	0.0833	0.0000	
10			Service Order	Circuit Provisioning Group	Advanced Networking Division	470X				0.0167	0.0000	0.0000	0.0000	
11			Service Order	Work Management Center	Advanced Networking Division	4WXX				0.0500	0.0000	0.0000	0.0000	
12			Service Order	Access Customer Advocate Center	Advanced Networking Division	471X				0.0111	0.0000	0.0111	0.0000	
13			Engineering	Circuit Provisioning Group	Advanced Networking Division	470X				0.0167	0.0000	0.0167	0.0000	
14			Connect & Test	CO Install & Mtce Field - Ckt & Fac	Advanced Networking Division	431X				0.4167	0.0000	0.4167	0.0000	
15			Connect & Test	Access Customer Advocate Center	Advanced Networking Division	471X				0.1519	0.0000	0.1519	0.0000	
16														
17	TN	H.1.3199	Physical Collocation - 2-Fiber Cross Connect - Disconnect				42							
18			Service Order	Customer Point of Contact	Interconnection Operations	2300				0.0000	0.0023	0.0000	0.0023	
19			Service Order	Network Engineering & Planning	Advanced Networking Division	31XX				0.0000	0.0000	0.0000	0.0000	
20			Service Order	Circuit Provisioning Group	Advanced Networking Division	470X				0.0000	0.0167	0.0000	0.0000	
21			Service Order	Work Management Center	Advanced Networking Division	4WXX				0.0000	0.0500	0.0000	0.0000	
22			Service Order	Access Customer Advocate Center	Advanced Networking Division	471X				0.0000	0.0111	0.0000	0.0111	
23			Engineering	Circuit Provisioning Group	Advanced Networking Division	470X				0.0000	0.0167	0.0000	0.0167	
24			Connect & Test	CO Install & Mtce Field - Ckt & Fac	Advanced Networking Division	431X				0.0000	0.1667	0.0000	0.1667	
25			Connect & Test	Access Customer Advocate Center	Advanced Networking Division	471X				0.0000	0.0240	0.0000	0.0240	
26														
27	TN	H.1.32	Physical Collocation - 4-Fiber Cross Connect				0							
28			Service Order	Customer Point of Contact	Interconnection Operations	2300				0.0070	0.0000	0.0070	0.0000	
29			Service Order	Network Engineering & Planning	Advanced Networking Division	31XX				0.2500	0.0000	0.0833	0.0000	
30			Service Order	Circuit Provisioning Group	Advanced Networking Division	470X				0.0167	0.0000	0.0000	0.0000	
31			Service Order	Work Management Center	Advanced Networking Division	4WXX				0.0500	0.0000	0.0000	0.0000	
32			Service Order	Access Customer Advocate Center	Advanced Networking Division	471X				0.0111	0.0000	0.0111	0.0000	
33			Engineering	Circuit Provisioning Group	Advanced Networking Division	470X				0.0167	0.0000	0.0167	0.0000	
34			Connect & Test	CO Install & Mtce Field - Ckt & Fac	Advanced Networking Division	431X				0.6250	0.0000	0.6250	0.0000	
35			Connect & Test	Access Customer Advocate Center	Advanced Networking Division	471X				0.1519	0.0000	0.1519	0.0000	
36														
37	TN	H.1.3299	Physical Collocation - 4-Fiber Cross Connect - Disconnect				42							
38			Service Order	Customer Point of Contact	Interconnection Operations	2300				0.0000	0.0023	0.0000	0.0023	
39			Service Order	Network Engineering & Planning	Advanced Networking Division	31XX				0.0000	0.0000	0.0000	0.0000	
40			Service Order	Circuit Provisioning Group	Advanced Networking Division	470X				0.0000	0.0167	0.0000	0.0000	
41			Service Order	Work Management Center	Advanced Networking Division	4WXX				0.0000	0.0500	0.0000	0.0000	
42			Service Order	Access Customer Advocate Center	Advanced Networking Division	471X				0.0000	0.0111	0.0000	0.0111	
43			Engineering	Circuit Provisioning Group	Advanced Networking Division	470X				0.0000	0.0167	0.0000	0.0167	
44			Connect & Test	CO Install & Mtce Field - Ckt & Fac	Advanced Networking Division	431X				0.0000	0.2500	0.0000	0.2500	
45			Connect & Test	Access Customer Advocate Center	Advanced Networking Division	471X				0.0000	0.0240	0.0000	0.0240	
46														
47	TN	H.1.35	Physical Collocation - 2-Fiber Cross Connect -											
48			Manual Svc Order vs. Electronic Service Order				0							
49			Service Order	Customer Point of Contact	Interconnection Operations	2300				0.0597	0.0000	0.0597	0.0000	
50														
51	TN	H.1.3599	Physical Collocation - 2-Fiber Cross Connect - Disconnect											
52			Manual Svc Order vs. Electronic Service Order				42							
53			Service Order	Customer Point of Contact	Interconnection Operations	2300				0.0000	0.0310	0.0000	0.0310	
54														
55	TN	H.1.36	Physical Collocation - 4-Fiber Cross Connect -											
56			Manual Svc Order vs. Electronic Service Order				0							
57			Service Order	Customer Point of Contact	Interconnection Operations	2300				0.0597	0.0000	0.0597	0.0000	
58														
59	TN	H.1.3699	Physical Collocation - 4-Fiber Cross Connect - Disconnect											
60			Manual Svc Order vs. Electronic Service Order				42							
61			Service Order	Customer Point of Contact	Interconnection Operations	2300				0.0000	0.0310	0.0000	0.0310	
62														
63														
64														
65														
66														
67														
68														

000087

TELRIC INPUT FORM - MATERIAL/INVESTMENT DATA

Instructions:

1. Use this worksheet to record material and/or investments to be input into the TELRIC calculations.
2. All amounts shown are per unit (e.g., per call, per loop, per MOU).
3. Input data, by Cost Element, leaving no blank lines. On next row after last line of data, type END in Cost Element Column.
4. All data on this form should be cell-referenced to study workpapers.
5. Do NOT change columns, headings, sheet name.

State	Cost Element #	FRC	Sub FRC	Volume Sensitive $ Amount	Volume Insensitive $ Amount
TN	H.1.31	357C	01	$213.135	
TN	H.1.32	357C	01	$383.072	
TN	H.1.33	357C	01	$528.628	
TN	H.1.34	357C	01	$712.837	
	END				

TELRIC INPUT FORM - RECURRING EXPENSES DATA

Instructions:

1. Use this worksheet to record recurring non-labor expenses to be input into the TELRIC calculations.
2. All amounts shown are per unit (e.g., per call, per loop, per MOU).
3. Input data, by Cost Element, leaving no blank lines. On next row after last line of data, type END in Cost Element Column.
4. All data on this form should be cell-referenced to study workpapers.
5. Do NOT change columns, headings, sheet name.

State	Cost Element #	Recurring Expense Description (Limited to 25 characters)	Recurring Volume Sensitive $ Amount	Recurring Volume Insensitive $ Amount
TN				
	END			

Maximum 10 entries per Cost Element #

680089

TELRIC INPUT FORM - NONRECURRING EXPENSES DATA

Instructions:

1. Use this worksheet to record nonrecurring non-labor expenses to be input into the TELRIC calculations.
2. All amounts shown are per unit (e.g., per call, per loop, per MOU).
3. Input data, by Cost Element, leaving no blank lines. On next row after last line of data, type END in Cost Element Column.
4. All data on this form should be cell-referenced to study workpapers.
5. Do NOT change columns, headings, sheet name.
6. Use column D when cost element has a single nonrecurring cost; use columns E & F for elements with a first and additional nonrecurring cost; use columns G & H for elements with an initial and subsequent nonrecurring cost.

State	Cost Element #	Nonrecurring Expense Description (Limited to 25 characters)	Nonrecurring $ Amount	Nonrecurring First $ Amount	Nonrecurring Additional $ Amount	Nonrecurring Initial $ Amount	Nonrecurring Subsequent $ Amount
TN							
	END						

Maximum 10 entries per Cost Element #

060090

TELRIC INPUT FORM - RECURRING LABOR EXPENSES DATA

Instructions:

1. Use this worksheet to record recurring expensed labor times to be input into the TELRIC calculations.
2. All amounts shown are per unit (e.g., per call, per loop, per MOU).
3. Input data, by Cost Element, leaving no blank lines. On next row after last line of data, type END in Cost Element Column.
4. All data on this form should be cell-referenced to study workpapers.
5. Do NOT change columns, headings, sheet name.

State	Cost Element #	Labor Expense Description (Limited to 25 characters)	JFC	Work Time (Hours) Volume Sensitive	Work Time (Hours) Volume Insensitive
TN					
	END				

Maximum 20 entries per Cost Element #

000091

TELRIC INPUT FORM - NONRECURRING LABOR TIMES

Instructions:

1. Use this worksheet to record nonrecurring labor times to be input into the TELRIC calculations.
2. All amounts shown are per unit (e.g., per call, per loop, per MOU).
3. Input data, by Cost Element, leaving no blank lines. On next row after last line of data, type END in Cost Element Column.
4. All data on this form should be cell-referenced to study workpapers.
5. Do NOT change columns, headings, sheet name.
6. Use columns F & G when cost element has a single nonrecurring cost; use columns H, I, J, & K for elements with a first and additional nonrecurring cost; use columns L, M, N & O for elements with an initial and subsequent nonrecurring cost.
7. Study midpoint date is set at 6/1999.
8. Input Cost Element Life (in months) on first row of data for each cost element. It is not necessary to repeat on each line.

Study Mid-Point Date (Mos.) Jun-99

					(For use w/ one NR)		First	First	Additional	Additional	Initial	Initial	Subsequent	Subsequent
	Cost	Cost Element	Labor Expense Description	JFC	Installation Time	Disconnect Time	Installation Time	Disconnect Time	Installation Time	Disconnect Time	Installation Time	Disconnect Time	Installation Time	Disconnect Time
State	Element #	Life (Mo)	(Limited to 25 characters)	Payband	(Hours)	Hours	(Hours)	Hours	(Hours)	Hours	(Hours)	Hours	(Hours)	Hours
TN	H.1.31	0	Service Order	2300			0.0070	0.0000	0.0070	0.0000				
TN	H.1.31	0	Service Order	31XX			0.2500	0.0000	0.0833	0.0000				
TN	H.1.31	0	Service Order	470X			0.0167	0.0000	0.0000	0.0000				
TN	H.1.31	0	Service Order	4WXX			0.0500	0.0000	0.0000	0.0000				
TN	H.1.31	0	Service Order	471X			0.0111	0.0000	0.0111	0.0000				
TN	H.1.31	0	Engineering	470X			0.0167	0.0000	0.0167	0.0000				
TN	H.1.31	0	Connect & Test	431X			0.4167	0.0000	0.4167	0.0000				
TN	H.1.31	0	Connect & Test	471X			0.1519	0.0000	0.1519	0.0000				
TN	H.1.3199	42	Service Order	2300			0.0000	0.0023	0.0000	0.0023				
TN	H.1.3199	42	Service Order	31XX			0.0000	0.0000	0.0000	0.0000				
TN	H.1.3199	42	Service Order	470X			0.0000	0.0167	0.0000	0.0000				
TN	H.1.3199	42	Service Order	4WXX			0.0000	0.0500	0.0000	0.0000				
TN	H.1.3199	42	Service Order	471X			0.0000	0.0111	0.0000	0.0111				
TN	H.1.3199	42	Engineering	470X			0.0000	0.0167	0.0000	0.0167				
TN	H.1.3199	42	Connect & Test	431X			0.0000	0.1667	0.0000	0.1667				
TN	H.1.3199	42	Connect & Test	471X			0.0000	0.0240	0.0000	0.0240				
TN	H.1.32	0	Service Order	2300			0.0070	0.0000	0.0070	0.0000				
TN	H.1.32	0	Service Order	31XX			0.2500	0.0000	0.0833	0.0000				
TN	H.1.32	0	Service Order	470X			0.0167	0.0000	0.0000	0.0000				
TN	H.1.32	0	Service Order	4WXX			0.0500	0.0000	0.0000	0.0000				
TN	H.1.32	0	Service Order	471X			0.0111	0.0000	0.0111	0.0000				
TN	H.1.32	0	Engineering	470X			0.0167	0.0000	0.0167	0.0000				
TN	H.1.32	0	Connect & Test	431X			0.6250	0.0000	0.6250	0.0000				
TN	H.1.32	0	Connect & Test	471X			0.1519	0.0000	0.1519	0.0000				
TN	H.1.3299	42	Service Order	2300			0.0000	0.0023	0.0000	0.0023				
TN	H.1.3299	42	Service Order	31XX			0.0000	0.0000	0.0000	0.0000				
TN	H.1.3299	42	Service Order	470X			0.0000	0.0167	0.0000	0.0000				
TN	H.1.3299	42	Service Order	4WXX			0.0000	0.0500	0.0000	0.0000				
TN	H.1.3299	42	Service Order	471X			0.0000	0.0111	0.0000	0.0111				
TN	H.1.3299	42	Engineering	470X			0.0000	0.0167	0.0000	0.0167				
TN	H.1.3299	42	Connect & Test	431X			0.0000	0.2500	0.0000	0.2500				
TN	H.1.3299	42	Connect & Test	471X			0.0000	0.0240	0.0000	0.0240				
TN	H.1.35	0	Service Order	2300			0.0597	0.0000	0.0597	0.0000				
TN	H.1.3599	42	Service Order	2300			0.0000	0.0310	0.0000	0.0310				
TN	H.1.36	0	Service Order	2300			0.0597	0.0000	0.0597	0.0000				
TN	H.1.3699	42	Service Order	2300			0.0000	0.0310	0.0000	0.0310				
	END													
			Maximum of 25 entries per Cost Element #											

260092

PHYSICAL COLLOCATION			State	TN
			Workpaper	131
Development of			Cost Element	H.1.31
Physical Collocation - 2-Fiber Cross Connect			Page	1 of 1
Ln	Description	Source	Value	
1	LGX Terminations			
2				
3	Material Price	Inputs_Recur Line 7	[redacted]	
4				
5	Projected Actual Utilization	Inputs_Recur Line 8		
6				
7	Fiber Capacity	Inputs_Recur Line 9	648	
8				
9	Number Required	Inputs_Recur Line 10	2	
10				
11	Utilized Material Price	Ln 3 / Ln 5 / Ln 7 x Ln 9	$31.065	
12				
13	2-Fiber Building Cable			
14				
15	Material Price per Foot	Inputs_Recur Line 12	[redacted]	
16				
17	Projected Actual Utilization	Inputs_Recur Line 13		
18				
19	Number Feet	Inputs_Recur Line 14	315	
20				
21	Number Required	Inputs_Recur Line 15	1	
22				
23	Utilized Material Price	Ln 15 / Ln 17 x Ln 19 x Ln 21	$105.147	
24				
25	Cable Rack			
26				
27	Material Price per Foot	Inputs_Recur Line 17	[redacted]	
28				
29	Projected Actual Utilization	Inputs_Recur Line 18		
30				
31	Number Feet	Inputs_Recur Line 19	300	
32				
33	Fiber Capacity	Inputs_Recur Line 20	1,542	
34				
35	Number Required	Inputs_Recur Line 21	2	
36				
37	Utilized Material Price	Ln 27 / Ln 29 x Ln 31 / Ln 33 x Ln 35	$9.723	
38				
39	Connector Price			
40				
41	Material Price	Inputs_Recur Line 23	[redacted]	
42				
43	Projected Actual Utilization	Inputs_Recur Line 24		
44				
45	Number Required	Inputs_Recur Line 25	4	
46				
47	Utilized Material Price	Ln 41 / Ln 43 x Ln 45	$67.200	
48				
49	Utilized Material Price per			
50	2-Fiber Cross Connect	Ln 11 + Ln 23 + Ln 37 + Ln 47	$213.135	
51				

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PHYSICAL COLLOCATION			State	TN
			Workpaper	132
Development of			Cost Element	H.1.32
Physical Collocation - 4-Fiber Cross Connect			Page	1 of 1
Ln	Description	Source	Value	
1	LGX Terminations			
2				
3	Material Price	Inputs_Recur Line 29	[redacted]	
4				
5	Projected Actual Utilization	Inputs_Recur Line 30		
6				
7	Fiber Capacity	Inputs_Recur Line 31	648	
8				
9	Number Required	Inputs_Recur Line 32	4	
10				
11	Utilized Material Price	Ln 3 / Ln 5 / Ln 7 x Ln 9	$62.129	
12				
13	4-Fiber Building Cable			
14				
15	Material Price per Foot	Inputs_Recur Line 34	[redacted]	
16				
17	Projected Actual Utilization	Inputs_Recur Line 35		
18				
19	Number Feet	Inputs_Recur Line 36	315	
20				
21	Number Required	Inputs_Recur Line 37	1	
22				
23	Utilized Material Price	Ln 15 / Ln 17 x Ln 19 x Ln 21	$176.274	
24				
25	Cable Rack			
26				
27	Material Price per Foot	Inputs_Recur Line 39	[redacted]	
28				
29	Projected Actual Utilization	Inputs_Recur Line 40		
30				
31	Number Feet	Inputs_Recur Line 41	300	
32				
33	Fiber Capacity	Inputs_Recur Line 42	2,920	
34				
35	Number Required	Inputs_Recur Line 43	4	
36				
37	Utilized Material Price	Ln 27 / Ln 29 x Ln 31 / Ln 33 x Ln 35	$10.269	
38				
39	Connector Price			
40				
41	Material Price	Inputs_Recur Line 45	[redacted]	
42				
43	Projected Actual Utilization	Inputs_Recur Line 46		
44				
45	Number Required	Inputs_Recur Line 47	8	
46				
47	Utilized Material Price	Ln 41 / Ln 43 x Ln 45	$134.400	
48				
49	Utilized Material Price per			
50	4-Fiber Cross Connect	Ln 11 + Ln 23 + Ln 37 + Ln 47	$383.072	
51				

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PHYSICAL COLLOCATION			State	TN
			Workpaper	133
Development of			Cost Element	H.1.33
Physical Collocation - 2-Fiber POT Bay			Page	1 of 2
Ln	Description	Source	Value	
1	POT Bay			
2				
3	Material Price	Inputs_Recur Line 51	[redacted]	
4				
5	Projected Actual Utilization	Inputs_Recur Line 52		
6				
7	Shelf Capacity	Inputs_Recur Line 53	12	
8				
9	Bay Investment per Shelf	Line 3 / Line 5 / Line 7	$196.40	
10				
11	Projected Actual Utilization	Inputs_Recur Line 54	[redacted]	
12				
13	Fiber Capacity per Shelf	Inputs_Recur Line 55	24	
14				
15	Fiber Investment per Bay	Line 9 / Line 11 / Line 13	$73.65	
16				
17	Number Required	Inputs_Recur Line 56	2	
18				
19	Utilized Material Price	Line 15 x Line 17	$147.30	
20				
21	POT Bay Shelf e/w Locks			
22				
23	Material Price	Inputs_Recur Line 58	[redacted]	
24				
25	Projected Actual Utilization	Inputs_Recur Line 59		
26				
27	Fiber Capacity	Inputs_Recur Line 60	24	
28				
29	Fiber Investment per Shelf	Line 23 / Line 25 / Line 27	$102.48	
30				
31	Number Required	Inputs_Recur Line 61	2	
32				
33	Utilized Material Price	Line 29 x Line 31	$204.96	
34				
35	POT Bay Shelf Coupler Panel			
36				
37	Material Price	Inputs_Recur Line 63	[redacted]	
38				
39	Projected Actual Utilization	Inputs_Recur Line 64		
40				
41	Fiber Capacity	Inputs_Recur Line 65	6	
42				
43	Utilized Material Price per Fiber	Line 37 / Line 39 / Line 41	$4.868	
44				
45	Number Required	Inputs_Recur Line 66	2	
46				
47	Utilized Material Price	Line 43 x Line 45	$9.735	
48				
49	POT Bay SC Coupling			
50				
51	Material Price	Inputs_Recur Line 68	[redacted]	

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PHYSICAL COLLOCATION			State	TN
			Workpaper	133
Development of			Cost Element	H.1.33
Physical Collocation - 2-Fiber POT Bay			Page	2 of 2
Ln	Description	Source	Value	
52				
53	Projected Actual Utilization	Inputs_Recur Line 69		
54				
55	Number Required	Inputs_Recur Line 70	2	
56				
57	Utilized Material Price	Line 51 / Line 53 x Line 55	$12.000	
58				
59	POT Bay Excess Fiber Cable Storage Shelf			
60				
61	Material Price	Inputs_Recur Line 72		
62				
63	Projected Actual Utilization	Inputs_Recur Line 73		
64				
65	Fiber Capacity	Inputs_Recur Line 74	48	
66				
67	Fiber Investment per Shelf	Line 61 / Line 63 / Line 65	$77.32	
68				
69	Number Required	Inputs_Recur Line 75	2	
70				
71	Utilized Material Price	Line 67 x Line 69	$154.64	
72				
73	Utilized Material Price per 2-Fiber POT Bay	Ln19 + Ln33 + Ln47 + Ln57 + Ln71	$528.628	
74				
75				
76				
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80				
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PHYSICAL COLLOCATION			State	TN
			Workpaper	134
Development of			Cost Element	H.1.34
Physical Collocation - 4-Fiber POT Bay			Page	1 of 2
Ln	Description	Source	Value	
1	POT Bay			
2				
3	Material Price	Inputs_Recur Line 79	[redacted]	
4				
5	Projected Actual Utilization	Inputs_Recur Line 80		
6				
7	Shelf Capacity	Inputs_Recur Line 81	12	
8				
9	Bay Investment per Shelf	Line 3 / Line 5 / Line 7	$196.40	
10				
11	Projected Actual Utilization	Inputs_Recur Line 82	[redacted]	
12				
13	Fiber Capacity per Shelf	Inputs_Recur Line 83	24	
14				
15	Fiber Investment per Bay	Line 9 / Line 11 / Line 13	$49.10	
16				
17	Number Required	Inputs_Recur Line 84	4	
18				
19	Utilized Material Price	Line 15 x Line 17	$196.40	
20				
21	POT Bay Shelf e/w Locks			
22				
23	Material Price	Inputs_Recur Line 86	[redacted]	
24				
25	Projected Actual Utilization	Inputs_Recur Line 87		
26				
27	Fiber Capacity	Inputs_Recur Line 88	24	
28				
29	Fiber Investment per Shelf	Line 23 / Line 25 / Line 27	$68.32	
30				
31	Number Required	Inputs_Recur Line 89	4	
32				
33	Utilized Material Price	Line 29 x Line 31	$273.28	
34				
35	POT Bay Shelf Coupler Panel			
36				
37	Material Price	Inputs_Recur Line 91	[redacted]	
38				
39	Projected Actual Utilization	Inputs_Recur Line 92		
40				
41	Fiber Capacity	Inputs_Recur Line 93	6	
42				
43	Utilized Material Price per Fiber	Line 37 / Line 39 / Line 41	$3.245	
44				
45	Number Required	Inputs_Recur Line 94	4	
46				
47	Utilized Material Price	Line 43 x Line 45	$12.980	
48				
49	POT Bay SC Coupling			
50				
51	Material Price	Inputs_Recur Line 96	[redacted]	

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PHYSICAL COLLOCATION			State	TN
			Workpaper	134
Development of			Cost Element	H.1.34
Physical Collocation - 4-Fiber POT Bay			Page	2 of 2
Ln	Description	Source	Value	
52				
53	Projected Actual Utilization	Inputs_Recur Line 97	[redacted]	
54				
55	Number Required	Inputs_Recur Line 98	4	
56				
57	Utilized Material Price	Line 51 / Line 53 x Line 55	$24.000	
58				
59	POT Bay Excess Fiber Cable Storage Shelf			
60				
61	Material Price	Inputs_Recur Line 100	[redacted]	
62				
63	Projected Actual Utilization	Inputs_Recur Line 101		
64				
65	Fiber Capacity	Inputs_Recur Line 102	48	
66				
67	Fiber Investment per Shelf	Line 61 / Line 63 / Line 65	$51.55	
68				
69	Number Required	Inputs_Recur Line 103	4	
70				
71	Utilized Material Price	Line 67 x Line 69	$206.18	
72				
73	Utilized Material Price per 4-Fiber POT Bay	Ln19 + Ln33 + Ln47 + Ln57 + Ln71	$712.837	
74				
75				
76				
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80				
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	A	B	C	D	E	F	G	H
1		Cost					Sub	Recurring
2	State	Element #		Source	Inputs	FRC	FRC	Additive
3	**TN**	**H.2**	**VIRTUAL COLLOCATION**					
4								
5								
6	**TN**	**H.2.16**	**Virtual Collocation - 2-Fiber Cross Connect**			357C	01	
7			**LGX Terminations**					
8			Material Price	Network Planning & Support				
9			Projected Actual Utilization	Network Planning & Support				
10			Fiber Capacity	Network Planning & Support	648			
11			Number Required	Network Planning & Support	2			
12			**Fiber Duct**					
13			Material Price per Foot	Network Planning & Support				
14			Projected Actual Utilization	Network Planning & Support				
15			Number Feet	Network Planning & Support	300			
16			Fiber Capacity	Network Planning & Support	800			
17			Number Required	Network Planning & Support	2			
18								
19	**TN**	**H.2.17**	**Virtual Collocation - 4-Fiber Cross Connect**			357C	01	
20			**LGX Terminations**					
21			Material Price	Network Planning & Support				
22			Projected Actual Utilization	Network Planning & Support				
23			Fiber Capacity	Network Planning & Support	648			
24			Number Required	Network Planning & Support	4			
25			**Fiber Duct**					
26			Material Price per Foot	Network Planning & Support				
27			Projected Actual Utilization	Network Planning & Support				
28			Number Feet	Network Planning & Support	300			
29			Fiber Capacity	Network Planning & Support	800			
30			Number Required	Network Planning & Support	4			
31								

000099

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1							Cost	(For use w/ one NR)		First		Additional		
2							Element	Install	Disconnect	Install	Disconnect	Install	Disconnect	
3		Cost					Life	Time	Time	Time	Time	Time	Time	Nonrecurring
4	State	Element #			Source	JFC	(months)	(Hours)	Hours	(Hours)	Hours	(Hours)	Hours	Additive
5														
6	TN	H.2	VIRTUAL COLLOCATION											
7														
8	TN	H.2.16	Virtual Collocation - 2-Fiber Cross Connect				0							
9			Service Order	Customer Point of Contact	Interconnection Operations	2300				0.0070	0.0000	0.0070	0.0000	
10			Service Order	Network Engineering & Planning	Advanced Networking Division	31XX				0.2500	0.0000	0.0833	0.0000	
11			Service Order	Circuit Provisioning Group	Advanced Networking Division	470X				0.0167	0.0000	0.0000	0.0000	
12			Service Order	Work Management Center	Advanced Networking Division	4WXX				0.0500	0.0000	0.0000	0.0000	
13			Service Order	Access Customer Advocate Center	Advanced Networking Division	471X				0.0111	0.0000	0.0111	0.0000	
14			Engineering	Circuit Provisioning Group	Advanced Networking Division	470X				0.0167	0.0000	0.0167	0.0000	
15			Connect & Test	CO Install & Mtce Field - Ckt & Fac	Advanced Networking Division	431X				0.4167	0.0000	0.4167	0.0000	
16			Connect & Test	Access Customer Advocate Center	Advanced Networking Division	471X				0.1519	0.0000	0.1519	0.0000	
17														
18	TN	H.2.1699	Virtual Collocation - 2-Fiber Cross Connect - Disconnect				42							
19			Service Order	Customer Point of Contact	Interconnection Operations	2300				0.0000	0.0023	0.0000	0.0023	
20			Service Order	Network Engineering & Planning	Advanced Networking Division	31XX				0.0000	0.0000	0.0000	0.0000	
21			Service Order	Circuit Provisioning Group	Advanced Networking Division	470X				0.0000	0.0167	0.0000	0.0000	
22			Service Order	Work Management Center	Advanced Networking Division	4WXX				0.0000	0.0500	0.0000	0.0000	
23			Service Order	Access Customer Advocate Center	Advanced Networking Division	471X				0.0000	0.0111	0.0000	0.0111	
24			Engineering	Circuit Provisioning Group	Advanced Networking Division	470X				0.0000	0.0167	0.0000	0.0167	
25			Connect & Test	CO Install & Mtce Field - Ckt & Fac	Advanced Networking Division	431X				0.0000	0.1667	0.0000	0.1667	
26			Connect & Test	Access Customer Advocate Center	Advanced Networking Division	471X				0.0000	0.0240	0.0000	0.0240	
27														
28	TN	H.2.17	Virtual Collocation - 4-Fiber Cross Connect				0							
29			Service Order	Customer Point of Contact	Interconnection Operations	2300				0.0070	0.0000	0.0070	0.0000	
30			Service Order	Network Engineering & Planning	Advanced Networking Division	31XX				0.2500	0.0000	0.0833	0.0000	
31			Service Order	Circuit Provisioning Group	Advanced Networking Division	470X				0.0167	0.0000	0.0000	0.0000	
32			Service Order	Work Management Center	Advanced Networking Division	4WXX				0.0500	0.0000	0.0000	0.0000	
33			Service Order	Access Customer Advocate Center	Advanced Networking Division	471X				0.0111	0.0000	0.0111	0.0000	
34			Engineering	Circuit Provisioning Group	Advanced Networking Division	470X				0.0167	0.0000	0.0167	0.0000	
35			Connect & Test	CO Install & Mtce Field - Ckt & Fac	Advanced Networking Division	431X				0.6250	0.0000	0.6250	0.0000	
36			Connect & Test	Access Customer Advocate Center	Advanced Networking Division	471X				0.1519	0.0000	0.1519	0.0000	
37														
38	TN	H.2.1799	Virtual Collocation - 4-Fiber Cross Connect - Disconnect				42							
39			Service Order	Customer Point of Contact	Interconnection Operations	2300				0.0000	0.0023	0.0000	0.0023	
40			Service Order	Network Engineering & Planning	Advanced Networking Division	31XX				0.0000	0.0000	0.0000	0.0000	
41			Service Order	Circuit Provisioning Group	Advanced Networking Division	470X				0.0000	0.0167	0.0000	0.0000	
42			Service Order	Work Management Center	Advanced Networking Division	4WXX				0.0000	0.0500	0.0000	0.0000	
43			Service Order	Access Customer Advocate Center	Advanced Networking Division	471X				0.0000	0.0111	0.0000	0.0111	
44			Engineering	Circuit Provisioning Group	Advanced Networking Division	470X				0.0000	0.0167	0.0000	0.0167	
45			Connect & Test	CO Install & Mtce Field - Ckt & Fac	Advanced Networking Division	431X				0.0000	0.2500	0.0000	0.2500	
46			Connect & Test	Access Customer Advocate Center	Advanced Networking Division	471X				0.0000	0.0240	0.0000	0.0240	
47														
48	TN	H.2.18	Virtual Collocation - 2-Fiber Cross Connect -				0							
49			Manual Svc Order vs. Electronic Service Order											
50			Service Order	Customer Point of Contact	Interconnection Operations	2300				0.0597	0.0000	0.0597	0.0000	
51														
52	TN	H.2.1899	Virtual Collocation - 2-Fiber Cross Connect - Disconnect				42							
53			Manual Svc Order vs. Electronic Service Order											
54			Service Order	Customer Point of Contact	Interconnection Operations	2300				0.0000	0.0310	0.0000	0.0310	
55														
56	TN	H.2.19	Virtual Collocation - 4-Fiber Cross Connect -				0							
57			Manual Svc Order vs. Electronic Service Order											
58			Service Order	Customer Point of Contact	Interconnection Operations	2300				0.0597	0.0000	0.0597	0.0000	
59														
60	TN	H.2.1999	Virtual Collocation - 4-Fiber Cross Connect - Disconnect				42							
61			Manual Svc Order vs. Electronic Service Order											
62			Service Order	Customer Point of Contact	Interconnection Operations	2300				0.0000	0.0310	0.0000	0.0310	
63														

	A	B	C	D	E	F	G	H
1		**TELRIC INPUT FORM - MATERIAL/INVESTMENT DATA**						
2								
3		**Instructions:**						
4		**1. Use this worksheet to record material and/or investments to be input into the**						
5		**TELRIC calculations.**						
6		**2. All amounts shown are per unit (e.g., per call, per loop, per MOU).**						
7		**3. Input data, by Cost Element, leaving no blank lines. On next row**						
8		**after last line of data, type END in Cost Element Column.**						
9		**4. All data on this form should be cell-referenced to study workpapers.**						
10		**5. Do NOT change columns, headings, sheet name.**						
11								
12					**Volume**	**Volume**		
13		**Cost**		**Sub**	**Sensitive**	**Insensitive**		
14	**State**	**Element #**	**FRC**	**FRC**	**$ Amount**	**$ Amount**		
15	**TN**	**H.2.16**	357C	01	$41.307			
16	**TN**	**H.2.17**	357C	01	$82.614			
17		**END**						
18								
19								

000101

	A	B	C	D	E	F	G
1		**TELRIC INPUT FORM - RECURRING EXPENSES DATA**					
2							
3		**Instructions:**					
4		**1. Use this worksheet to record recurring non-labor expenses to be input into the**					
5		**TELRIC calculations.**					
6		**2. All amounts shown are per unit (e.g., per call, per loop, per MOU).**					
7		**3. Input data, by Cost Element, leaving no blank lines. On next row**					
8		**after last line of data, type END in Cost Element Column.**					
9		**4. All data on this form should be cell-referenced to study workpapers.**					
10		**5. Do NOT change columns, headings, sheet name.**					
11							
12							
13							
14				**Recurring**	**Recurring**		
15			**Recurring**	**Volume**	**Volume**		
16		**Cost**	**Expense Description**	**Sensitive**	**Insensitive**		
17	**State**	**Element #**	**(Limited to 25 characters)**	**$ Amount**	**$ Amount**		
18	**TN**						
19		**END**					
20							
21							
22			Maximum 10 entries per Cost Element #				
23							

000102

	A	B	C	D	E	F	G	H	I
1		**TELRIC INPUT FORM - NONRECURRING EXPENSES DATA**							
2									
3		**Instructions:**							
4		**1. Use this worksheet to record nonrecurring non-labor expenses to be input into the TELRIC calculations.**							
5		**2. All amounts shown are per unit (e.g., per call, per loop, per MOU).**							
6		**3. Input data, by Cost Element, leaving no blank lines. On next row**							
7		**after last line of data, type END in Cost Element Column.**							
8		**4. All data on this form should be cell-referenced to study workpapers.**							
9		**5. Do NOT change columns, headings, sheet name.**							
10		**6. Use column D when cost element has a single nonrecurring cost; use columns E & F for elements with a first**							
11		**and additional nonrecurring cost; use columns G & H for elements with an initial and subsequent nonrecurring cost.**							
12									
13									
14			**Nonrecurring**		**Nonrecurring**	**Nonrecurring**	**Nonrecurring**	**Nonrecurring**	
15		**Cost**	**Expense Description**	**Nonrecurring**	**First**	**Additional**	**Initial**	**Subsequent**	
16	**State**	**Element #**	**(Limited to 25 characters)**	**$ Amount**	**$ Amount**	**$ Amount**	**$ Amount**	**$ Amount**	
17	**TN**								
18		**END**							
19									
20									
21			Maximum 10 entries per Cost Element #						
22									

	A	B	C	D	E	F	G	H	I
1		**TELRIC INPUT FORM - RECURRING LABOR EXPENSES DATA**							
2									
3		**Instructions:**							
4		**1. Use this worksheet to record recurring expensed labor times to be input into the**							
5		**TSLRIC calculations.**							
6		**2. All amounts shown are per unit (e.g., per call, per loop, per MOU).**							
7		**3. Input data, by Cost Element, leaving no blank lines. On next row**							
8		**after last line of data, type END in Cost Element Column.**							
9		**4. All data on this form should be cell-referenced to study workpapers.**							
10		**5. Do NOT change columns, headings, sheet name.**							
11									
12									
13				**JFC**	**Work Time (Hours)**				
14		**Cost**	**Labor Expense Description**		**Volume**	**Volume**			
15	**State**	**Element #**	**(Limited to 25 characters)**		**Sensitive**	**Insensitive**			
16	**TN**								
17		**END**							
18									
19									
20			Maximum 20 entries per Cost Element #						
21									

0001104

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1		TELRIC INPUT FORM - NONRECURRING LABOR TIMES													
2															
3		Instructions:													
4		1. Use this worksheet to record nonrecurring labor times to be input into the TELRIC calculations.													
5		2. All amounts shown are per unit (e.g., per call, per loop, per MOU).													
6		3. Input data, by Cost Element, leaving no blank lines. On next row													
7		after last line of data, type END in Cost Element Column.													
8		4. All data on this form should be cell-referenced to study workpapers.													
9		5. Do NOT change columns, headings, sheet name.													
10		6. Use columns F & G when cost element has a single nonrecurring cost; use columns H, I, J, & K for elements with a first													
11		and additional nonrecurring cost; use columns L, M, N & O for elements with an initial and subsequent nonrecurring cost.													
12		7. Study midpoint date is set at 6/1999.													
13		8. Input Cost Element Life (in months) on first row of data for each cost element. It is not necessary to repeat on each line.													
14															
15	Study Mid-Point Date (Mos.)			Jun-99											
16															
17						(For use w/ one NR)		First	First	Additional	Additional	Initial	Initial	Subsequent	Subsequent
18			Cost			Installation	Disconnect	Installation	Disconnect	Installation	Disconnect	Installation	Disconnect	Installation	Disconnect
19		Cost	Element	Labor Expense Description	JFC	Time	Time	Time	Time	Time	Time	Time	Time	Time	Time
20	State	Element #	Life (Mo)	(Limited to 25 characters)	Payband	(Hours)	Hours	(Hours)	Hours	(Hours)	Hours	(Hours)	Hours	(Hours)	Hours
21	TN	H.2.16	0	Service Order	2300			0.0070	0.0000	0.0070	0.0000				
22	TN	H.2.16	0	Service Order	31XX			0.2500	0.0000	0.0833	0.0000				
23	TN	H.2.16	0	Service Order	470X			0.0167	0.0000	0.0000	0.0000				
24	TN	H.2.16	0	Service Order	4WXX			0.0500	0.0000	0.0000	0.0000				
25	TN	H.2.16	0	Service Order	471X			0.0111	0.0000	0.0111	0.0000				
26	TN	H.2.16	0	Engineering	470X			0.0167	0.0000	0.0167	0.0000				
27	TN	H.2.16	0	Connect & Test	431X			0.4167	0.0000	0.4167	0.0000				
28	TN	H.2.16	0	Connect & Test	471X			0.1519	0.0000	0.1519	0.0000				
29	TN	H.2.1699	42	Service Order	2300			0.0000	0.0023	0.0000	0.0023				
30	TN	H.2.1699	42	Service Order	31XX			0.0000	0.0000	0.0000	0.0000				
31	TN	H.2.1699	42	Service Order	470X			0.0000	0.0167	0.0000	0.0000				
32	TN	H.2.1699	42	Service Order	4WXX			0.0000	0.0500	0.0000	0.0000				
33	TN	H.2.1699	42	Service Order	471X			0.0000	0.0111	0.0000	0.0111				
34	TN	H.2.1699	42	Engineering	470X			0.0000	0.0167	0.0000	0.0167				
35	TN	H.2.1699	42	Connect & Test	431X			0.0000	0.1667	0.0000	0.1667				
36	TN	H.2.1699	42	Connect & Test	471X			0.0000	0.0240	0.0000	0.0240				
37	TN	H.2.17	0	Service Order	2300			0.0070	0.0000	0.0070	0.0000				
38	TN	H.2.17	0	Service Order	31XX			0.2500	0.0000	0.0833	0.0000				
39	TN	H.2.17	0	Service Order	470X			0.0167	0.0000	0.0000	0.0000				
40	TN	H.2.17	0	Service Order	4WXX			0.0500	0.0000	0.0000	0.0000				
41	TN	H.2.17	0	Service Order	471X			0.0111	0.0000	0.0111	0.0000				
42	TN	H.2.17	0	Engineering	470X			0.0167	0.0000	0.0167	0.0000				
43	TN	H.2.17	0	Connect & Test	431X			0.6250	0.0000	0.6250	0.0000				
44	TN	H.2.17	0	Connect & Test	471X			0.1519	0.0000	0.1519	0.0000				
45	TN	H.2.1799	42	Service Order	2300			0.0000	0.0023	0.0000	0.0023				
46	TN	H.2.1799	42	Service Order	31XX			0.0000	0.0000	0.0000	0.0000				
47	TN	H.2.1799	42	Service Order	470X			0.0000	0.0167	0.0000	0.0000				
48	TN	H.2.1799	42	Service Order	4WXX			0.0000	0.0500	0.0000	0.0000				
49	TN	H.2.1799	42	Service Order	471X			0.0000	0.0111	0.0000	0.0111				
50	TN	H.2.1799	42	Engineering	470X			0.0000	0.0167	0.0000	0.0167				
51	TN	H.2.1799	42	Connect & Test	431X			0.0000	0.2500	0.0000	0.2500				
52	TN	H.2.1799	42	Connect & Test	471X			0.0000	0.0240	0.0000	0.0240				
53	TN	H.2.18	0	Service Order	2300			0.0597	0.0000	0.0597	0.0000				
54	TN	H.2.1899	42	Service Order	2300			0.0000	0.0310	0.0000	0.0310				
55	TN	H.2.19	0	Service Order	2300			0.0597	0.0000	0.0597	0.0000				
56	TN	H.2.1999	42	Service Order	2300			0.0000	0.0310	0.0000	0.0310				
57		END													
58				Maximum of 25 entries per Cost Element #											

VIRTUAL COLLOCATION			State	TN
			Workpaper	216
Development of			Cost Element	H.2.16
Virtual Collocation - 2-Fiber Cross Connect			Page	1 of 1
	Description	Source	Value	
1	LGX Terminations			
2				
3	Material Price	Inputs_Recur Line 8	[redacted]	
4				
5	Projected Actual Utilization	Inputs_Recur Line 9		
6				
7	Fiber Capacity	Inputs_Recur Line 10	648	
8				
9	Number Required	Inputs_Recur Line 11	2	
10				
11	Utilized Material Price	Line 3 / Line 5 / Line 7 x Line 9	$31.065	
12				
13	Fiber Duct			
14				
15	Material Price per Foot	Inputs_Recur Line 13	[redacted]	
16				
17	Projected Actual Utilization	Inputs_Recur Line 14		
18				
19	Number Feet	Inputs_Recur Line 15	300	
20				
21	Fiber Capacity	Inputs_Recur Line 16	800	
22				
23	Number Required	Inputs_Recur Line 17	2	
24				
25	Utilized Material Price	Ln 15 / Ln 17 x Ln 19 / Ln 21 x Ln 23	$10.243	
26				
27	Utilized Material Price per 2-Fiber Cross Connect	Line 11 + Line 25	$41.307	
28				
29				
30				
31				
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VIRTUAL COLLOCATION			State	TN
			Workpaper	217
Development of			Cost Element	H.2.17
Virtual Collocation - 4-Fiber Cross Connect			Page	1 of 1
	Description	Source	Value	
1	LGX Terminations			
2				
3	Material Price	Inputs_Recur Line 21	[redacted]	
4				
5	Projected Actual Utilization	Inputs_Recur Line 22		
6				
7	Fiber Capacity	Inputs_Recur Line 23	648	
8				
9	Number Required	Inputs_Recur Line 24	4	
10				
11	Utilized Material Price	Line 3 / Line 5 / Line 7 x Line 9	$62.129	
12				
13	Fiber Duct			
14				
15	Material Price per Foot	Inputs_Recur Line 26	[redacted]	
16				
17	Projected Actual Utilization	Inputs_Recur Line 27		
18				
19	Number Feet	Inputs_Recur Line 28	300	
20				
21	Fiber Capacity	Inputs_Recur Line 29	800	
22				
23	Number Required	Inputs_Recur Line 30	4	
24				
25	Utilized Material Price	Ln 15 / Ln 17 x Ln 19 / Ln 21 x Ln 23	$20.485	
26				
27	Utilized Material Price per 4-Fiber Cross Connect	Line 11 + Line 25	$82.614	
28				
29				
30				
31				
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TENNESSEE DOCKET NO 99-00430
APPENDIX A
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

The following worksheets showing the calculations associated with loadings and factors development discussed in Section 4 are included in this Appendix.

1. TPIs
2. Levelized Inflation Factors
3. Hard-Wired Factors
4. Supporting equipment & Power Loadings
5. Plant Specific Expense Factor
6. Land & Building Loadings
7. Capital Cost model Calculations
8. State & Federal Income Taxes
9. Labor Rates

TENNESSEE DOCKET NO 99-00430
APPENDIX A
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

TPIs
Levelized Inflation Factors

File: infltnlv.xls

BELLSOUTH TELECOMMUNICATIONS
FORECAST TELEPHONE PLANT INDEXES
ACCOUNTS ON PART 32 USOA BASIS
SEPTEMBER 1997 FORECAST OF % COST CHANGE

ACCOUNT NAME	ACCT #	FRC	ACTUAL 1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007+
BUILDINGS	2121	10C	3.6	2	2	3	3	3	3	3	3	3	3	3
MOTOR VEHICLES	2112	40C	0.9	-1	1	1	2	2	2	2	2	2	2	2
AIRCRAFT	2113	140C	4.1	2	2	4	4	4	4	4	4	4	4	4
GARAGE WORK EQ	2115	340C	2.4	1	2	2	3	3	3	3	3	3	3	3
OTHER WORK EQ	2116	540C	2.2	2	2	2	2	2	2	3	3	3	3	3
FURNITURE	2122	30C	2.3	2	2	3	3	3	3	3	3	3	3	3
OFFICE EQUIPMENT	2123	430,718C	1.3	1	1	1	1	1	1	1	1	1	1	1
OFF SUPPORT EQ			0.5	1	0	1	1	1	1	1	1	1	1	1
OTH COMM EQ			1.6	1	1	1	1	1	1	1	1	1	1	1
G.P. COMPUTERS	2124	530C	-16.0	-23	-18	-14	-10	-8	-6	-5	-5	-5	-5	0
GEN EQ COMPOSITE			-10.8	-15	-10	-7	-4	-3	-2	-1	-1	0	0	1
ANALOG ELECTRONI	2211	77C	5.6	3	3	3	3	3	3	3	3	3	3	--
DIGITAL ELECTRONIC	2212	377C	10.5	0	-2	0	1	2	1	0	-1	-1	-1	1
OPERATOR SYSTEMS	2220	117C	9.2	0	-2	0	0	2	1	0	-1	-1	-2	1
RADIO	2231	67C	-1.4	-1	0	0	1	1	1	1	1	1	1	1
CIRCUIT COMPOSITE	2232		-1.9	-1	-3	0	-2	0	0	0	-1	0	-2	0
ANALOG		57,457C	0.9	0	1	2	3	3	3	3	3	3	3	--
DIGITAL SPG		257C	-2.0	0	-3	0	-2	0	0	0	-2	0	-2	0
OTHER DIGITAL		157,357C	-2.2	-2	-3	0	-2	0	0	-1	-2	0	-2	0
COE COMPOSITE			2.4	-1	-2	0	-1	1	1	0	-1	0	-1	1
STATION APPARATUS	2311	318C	1.6	2	2	2	2	2	2	2	2	2	2	2
LARGE PBX	2341	258C	-1.2	-3	-2	-1	-1	0	0	-1	-1	-1	-1	1
PUBLIC TELEPHONES	2351	198C	0.8	1	1	1	1	1	1	1	1	1	1	1
OTH TERM EQ	2362	558,858C	-1.7	-2	-1	0	0	0	1	0	0	1	1	1
STATION COMPOSITE			-1.0	-1	-1	0	0	0	1	0	0	1	1	1
ISP COMPOSITE			2.3	-1	-2	0	-1	1	1	0	-1	0	-1	1

000110

BELLSOUTH TELECOMMUNICATIONS
FORECAST TELEPHONE PLANT INDEXES
ACCOUNTS ON PART 32 USOA BASIS
SEPTEMBER 1997 FORECAST OF % COST CHANGE

ACCOUNT NAME	ACCT #	FRC	ACTUAL 1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007+
POLES	2411	1C	1.7	3	3	3	4	4	4	4	4	4	4	4
AERIAL CABLE	2421		2.0	1	0	1	4	3	4	4	4	4	4	2
COPPER		22C	2.2	1	0	2	5	3	4	4	4	4	4	4
OPTICAL		822C	1.2	1	1	-2	1	-1	1	1	1	2	2	2
U.G. CABLE	2422		1.2	0	0	-1	2	0	2	2	2	2	2	1
COPPER		5C	1.7	0	-1	1	5	3	4	3	3	3	3	3
OPTICAL		85C	0.9	0	1	-3	0	-2	0	1	1	1	1	1
BURIED CABLE	2423		2.1	1	1	2	3	3	3	3	3	3	3	3
COPPER		45C	2.0	1	1	2	4	3	3	3	3	3	3	3
OPTICAL		845C	2.1	2	2	0	2	1	2	2	2	2	2	2
SUBMARINE CABLE	2424		2.4	2	2	1	2	2	3	3	3	3	3	3
COPPER		6C	1.1	1	0	1	5	3	3	3	3	3	3	3
OPTICAL		86C	2.7	2	2	1	2	2	2	3	3	3	3	3
INBLDG NETWK CABL	2426		3.0	0	-2	1	6	3	4	4	4	4	4	2
COPPER		52C	3.1	0	-2	1	6	3	4	4	4	4	4	3
OPTICAL		852C	1.6	1	2	0	1	0	2	2	2	2	2	2
CABLE COMPOSITE			2.0	1	1	1	4	2	3	3	3	3	3	2
COPPER			2.1	1	0	2	4	3	4	4	4	4	4	3
OPTICAL			1.4	1	1	-1	1	0	1	1	2	2	2	2
CONDUIT SYSTEMS	2441	4C	1.3	3	3	3	3	3	3	3	3	3	3	3
OSP STRUCTURES			1.4	3	3	3	3	3	4	4	4	4	4	4
OSP COMPOSITE			1.9	1	1	1	4	2	3	3	3	3	3	3
TOTAL COMPOSITE			0.4	-2	-2	0	0	1	2	1	1	1	1	1

NOTE: BACKUP FOR INVESTMENT INFLATION FACTORS

000111

1998
BELLSOUTH
ACCOUNT AVERAGE LEVELIZED INFLATION LOADINGS
FOR FORWARD LOOKING STUDIES - THREE YEARS (1997EOY thru 2000)

BELLSOUTH		TELEPHONE PLANT INDICES (TPI) 1998 A	1999 B	2000 C	CUMULATIVE INFLATION FACTORS 1998 D	1999 E	2000 F	TOTAL G	INVESTMENT INFLATION LOADINGS H
ACCOUNT NAME	FRC				=1+(A/100)	=1+(B/100)XD	=1+(C/100)XE	=D+E+F	=G/3
BUILDINGS	10C	2	3	3	1.022623	1.048500	1.076500	3.147623	1.049208
					1.000000	1.000000	1.000000	3.000000	1.000000
MOTOR VEHICLES	40C	1	1	2	1.010000	1.020100	1.040500	3.070600	1.023533
AIRCRAFT	140C	2	4	4	1.020000	1.060800	1.103200	3.184000	1.061333
GARAGE WORK EQ	340C	2	2	3	1.020000	1.040400	1.071600	3.132000	1.044000
OTHER WORK EQ	540C	2	2	2	1.020000	1.040400	1.061200	3.121600	1.040533
FURNITURE	30C	2	3	3	1.020000	1.050600	1.082100	3.152700	1.050900
OFFICE EQUIPMENT	430,718C	1	1	1	1.010000	1.020100	1.030300	3.060400	1.020133
OFF SUPPORT EQ		0	1	1	1.000000	1.010000	1.020100	3.030100	1.010033
OTH COMM EQ		1	1	1	1.010000	1.020100	1.030300	3.060400	1.020133
G.P. COMPUTERS	530C	-18	-14	-10	0.820000	0.705200	0.634700	2.159900	0.719967
GEN EQ COMPOSITE		-10	-7	-4	0.900000	0.837000	0.803500	2.540500	0.846833
					1.000000	1.000000	1.000000	3.000000	1.000000
ANALOG ELECTRONIC	77C	3	3	3	1.030000	1.060900	1.092700	3.183600	1.061200
DIGITAL ELECTRONIC	377C	-2	0	1	0.980000	0.980000	0.989800	2.949800	0.983267
OPERATOR SYSTEMS	117C	-2	0	0	0.980000	0.980000	0.980000	2.940000	0.980000
RADIO	67C	0	0	1	1.000000	1.000000	1.010000	3.010000	1.003333
CIRCUIT COMPOSITE		-3	0	-2	0.970000	0.970000	0.950600	2.890600	0.963533
ANALOG	57,457C	1	2	3	1.010000	1.030200	1.061100	3.101300	1.033767
DIGITAL SPG	257C	-3	0	-2	0.970000	0.970000	0.950600	2.890600	0.963533
OTHER DIGITAL	157,357C	-3	0	-2	0.970000	0.970000	0.950600	2.890600	0.963533
COE COMPOSITE		-2	0	-1	0.980000	0.980000	0.970200	2.930200	0.976733
STATION APPARATUS	318C	2	2	2	1.020000	1.040400	1.061200	3.121600	1.040533
LARGE PBX	258C	-2	-1	-1	0.980000	0.970200	0.960500	2.910700	0.970233
PUBLIC TELEPHONES	198C	1	1	1	1.010000	1.020100	1.030300	3.060400	1.020133
OTH TERM EQ	558,858C	-1	0	0	0.990000	0.990000	0.990000	2.970000	0.990000
STATION COMPOSITE		-1	0	0	0.990000	0.990000	0.990000	2.970000	0.990000
ISP COMPOSITE		-2	0	-1	0.980000	0.980000	0.970200	2.930200	0.976733

SOURCE: TPI from Network - Forecast Telephone Plant Indexes, Sep 1997 Forecast of % Cost Change, Att. C, Pages 1 & 2

000112

POLES	1C	3	3	4	1.032135	1.067800	1.105800	3.205735	1.068578
AERIAL CABLE		0	1	4	1.000000	1.010000	1.050400	3.060400	1.020133
OPTICAL	822C	1	-2	1	1.010000	0.989800	0.999700	2.999500	0.999833
U.G. CABLE		0	-1	2	1.000000	0.990000	1.009800	2.999800	0.999933
COPPER	5C	-1	1	5	0.990000	0.999900	1.049900	3.039800	1.013267
OPTICAL	85C	1	-3	0	1.010000	0.979700	0.979700	2.969400	0.989800
BURIED CABLE		1	2	3	1.010000	1.030200	1.061100	3.101300	1.033767
COPPER	45C	1	2	4	1.010000	1.030200	1.071400	3.111600	1.037200
OPTICAL	845C	2	0	2	1.020000	1.020000	1.040400	3.080400	1.026800
SUBMARINE CABLE		2	1	2	1.020000	1.030200	1.050800	3.101000	1.033667
COPPER	6C	0	1	5	1.000000	1.010000	1.060500	3.070500	1.023500
OPTICAL	86C	2	1	2	1.020000	1.030200	1.050800	3.101000	1.033667
INBLDG NETWK CABLE		-2	1	6	0.980000	0.989800	1.049200	3.019000	1.006333
COPPER	52C	-2	1	6	0.980000	0.989800	1.049200	3.019000	1.006333
OPTICAL	852C	2	0	1	1.020000	1.020000	1.030200	3.070200	1.023400
CABLE COMPOSITE		1	1	4	1.010000	1.020100	1.060900	3.091000	1.030333
COPPER		0	2	4	1.000000	1.020000	1.060800	3.080800	1.026933
OPTICAL		1	-1	1	1.010000	0.999900	1.009900	3.019800	1.006600
CONDUIT SYSTEMS	4C	3	3	3	1.029849	1.057800	1.090800	3.178449	1.059483
OSP STRUCTURES		3	3	3	1.030732	1.061700	1.096600	3.189032	1.063011
OSP COMPOSITE		1	1	4	1.008573	1.021900	1.058200	3.088673	1.029558
					1.000000	1.000000	1.000000	3.000000	1.000000
TOTAL COMPOSITE		-2	0	0	0.980000	0.980000	0.980000	2.940000	0.980000

SOURCE: TPI from Network - Forecast Telephone Plant Indexes, Sep 1997 Forecast of % Cost Change, Att. C, Pages 1 & 2

000113

1998
BELLSOUTH
ACCOUNT AVERAGE LEVELIZED INFLATION LOADINGS
FOR FORWARD LOOKING STUDIES - TWO YEARS (1998 thru 2000)

BELLSOUTH		TELEPHONE PLANT INDICES (TI 1999 A	2000 B	CUMULATIVE INFLATION FACTORS 1999 C =1+(A/100)	2000 D =(1+B/100)*A	TOTAL E =C+D	LEVELIZED INVESTMENT INFLATION LOADINGS F =E/2
Building	10C	2.5	2.7	1.025349	1.052737	2.078086	1.039043
Gen Purpose Computer	530C	-14.0	-10.0	0.860000	0.774000	1.634000	0.817000
Digital Switch	377C	0.0	1.0	1.000000	1.010000	2.010000	1.005000
Circuit-DDS	157C	0.0	-2.0	1.000000	0.980000	1.980000	0.990000
Circuit-Digital Pair Gain	257C	0.0	-2.0	1.000000	0.980000	1.980000	0.990000
Circuit-Other Digital	357C	0.0	-2.0	1.000000	0.980000	1.980000	0.990000
Poles	1C	3.5	3.6	1.034562	1.071423	2.105985	1.052992
Aerial Cable-Copper	22C	2.0	5.0	1.020000	1.071000	2.091000	1.045500
Aerial Cable-Fiber	822C	-2.0	1.0	0.980000	0.989800	1.969800	0.984900
Underground Cable-Copper	5C	1.0	5.0	1.010000	1.060500	2.070500	1.035250
Underground Cable-Fiber	85C, D, F, T5	-3.0	0.0	0.970000	0.970000	1.940000	0.970000
Buried Cable-Copper	45C	2.0	4.0	1.020000	1.060800	2.080800	1.040400
Buried Cable-Fiber	845C	0.0	2.0	1.000000	1.020000	2.020000	1.010000
Submarine Cable-Copper	6C	1.0	5.0	1.010000	1.060500	2.070500	1.035250
Submarine Cable-Fiber	86C	1.0	2.0	1.010000	1.030200	2.040200	1.020100
Intrbldg Ntwk Cable-Copper	52C	1.0	6.0	1.010000	1.070600	2.080600	1.040300
Intrbldg Ntwk Cable-Fiber	852C	0.0	1.0	1.000000	1.010000	2.010000	1.005000
Conduit	4C	2.7	3.1	1.027181	1.059201	2.086383	1.043191

SOURCE: TPI from Network - Forecast Telephone Plant Indexes, Sep 1997 Forecast of % Cost Change, Att. C, Pages 1 & 2

000114

1998
BELLSOUTH
ACCOUNT AVERAGE LEVELIZED INFLATION LOADINGS
FOR FORWARD LOOKING STUDIES - THREE YEARS (1997EOY thru 2000)

BELLSOUTH		TELEPHONE PLANT INDICES (TPI) 1998 A	1999 B	2000 C	CUMULATIVE INFLATION FACTORS 1998 D =1+(A/100)	1999 E =1+(B/100)XD	2000 F =1+(C/100)XE	TOTAL G =D+E+F	LEVELIZED INVESTMENT INFLATION LOADINGS H =G/3
Building	10C	2.3	2.5	2.7	1.022623	1.048500	1.076500	3.147623	1.049208
Gen Purpose Computer	530C	-18.0	-14.0	-10.0	0.820000	0.705200	0.634700	2.159900	0.719967
Digital Switch	377C	-2.0	0.0	1.0	0.980000	0.980000	0.989800	2.949800	0.983267
Circuit-DDS	157C	-3.0	0.0	-2.0	0.970000	0.970000	0.950600	2.890600	0.963533
Circuit-Digital Pair Gain	257C	-3.0	0.0	-2.0	0.970000	0.970000	0.950600	2.890600	0.963533
Circuit-Other Digital	357C	-3.0	0.0	-2.0	0.970000	0.970000	0.950600	2.890600	0.963533
Poles	1C	3.2	3.5	3.6	1.032135	1.067800	1.105800	3.205735	1.068578
Aerial Cable-Copper	22C	0.0	2.0	5.0	1.000000	1.020000	1.071000	3.091000	1.030333
Aerial Cable-Fiber	822C	1.0	-2.0	1.0	1.010000	0.989800	0.999700	2.999500	0.999833
Underground Cable-Copper	5C	-1.0	1.0	5.0	0.990000	0.999900	1.049900	3.039800	1.013267
Underground Cable-Fiber	85C, D, F, T5C	1.0	-3.0	0.0	1.010000	0.979700	0.979700	2.969400	0.989800
Buried Cable-Copper	45C	1.0	2.0	4.0	1.010000	1.030200	1.071400	3.111600	1.037200
Buried Cable-Fiber	845C	2.0	0.0	2.0	1.020000	1.020000	1.040400	3.080400	1.026800
Submarine Cable-Copper	6C	0.0	1.0	5.0	1.000000	1.010000	1.060500	3.070500	1.023500
Submarine Cable-Fiber	86C	2.0	1.0	2.0	1.020000	1.030200	1.050800	3.101000	1.033667
Intrbldg Ntwk Cable-Copper	52C	-2.0	1.0	6.0	0.980000	0.989800	1.049200	3.019000	1.006333
Intrbldg Ntwk Cable-Fiber	852C	2.0	0.0	1.0	1.020000	1.020000	1.030200	3.070200	1.023400
Conduit	4C	3.0	2.7	3.1	1.029849	1.057800	1.090800	3.178449	1.059483

SOURCE: TPI from Network - Forecast Telephone Plant Indexes, Sep 1997 Forecast of % Cost Change, Att. C, Pages 1 & 2

1998
BELLSOUTH
ACCOUNT AVERAGE LEVELIZED INFLATION LOADINGS
FOR FORWARD LOOKING STUDIES - TWO YEARS (1998 thru 2000)

BELLSOUTH		TELEPHONE PLANT INDICES (TPI) 1999 A	2000 B	CUMULATIVE INFLATION FACTORS 1999 C =1+(A/100)	2000 D =(1+B/100)*A	TOTAL E =C+D	LEVELIZED INVESTMENT INFLATION LOADINGS F =E/2
Building	10C	2.5	2.7	1.025349	1.052737	2.078086	1.039043
Gen Purpose Computer	530C	-14.0	-10.0	0.860000	0.774000	1.634000	0.817000
Digital Switch	377C	0.0	1.0	1.000000	1.010000	2.010000	1.005000
Circuit-DDS	157C	0.0	-2.0	1.000000	0.980000	1.980000	0.990000
Circuit-Digital Pair Gain	257C	0.0	-2.0	1.000000	0.980000	1.980000	0.990000
Circuit-Other Digital	357C	0.0	-2.0	1.000000	0.980000	1.980000	0.990000
Poles	1C	3.5	3.6	1.034562	1.071423	2.105985	1.052992
Aerial Cable-Copper	22C	2.0	5.0	1.020000	1.071000	2.091000	1.045500
Aerial Cable-Fiber	822C	-2.0	1.0	0.980000	0.989800	1.969800	0.984900
Underground Cable-Copper	5C	1.0	5.0	1.010000	1.060500	2.070500	1.035250
Underground Cable-Fiber	85C, D, F, T5C	-3.0	0.0	0.970000	0.970000	1.940000	0.970000
Buried Cable-Copper	45C	2.0	4.0	1.020000	1.060800	2.080800	1.040400
Buried Cable-Fiber	845C	0.0	2.0	1.000000	1.020000	2.020000	1.010000
Submarine Cable-Copper	6C	1.0	5.0	1.010000	1.060500	2.070500	1.035250
Submarine Cable-Fiber	86C	1.0	2.0	1.010000	1.030200	2.040200	1.020100
Intrbldg Ntwk Cable-Copper	52C	1.0	6.0	1.010000	1.070600	2.080600	1.040300
Intrbldg Ntwk Cable-Fiber	852C	0.0	1.0	1.000000	1.010000	2.010000	1.005000
Conduit	4C	2.7	3.1	1.027181	1.059201	2.086383	1.043191

SOURCE: TPI from Network - Forecast Telephone Plant Indexes, Sep 1997 Forecast of % Cost Change, Att. C, Pages 1 & 2

000116

TENNESSEE DOCKET NO 99-00430
APPENDIX A
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

Hard-wired Factors

File: pihw97.xls

STATE: TENNESSEE **1997 PLUG-IN AND HARDWIRE STUDY**
SOURCE DATA: 1997

FRC A	FILE 542 PLUG-IN INVESTMENT MATERIAL B	INPLACE C	PRELIM PLUG-IN FACTOR D (C / B)	PLUG-IN FACTOR E (min=1.060)	FILE 542 HARDWIRE INVESTMENT MATERIAL F	INPLACE G	PRELIM HARDWIRE FACTOR H (G / F)	HARDWIRE FACTOR I (min=1.060)
57C	$ 275,077	$ 289,412	1.0521	**1.0600**	$ 105,777.02	$ 122,295.45	1.1562	**1.1562**
67C	$ 600	$ 625	1.0749	**1.0749**	$ 9,762.56	$ 10,453.85	2.2186	**2.2186**
77C	$ 1,102,222	$ 1,190,755	1.0803	**1.0803**	$ 889,717.23	$ 1,932,084.83	2.1716	**2.1716**
117C	$ 316,137	$ 340,204	1.0761	**1.0761**	$ 36,960.42	$ 247,404.62	6.6938	**6.6938**
167C	$ 1,200	$ 1,200	1.0749	**1.0749**	$ -	$ -	2.2186	**2.2186**
SUBTOTAL	$ 1,695,235	$ 1,822,196	1.0749	**1.0749**	$ 1,042,217.23	$ 2,312,238.75	2.2186	**2.2186**
157C	$ 819,552	$ 867,084	1.0580	**1.0600**	$ 8,550.13	$ 9,216.61	2.4367	**2.4367**
257C	$ 29,274,897	$ 31,184,848	1.0652	**1.0652**	$ 16,881,049.16	$ 34,880,557.97	2.0663	**2.0663**
357C	$ 32,892,029	$ 35,049,334	1.0656	**1.0656**	$ 6,382,300.80	$ 20,692,286.26	3.2421	**3.2421**
COMPOSITE 257C/357C	$ 62,166,926	$ 66,234,182	1.0654	**1.0654**	$ 23,263,349.96	$ 55,572,844.23	2.3889	**2.3889**
377C	$ 42,828,119	$ 45,678,939	1.0666	**1.0666**	$ 16,096,364.08	$ 40,347,789.76	2.5066	**2.5066**
SUBTOTAL	$ 105,814,597	$ 112,780,206	1.0658	**1.0658**	$ 39,368,264.17	$ 95,929,850.60	2.4367	**2.4367**
TOTAL	$ 107,509,832	$ 114,602,402	1.0660	**1.0660**	$ 40,410,481.40	$ 98,242,089.35	2.4311	**2.4311**

Note: Use column D if it is higher than 1 + Tax Rate. Otherwise, use 1 + Tax Rate because Plug-in Inplace costs includes material costs, transportation, taxes and prorated portion of installed labor charges, engineering and certain other costs accumulated during the year for the involved accounting location and subaccount.

SOURCE: File 542, Investments from Finance, Tax rates from Tax Office, and Material Factor from In-Plant - COE Study

000118

TENNESSEE DOCKET NO 99-00430
APPENDIX A
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

Supporting Equipment & Power Loadings

File: se&p97.xls

1997 SUPPORTING EQUIPMENT & POWER LOADINGS

07/10/98

							1997 SE&P LOADINGS		
Source: COMAP Extract as of 12/31/97			TOTAL (Investment) (a)	9CO (COMAP: P&C) (b)	9DO (COMAP: P&C) (c)	POWER ONLY (COMAP) (d)	TOTAL SE&P (e)=(b+c)/(a-b-c)+1 (e)	POWER ONLY (f)=d/(a-b-c)+1 (f)	SE ONLY (g)=(b+c-d)/(a-b-c)+1 (g)
TN	117C	OPERATOR SYSTEMS	19,492,908	2,512,148	43	2,404,597	1.1479	1.1416	1.0063
TN	157C	DDS	14,917,449	18,614	18,288	18,614	1.0025	1.0013	1.0012
TN	257C	DIGITAL PAIR GAIN	604,305,794	15,839,588	919,606	14,776,750	1.0285	1.0251	1.0034
TN	357C	DIGITAL OTHER	502,660,944	17,435,289	4,949,156	13,364,221	1.0466	1.0278	1.0188
TN	377C	DIGITAL SW	845,602,402	83,831,330	514,064	66,876,066	1.1108	1.0878	1.0229
TN	57C	ANALOG CKT	61,091,565	2,500,756	775,855	2,081,138	1.0567	1.0360	1.0207
TN	67/167C	RADIO	2,304,421	133,439	83,932	2,004	1.1042	1.0010	1.1032
TN	77C	ANALOG SW	68,806,409	4,432,872	70,789	2,685,108	1.0700	1.0418	1.0283

000120

TENNESSEE DOCKET NO 99-00430
APPENDIX A
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

Plant specific Expense Factors
Land & Building Loadings

File: plntsp98.xls

Calculation of Plant Specific Expense to Investment Ratios

Forward Looking Studies - 1998-2000

Tennessee

Line	SCALE=000 DESCRIPTION	Account FRC	LAND 2111 ALL	BUILDINGS - COE 2121 ALL	GEN PRPSE COMPUTERS 2124 LESS 633	ANALOG ELEC SWITCH 2211 77C	DIGITAL ELEC SWITCH 2212 377C, 587C	OPERATOR SYSTEMS 2220 117C	RADIO 2231 67C, 167C	DIGITAL DATA SYSTEMS 2232 157C	DIGTL CIRC-PAIR GAIN 2232 257C,D257C, F257C	DIGTL CIRC-OTHER 2232 357	ANALOG CIRC 2232 57C, 457C
1	MR Book Investment 1996 EOY	Reg Investments	10,889	226,995	224,347	66,027	774,482	20,981	2,497	14,174	539,029	454,403	62,745
2	MR Book Investment 1997 EOY	Reg Investments	10,793	242,983	212,294	68,770	828,755	19,476	2,304	14,917	603,958	502,467	61,093
3	1998 Additions	Construction Budget	50	12,472	10,002	-325	50,340	231	-18	-144	63,000	23,502	0
4	Investment 1998 EOY	Ln2 + Ln3	10,843	255,455	222,296	68,445	879,095	19,707	2,287	14,773	666,958	525,968	61,093
5	1999 Additions	Construction Budget	50	6,141	5,437	-2,600	34,600	477	-19	-320	63,400	17,653	0
6	Investment 1999 EOY	Ln4 + Ln5	10,893	261,596	227,733	65,845	913,695	20,184	2,267	14,454	730,358	543,621	61,093
7	2000 Additions	Construction Budget	50	6,200	10,766	-1,800	36,000	478	-21	-425	63,500	17,555	0
8	Investment 2000 EOY	Ln6 + Ln7	10,943	267,796	238,499	64,045	949,695	20,662	2,246	14,029	793,858	561,176	61,093
9	Average Investment 1997	(Ln1 + Ln2)/2	10,841	234,989	218,321	67,399	801,619	20,229	2,401	14,546	571,493	478,435	61,919
10	Average Investment 1998	(Ln2 + Ln4)/2	10,818	249,219	217,295	68,607	853,925	19,592	2,296	14,845	635,458	514,217	61,093
11	Average Investment 1999	(Ln4 + Ln6)/2	10,868	258,526	225,015	67,145	896,395	19,946	2,277	14,613	698,658	534,795	61,093
12	Average Investment 2000	(Ln6 + Ln8)/2	10,918	264,696	233,116	64,945	931,695	20,423	2,257	14,241	762,108	552,398	61,093
13	Curr Cost / Book Cost	Capital Recovery	2.110	2.110	0.619	1.603	1.103	1.068	1.379	0.978	0.999	0.999	0.999
14	1997 Curr Average Investment	Ln13 * Ln9	22,875	495,828	135,140	108,040	884,185	21,604	3,310	14,226	570,922	477,956	61,857
15	1998 Curr Average Investment	Ln14 + (Ln10 - Ln9)	22,852	510,058	134,115	109,249	936,492	20,968	3,205	14,525	634,886	513,739	61,031
16	1999 Curr Average Investment	Ln15 + (Ln11 - Ln10)	22,902	519,364	141,834	107,786	978,962	21,322	3,187	14,293	698,086	534,316	61,031
17	2000 Curr Average Investment	Ln16 + (Ln12 - Ln11)	22,952	525,535	149,936	105,586	1,014,262	21,799	3,167	13,921	761,536	551,920	61,031
18	1998-2000 Curr Avg Investment	(Ln15+Ln16+Ln17)/3	22,902	518,319	141,962	107,540	976,572	21,363	3,186	14,247	698,169	533,325	61,031
19	Expense Account - Lev A		------	6121	6124	6211	6212	6220	6231	6232	6232	6232	6232
20	Expense - 1997 Actual	Reg Expenses	0	35,772	25,448	3,608	53,421	1,714	6	233	11,370	7,631	525
21	Service Order Adjustment	Service Order Study				451	4,397	0	0	0	533	1,220	5
22	RTU Adjustment	RTU Fees / Study					16,911						
23	Rental Revenue	Reg Acct 5240		616									
24	Adjusted Exps, Lev A - 1997	Ln20-Ln21-Ln22-Ln23	0	35,156	25,448	3,158	32,113	1,714	6	233	10,837	6,411	520
25	Expense Account - Lev B		6110	6120	6120	6210	6210	6220	6230	6230	6230	6230	6230
26	Expense - 1997 Actual	Reg Expenses	1,394	66,113	66,113	57,029	57,029	1,714	19,767	19,767	19,767	19,767	19,767
27	Ratio: Lev A / Lev B	Ln24 / Ln26	0.0000	0.5317	0.3849	0.0554	0.5631	1.0000	0.0003	0.0118	0.5482	0.3243	0.0263
28	Level B Account		Network Support	General Support	General Support	CO Switching	CO Switching	CO Opertor Systems	Radio	CO Transmissions	CO Transmissions	CO Transmissions	CO Transmissions
29	Average Exp - Lev B (1998-2000)	Regulatory Forecast	1,451	67,844	67,844	59,428	59,428	1,830	21,139	21,139	21,139	21,139	21,139
30	Average Exp - Lev A (1998-2000)	Ln23 * Ln 25	0	36,076	26,114	3,291	33,464	1,830	7	249	11,589	6,856	556
31	Adj Ratio:Oper Expense / Invest.	Ln30 / Ln18	0.0000	0.0696	0.1840	0.0306	0.0343	0.0857	0.0022	0.0175	0.0166	0.0129	0.0091
32	Commercial Power - COE	Acct 6531 / Ln18	----	----	----	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024	0.0024
33	Plant Specific Factor	Ln31 + Ln32	0.0000	0.0696	0.1840	0.0331	0.0367	0.0881	0.0046	0.0199	0.0190	0.0153	0.0116

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Calculation of Plant Specific Expense to Investment Ratios

Forward Looking Studies - 1998-2000

Tennessee

Line	SCALE=000 DESCRIPTION	Account FRC	POLES 2411 1C	AERIAL CA - METAL 2421 22C, 12C	AERIAL CA - FIBER 2421 822C, 812C,D22C,	UNGROUND CA - METAL 2422 5C	UNGROUND CA - FIBER 2422 85C,D5C,F5C, T5C	BURIED CA - METAL 2423 45C	BURIED CA - FIBER 2423 845C, D45C, F45C, T45C	SUBMARINE CA - METAL 2424 6C	SUBMARINE CA - FIBER 2424 86C,D6C,F6C	INTRBLD NTWK-METAL 2426 52C	INTRBLD NTWK-FIBER 2426 852C,D52C, F52C,T52C	CONDUIT SYS 2441 4C
1	MR Book Investment 1996 EOY	Reg Investments	128,451	574,955	63,558	226,569	57,100	758,619	37,954	1,087	120	19,909	97	188,803
2	MR Book Investment 1997 EOY	Reg Investments	133,364	601,369	69,298	226,274	59,521	793,384	43,765	1,087	120	19,796	130	192,554
3	1998 Additions	Construction Budget	5,375	28,886	9,113	2,632	4,303	32,392	4,384	0	0	-410	0	6,125
4	Investment 1998 EOY	Ln2 + Ln3	138,740	630,256	78,411	228,906	63,823	825,775	48,149	1,087	120	19,386	130	198,679
5	1999 Additions	Construction Budget	4,835	28,666	8,585	2,602	4,017	32,142	4,098	0	0	-410	0	5,665
6	Investment 1999 EOY	Ln4 + Ln5	143,575	658,922	86,996	231,507	67,840	857,917	52,247	1,087	120	18,977	130	204,344
7	2000 Additions	Construction Budget	4,835	28,666	8,408	2,602	3,660	32,142	3,801	0	0	-410	0	5,665
8	Investment 2000 EOY	Ln6 + Ln7	148,410	687,588	95,404	234,109	71,501	890,059	56,049	1,087	120	18,567	130	210,008
9	Average Investment 1997	(Ln1 + Ln2)/2	130,908	588,162	66,428	226,421	58,310	776,001	40,860	1,087	120	19,853	114	190,679
10	Average Investment 1998	(Ln2 + Ln4)/2	136,052	615,813	73,854	227,590	61,672	809,580	45,957	1,087	120	19,591	130	195,617
11	Average Investment 1999	(Ln4 + Ln6)/2	141,157	644,589	82,703	230,207	65,832	841,846	50,198	1,087	120	19,181	130	201,511
12	Average Investment 2000	(Ln6 + Ln8)/2	145,993	673,255	91,200	232,808	69,670	873,988	54,148	1,087	120	18,772	130	207,176
13	Curr Cost / Book Cost	Capital Recovery	2.624	1.569	0.912	1.572	0.845	1.425	0.972	1.455	1.455	1.373	0.918	1.795
14	1997 Curr Average Investment	Ln13 * Ln9	343,502	922,826	60,582	355,934	49,272	1,105,802	39,715	1,581	175	27,258	104	342,268
15	1998 Curr Average Investment	Ln14 + (Ln10 - Ln9)	348,646	950,477	68,009	357,103	52,634	1,139,380	44,813	1,581	175	26,996	121	347,206
16	1999 Curr Average Investment	Ln15 + (Ln11 - Ln10)	353,751	979,253	76,858	359,720	56,794	1,171,647	49,054	1,581	175	26,586	121	353,101
17	2000 Curr Average Investment	Ln16 + (Ln12 - Ln11)	358,587	1,007,919	85,355	362,321	60,632	1,203,789	53,004	1,581	175	26,177	121	358,765
18	1998-2000 Curr Avg Investment	(Ln15+Ln16+Ln17)/3	353,661	979,216	76,740	359,715	56,687	1,171,605	48,957	1,581	175	26,586	121	353,024
19	**Expense Account - Lev A**		6411	6421	6421	6422	6422	6423	6423	6424	6424	6426	6426	6441
20	Expense - 1997 Actual	Reg Expenses	11,257	47,018	315	5,971	174	47,147	77	0	0	197	0	745
21	Service Order Adjustment	Service Order Study		8,980	60	0	0	17,416	28			85	0	
22	RTU Adjustment	RTU Fees / Study												
23	Rental Revenue	Reg Acct 5240	798											147
24	Adjusted Exps, Lev A - 1997	Ln20-Ln21-Ln22-Ln23	10,459	38,038	255	5,971	174	29,731	49	0	0	112	0	598
25	**Expense Account - Lev B**		6410	6410	6410	6410	6410	6410	6410	6410	6410	6410	6410	6410
26	Expense - 1997 Actual	Reg Expenses	114,783	114,783	114,783	114,783	114,783	114,783	114,783	114,783	114,783	114,783	114,783	114,783
27	Ratio: Lev A / Lev B	Ln24 / Ln26	0.0911	0.3314	0.0022	0.0520	0.0015	0.2590	0.0004	0.0000	0.0000	0.0010	0.0000	0.0052
28	Level B Account		Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire
29	Average Exp - Lev B (1988-2000)	Regulatory Forecast	128,078	128,078	128,078	128,078	128,078	128,078	128,078	128,078	128,078	128,078	128,078	128,078
30	Average Exp - Lev A (1988-2000)	Ln23 * Ln 25	11,670	42,443	285	6,662	194	33,174	54	0	0	125	0	667
31	Adj Ratio:Oper Expense / Invest.	Ln30 / Ln13	0.0330	0.0433	0.0037	0.0185	0.0034	0.0283	0.0011	0.0000	0.0000	0.0047	0.0000	0.0019
32	Commercial Power - COE	Acct 6531 / Ln13	-----	----	-----	----	----	----	----	-----	----	----	----	----
33	Plant Specific Factor	Ln31 + Ln32	0.0330	0.0433	0.0037	0.0185	0.0034	0.0283	0.0011	0.0000	0.0000	0.0047	0.0000	0.0019

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	STRUCTURES LOADING FACTORS:	SOURCE	FACTORS
34	**Poles - Embedded (1997)**	Ln2: Ac2411/Ac2421	0.1989
35	**Conduit - Embedded (1997)**	Ln2: Ac2441/Ac2422	0.6738
36	**Poles - F'wrd Looking ('98-'00)**	Ln18: Ac2411/Ac2421	0.3349
37	**Conduit - F'wrd Looking ('98-'00)**	Ln18: Ac2441/Ac2422	0.8478

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Calculation of Plant Specific Expense to Investment Ratios

Forward Looking Studies - 1998-2000

BellSouth Telecommunications

Line	SCALE=000 DESCRIPTION	Account FRC	LAND 2111 ALL	BUILDINGS - COE 2121 ALL	GEN PRPSE COMPUTERS 2124 LESS 633	ANALOG ELEC SWITCH 2211 77C	DIGITAL ELEC SWITCH 2212 377C, 587C	OPERATOR SYSTEMS 2220 117C	RADIO 2231 67C, 167C	DIGITAL DATA SYSTEMS 2232 157C	DIGTL CIRC-PAIR GAIN 2232 257C,D257C, F257C	DIGTL CIRC-OTHER 2232 357	ANALOG CIRC 2232 57C, 457C
1	**MR Book Investment 1996 EOY**	Reg Investments	156,829	2,732,540	1,825,437	1,334,143	6,513,892	142,992	98,676	88,816	4,810,790	3,756,686	501,819
2	**MR Book Investment 1997 EOY**	Reg Investments	153,870	2,732,308	1,816,124	1,238,991	6,968,546	152,690	92,373	95,210	5,333,743	4,113,244	489,644
3	**1998 Additions**	Construction Budget	1,989	83,919	103,746	-74,910	557,604	6,984	-2,900	-6,953	424,100	187,260	0
4	**Investment 1998 EOY**	Ln2 + Ln3	155,859	2,816,227	1,919,869	1,164,081	7,526,150	159,674	89,474	88,257	5,757,843	4,300,504	489,644
5	**1999 Additions**	Construction Budget	1,490	66,520	42,759	-100,650	491,176	3,069	-618	-1,991	406,400	149,892	0
6	**Investment 1999 EOY**	Ln4 + Ln5	157,349	2,882,747	1,962,628	1,063,431	8,017,326	162,743	88,856	86,265	6,164,243	4,450,396	489,644
7	**2000 Additions**	Construction Budget	1,490	67,200	107,152	-70,550	488,110	2,956	880	-1,109	413,650	141,144	0
8	**Investment 2000 EOY**	Ln6 + Ln7	158,839	2,949,947	2,069,780	992,881	8,505,436	165,699	89,736	85,156	6,577,893	4,591,539	489,644
9	**Average Investment 1997**	(Ln1 + Ln2)/2	155,350	2,732,424	1,820,780	1,286,567	6,741,219	147,841	95,525	92,013	5,072,267	3,934,965	495,731
10	**Average Investment 1998**	(Ln2 + Ln4)/2	154,865	2,774,267	1,867,996	1,201,536	7,247,348	156,182	90,923	91,733	5,545,793	4,206,874	489,644
11	**Average Investment 1999**	(Ln4 + Ln6)/2	156,604	2,849,487	1,941,249	1,113,756	7,771,738	161,208	89,165	87,261	5,961,043	4,375,450	489,644
12	**Average Investment 2000**	(Ln6 + Ln8)/2	158,094	2,916,347	2,016,204	1,028,156	8,261,381	164,221	89,296	85,711	6,371,068	4,520,967	489,644
13	**Curr Cost / Book Cost**	*Composite: Ln14/Ln9*	1.9717	1.9850	0.6053	1.4867	1.0960	1.0647	1.2589	0.9346	1.0002	1.0027	1.0049
14	**1997 Curr Average Investment**	*Ln13 * Ln9*	306,298	5,423,827	1,102,186	1,912,776	7,388,294	157,400	120,260	85,999	5,073,282	3,945,406	498,174
15	**1998 Curr Average Investment**	Ln14 + (Ln10 - Ln9)	305,813	5,465,670	1,149,402	1,827,745	7,894,423	165,741	115,659	85,719	5,546,809	4,217,315	492,087
16	**1999 Curr Average Investment**	Ln15 + (Ln11 - Ln10)	307,552	5,540,889	1,222,654	1,739,965	8,418,813	170,768	113,900	81,247	5,962,059	4,385,891	492,087
17	**2000 Curr Average Investment**	Ln16 + (Ln12 - Ln11)	309,042	5,607,749	1,297,610	1,654,365	8,908,456	173,780	114,031	79,697	6,372,084	4,531,409	492,087
18	**1998-2000 Curr Avg Investment**	(Ln15+Ln16+Ln17)/3	307,469	5,538,103	1,223,222	1,740,692	8,407,231	170,096	114,530	82,221	5,960,317	4,378,205	492,087
19	**Expense Account - Lev A**		----	6121	6124	6211	6212	6220	6231	6232	6232	6232	6232
20	**Expense - 1997 Actual**	Reg Expenses	0	264,109	213,421	68,938	427,706	21,333	589	2,155	100,899	72,959	6,358
21	**Service Order Adjustment**	Service Order Study	0	0	0	9,867	28,688	0	0	803	3,878	11,912	1,395
22	**RTU Adjustment**	RTU Fees / Study	0	0	0	0	128,322	0	0	0	0	0	0
23	**Rental Revenue**	Reg Acct 5240	0	3,061	0	0	0	0	0	0	0	0	0
24	**Adjusted Exps, Lev A - 1997**	Ln20-Ln21-Ln22-Ln23	0	261,047	213,421	59,071	270,697	21,333	589	1,352	97,021	61,047	4,963
25	**Expense Account - Lev B**		6110	6120	6120	6210	6210	6220	6230	6230	6230	6230	6230
26	**Expense - 1997 Actual**	Reg Expenses	10,144	550,063	550,063	496,644	496,644	21,333	182,962	182,962	182,962	182,962	182,962
27	**Ratio: Lev A / Lev B**	Ln24 / Ln26	0.0000	0.4746	0.3880	0.1189	0.5451	1.0000	0.0032	0.0074	0.5303	0.3337	0.0271
28	**Level B Account**		Network Support	General Support	General Support	CO Switching	CO Switching	CO Opertor Systems	Radio	CO Transmissions	CO Transmissions	CO Transmissions	CO Transmissions
29	**Average Exp - Lev B (1988-2000)**	Regulatory Forecast	10,753	568,700	568,700	517,719	517,719	22,772	195,676	195,676	195,676	195,676	195,676
30	**Average Exp - Lev A (1988-2000)**	Ln23 * Ln 25	0	269,892	220,652	61,578	282,184	22,772	630	1,446	103,763	65,290	5,308
31	**Adj Ratio:Oper Expense / Invest.**	Ln30 / Ln18	0.0000	0.0487	0.1804	0.0354	0.0336	0.1339	0.0055	0.0176	0.0174	0.0149	0.0108
32	**Commercial Power - COE**	Acct 6531 / Ln18	-----	----	----	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
33	**Plant Specific Factor**	Ln31 + Ln32	0.0000	0.0487	0.1804	0.0379	0.0361	0.1364	0.0080	0.0201	0.0199	0.0174	0.0133

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Calculation of Plant Specific Expense to Investment Ratios

Forward Looking Studies - 1998-2000

BellSouth Telecommunications

Line	SCALE=000 DESCRIPTION	Account FRC	POLES 2411 1C	AERIAL CA - METAL 2421 22C, 12C	AERIAL CA - FIBER 2421 822C, 812C,D22C,	UNGROUND CA - METAL 2422 5C	UNGROUND CA - FIBER 2422 85C,D5C,F5C, T5C	BURIED CA - METAL 2423 45C	BURIED CA - FIBER 2423 845C, D45C, F45C, T45C	SUBMARINE CA - METAL 2424 6C	SUBMARINE CA - FIBER 2424 86C,D6C,F6C	INTRBLD NTWK-METAL 2426 52C	INTRBLD NTWK-FIBER 2426 852C,D52C, F52C,T52C	CONDUIT SYS 2441 4C
1	MR Book Investment 1996 EOY	Reg Investments	894,165	4,436,014	332,488	2,367,257	667,984	9,072,194	665,171	18,216	4,233	177,772	1,422	2,180,583
2	MR Book Investment 1997 EOY	Reg Investments	915,852	4,593,639	360,096	2,384,972	699,700	9,461,108	740,027	17,770	4,217	177,065	1,776	2,219,424
3	1998 Additions	Construction Budget	23,356	208,306	59,255	25,997	66,453	428,233	79,574	-420	-123	947	-33	58,906
4	Investment 1998 EOY	Ln2 + Ln3	939,208	4,801,945	419,351	2,410,969	766,153	9,889,341	819,600	17,350	4,094	178,012	1,743	2,278,329
5	1999 Additions	Construction Budget	20,030	210,032	58,773	26,305	65,509	428,052	79,418	-491	-71	1,090	-31	55,252
6	Investment 1999 EOY	Ln4 + Ln5	959,238	5,011,977	478,124	2,437,274	831,662	10,317,393	899,018	16,859	4,023	179,101	1,712	2,333,581
7	2000 Additions	Construction Budget	20,144	208,056	58,811	25,754	65,031	425,864	79,257	-491	-71	994	-33	55,264
8	Investment 2000 EOY	Ln6 + Ln7	979,382	5,220,033	536,935	2,463,028	896,692	10,743,256	978,275	16,368	3,952	180,095	1,679	2,388,845
9	Average Investment 1997	(Ln1 + Ln2)/2	905,008	4,514,826	346,292	2,376,114	683,842	9,266,651	702,599	17,993	4,225	177,418	1,599	2,200,004
10	Average Investment 1998	(Ln2 + Ln4)/2	927,530	4,697,792	389,723	2,397,970	732,927	9,675,225	779,813	17,560	4,156	177,539	1,759	2,248,877
11	Average Investment 1999	(Ln4 + Ln6)/2	949,223	4,906,961	448,738	2,424,121	798,907	10,103,367	859,309	17,105	4,058	178,557	1,727	2,305,955
12	Average Investment 2000	(Ln6 + Ln8)/2	969,310	5,116,005	507,530	2,450,151	864,177	10,530,325	938,647	16,614	3,987	179,598	1,696	2,361,213
13	Curr Cost / Book Cost	Capital Recovery	2.5076	1.4913	0.8871	1.4844	0.8062	1.3416	0.9598	1.7340	1.6559	1.4730	0.8924	1.6476
14	1997 Curr Average Investment	Ln13 * Ln9	2,269,421	6,732,971	307,208	3,527,106	551,344	12,432,089	674,333	31,200	6,996	261,330	1,427	3,624,644
15	1998 Curr Average Investment	Ln14 + (Ln10 - Ln9)	2,291,943	6,915,937	350,640	3,548,962	600,428	12,840,663	751,547	30,767	6,927	261,450	1,587	3,673,517
16	1999 Curr Average Investment	Ln15 + (Ln11 - Ln10)	2,313,636	7,125,106	409,654	3,575,113	666,409	13,268,805	831,043	30,312	6,829	262,468	1,555	-3,730,596
17	2000 Curr Average Investment	Ln16 + (Ln12 - Ln11)	2,333,723	7,334,150	468,446	3,601,143	731,679	13,695,763	910,381	29,821	6,758	263,509	1,524	3,785,854
18	1998-2000 Curr Avg Investment	(Ln15+Ln16+Ln17)/3	2,313,101	7,125,064	409,580	3,575,073	666,172	13,268,410	830,990	30,300	6,838	262,475	1,555	3,729,989
19	Expense Account - Lev A		6411	6421	6421	6422	6422	6423	6423	6424	6424	6426	6426	6441
20	Expense - 1997 Actual	Reg Expenses	70,616	302,429	1,244	63,794	2,054	532,859	2,265	70	3	2,654	22	9,183
21	Service Order Adjustment	Service Order Study	0	53,497	244	0	0	151,802	650	0	0	893	12	0
22	RTU Adjustment	RTU Fees / Study	0	0	0	0	0	0	0	0	0	0	0	0
23	Rental Revenue	Reg Acct 5240	6,227	0	0	0	0	0	0	0	0	0	0	906
24	Adjusted Exps, Lev A - 1997	Ln20-Ln21-Ln22-Ln23	64,389	248,932	999	63,794	2,054	381,056	1,615	70	3	1,760	10	8,277
25	Expense Account - Lev B		6410	6410	6410	6410	6410	6410	6410	6410	6410	6410	6410	6410
26	Expense - 1997 Actual	Reg Expenses	1,006,019	1,006,019	1,006,019	1,006,019	1,006,019	1,006,019	1,006,019	1,006,019	1,006,019	1,006,019	1,006,019	1,006,019
27	Ratio: Lev A / Lev B	Ln24 / Ln26	0.0640	0.2474	0.0010	0.0634	0.0020	0.3788	0.0016	0.0001	0.0000	0.0017	0.0000	0.0082
28	Level B Account		Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire	Cable & Wire
29	Average Exp - Lev B (1988-2000)	Regulatory Forecast	1,120,604	1,120,604	1,120,604	1,120,604	1,120,604	1,120,604	1,120,604	1,120,604	1,120,604	1,120,604	1,120,604	1,120,604
30	Average Exp - Lev A (1988-2000)	Ln23 * Ln 25	71,723	277,285	1,113	71,060	2,288	424,458	1,799	78	3	1,961	11	9,220
31	Adj Ratio:Oper Expense / Invest.	Ln30 / Ln13	0.0310	0.0389	0.0027	0.0199	0.0034	0.0320	0.0022	0.0026	0.0004	0.0075	0.0071	0.0025
32	Commercial Power - COE	Acct 6531 / Ln13	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
33	Plant Specific Factor	Ln31 + Ln32	0.0310	0.0389	0.0027	0.0199	0.0034	0.0320	0.0022	0.0026	0.0004	0.0075	0.0071	0.0025

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	STRUCTURES LOADING FACTORS:	SOURCE	FACTORS
34	**Poles - Embedded (1997)**	Ln2: Ac2411/Ac2421	0.1849
35	**Conduit - Embedded (1997)**	Ln2: Ac2441/Ac2422	0.7195
36	**Poles - F'wrd Looking ('98-'00)**	Ln18: Ac2411/Ac2421	0.3070
37	**Conduit - F'wrd Looking ('98-'00)**	Ln18: Ac2441/Ac2422	0.8795

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State	ield Code	ACFC Plt Specific Exp
BST	20C	0.0000
BST	10C	0.0487
BST	377C	0.0361
BST	377CP	0.0361
BST	117C	0.1364
BST	157C	0.0201
BST	257C	0.0199
BST	357C	0.0174
BST	1C	0.0310
BST	1CP	0.0310
BST	12C	0.0389
BST	22C	0.0389
BST	812C	0.0027
BST	822C	0.0027
BST	5C	0.0199
BST	85C	0.0034
BST	45C	0.0320
BST	845C	0.0022
BST	6C	0.0026
BST	86C	0.0004
BST	52C	0.0075
BST	852C	0.0071
BST	4C	0.0025
BST	4CP	0.0025
BST	530C	0.1804
BST	630C	0.1804

1997 BELLSOUTH
CALCULATION OF EMBEDDED LAND AND BUILDING
LOADING FACTORS

	DATA SOURCE: EOY 1997	TENNESSEE	BELLSOUTH
1. ACCOUNT 2111 - LAND	CSS	10,793,249	153,869,990
2. ACCOUNT 2121 - BUILDING	CSS	242,983,437	2,732,307,788
3. TOTAL LAND & BLDG.	LN 1 + LN 2	253,776,686	2,886,177,778
4. ACCT 2124 - GEN PUR COMP	CSS	212,371,061	1,817,337,997
5. ACCOUNT 2200 - COE	CSS	2,101,741,133	18,484,440,153
6. A/C2121, CP 2- BUILDINGS ASSOC W/CO	CSS	146,623,553	1,487,330,937
6A. - PERCENT OF TOTAL BUILDINGS	LN 6/LN2	60.34%	54.43%
7. A/C2121, CP 8- BUILDINGS ASSOC W/G	CSS	34,822,547	249,477,505
7A. - PERCENT OF TOTAL BUILDINGS	LN 7/LN2	14.33%	9.13%
8. PERCENT LAND	LN 1/LN 3	4.25%	5.33%
9. PERCENT BUILDING	LN 2/LN 3	95.75%	94.67%
10. TOTAL %	LN 8 + 9	100.00%	100.00%
CALCULATION OF EMBEDDED L&B FACTORS			
11. CENTRAL OFFICE - LAND	(LN 6A*LN1)/LN5	0.00310	0.00453
12. CENTRAL OFFICE - BUILDING	LN 6/LN5	0.06976	0.08046
13. GEN PUR COMPUTER - LAND	(LN 7A*LN1)/LN4	0.00728	0.00773
14. GEN PUR COMPUTER - BUILDING	LN 7/LN4	0.16397	0.13728

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		1998 - 2000 PROJECTED CALCULATION OF FORWARD LOOKING LAND AND BUILDING LOADING FACTORS		
	SCALE=000			
DATA SOURCE:			TENNESSEE	BELLSOUTH
15. ACCOUNT 2111 - LAND	1998-2000 AVG		22,902	307,469
16. ACCOUNT 2121 - BUILDING	1998-2000 AVG		518,319	5,538,103
17. TOTAL LAND & BLDG.	LN 15 + LN 16		541,221	5,845,572
18. ACCT 2124 - GEN PUR COMP	1998-2000 AVG		141,962	1,223,222
19. ACCOUNT 2200 - COE	1998-2000 AVG		2,415,434	21,345,379
20. A/C2121, BUILDINGS ASSOC W/COE	LN 6A * LN 16		312,754	3,033,105
'21. A/C2121, BUILDINGS ASSOC W/GPC	LN 7A * LN 16		74,275	498,177
CALCULATION OF FORWARD LOOKING L&B FACTORS:				
11. CENTRAL OFFICE - LAND	LN6A)*(LN15)/LN19		0.00572	0.00784
12. CENTRAL OFFICE - BUILDING	LN 20 / LN 19		0.12948	0.14210
13. GEN PUR COMPUTER - LAND	LN7A)*(LN15)/LN18		0.02312	0.02295
14. GEN PUR COMPUTER - BUILDING	LN 21 / LN 18		0.52320	0.40727

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REGULATED PLANT-IN-SERVICE MR INVESTMENT AS OF 12/31/96					
CSS EXTRACT FURNISHED 7/15/98 BY PAT MCCLELLAN (404/927-8116)					
					REGULATED
			CAP/	COST	INVESTMENT
STATE	ACCT	FRC	MTCE	POOL	BY FRC
TN	2111	20	C	1	10889454
TN	2112	40	C	1	48100497
TN	2112	40	C	3	317479
TN	2112	40	C	4	553094
TN	2112	40	C	5	239476
TN	2112	40	C	6	3690885
TN	2115	340	C	5	967790
TN	2115	341	C	6	9589
TN	2116	540	C	1	21555968
TN	2116	540	C	2	9365294
TN	2116	541	C	3	186028
TN	2121	10	C	1	128121
TN	2121	10	C	2	117767980
TN	2121	10	C	3	15725870
TN	2121	10	C	4	13913099
TN	2121	10	C	5	19324426
TN	2121	10	C	6	13580726
TN	2121	10	C	7	4490183
TN	2121	10	C	8	35786510
TN	2121	110	C	1	3644
TN	2121	110	C	2	3349941
TN	2121	110	C	3	447327
TN	2121	110	C	4	395762
TN	2121	110	C	5	549688
TN	2121	110	C	6	386307
TN	2121	110	C	7	127724
TN	2121	110	C	8	1017957
TN	2122	30	C	1	342964
TN	2122	30	C	2	2729160
TN	2122	130	C	2	47452
TN	2122	331	C	3	1185800
TN	2123	430	C	1	461877
TN	2123	430	C	2	4076228
TN	2123	658	C	3	4919244
TN	2123	718	C	3	1255130
TN	2123	731	C	4	1050776
TN	2123	768	C	3	1042
TN	2124	530	C	2	151401812
TN	2124	531	C	4	26212
TN	2124	630	C	3	72919028
TN	2124	633	C	3	17387624
TN	2211	77	C	1	941979
TN	2211	77	C	2	3410852
TN	2211	77	C	3	4369112
TN	2211	77	C	4	57269488

TN	2211	577	C	3	35806
TN	2212	377	C	1	138399
TN	2212	377	C	2	20305751
TN	2212	377	C	3	613185
TN	2212	377	C	4	672619325
TN	2212	377	C	5	80791817
TN	2212	587	C	5	13653
TN	2215	537	C	1	2421
TN	2215	547	C	1	1934
TN	2220	117	C	1	12581863
TN	2220	117	C	2	8398935
TN	2231	67	C	1	2264439
TN	2231	167	C	1	228579
TN	2231	527	C	1	786
TN	2231	567	C	1	2808
TN	2232	57	C	1	62730624
TN	2232	157	C	1	14173856
TN	2232	257	C	1	329223728
TN	2232	257	C	3	209805229
TN	2232	357	C	1	77442151
TN	2232	357	C	4	376908348
TN	2232	557	C	1	52370
TN	2232	597	C	1	14843
TN	2311	318	C	1	30691
TN	2341	158	C	1	4881060
TN	2341	458	C	1	1886828
TN	2341	468	C	1	306766
TN	2351	198	C	1	21132086
TN	2351	298	C	1	232223
TN	2351	988	C	1	3133
TN	2351	998	C	1	5144989
TN	2362	378	C	1	2325679
TN	2362	558	C	1	9238247
TN	2362	828	C	1	196890
TN	2362	858	C	1	11488370
TN	2362	868	C	1	15308
TN	2362	958	C	1	1717377
TN	2411	1	C	1	128451052
TN	2421	12	C	1	40908792
TN	2421	22	C	1	528474823
TN	2421	248	C	1	5571292
TN	2421	812	C	3	1086386
TN	2421	812	C	4	1223304
TN	2421	822	C	3	28807077
TN	2421	822	C	4	32440819
TN	2422	5	C	1	226568771
TN	2422	85	C	3	25415178
TN	2422	85	C	4	31684864
TN	2423	45	C	1	754701380
TN	2423	548	C	1	3917671
TN	2423	845	C	3	16827093

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TN	2423	845	C	4	21126608
TN	2424	6	C	1	1086933
TN	2424	86	C	3	53515
TN	2424	86	C	4	66409
TN	2426	52	C	1	19908964
TN	2426	852	C	3	97084
TN	2441	4	C	1	188802787
TN	2681	50	C	1	1376715
TN	2681	53	C	6	5229138
TN	2681	450	C	4	51472
TN	2682	350	C	1	4926142
TN	2682	353	C	4	20141
TN	2682	950	C	2	75990

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REGULATED PLANT-IN-SERVICE MR INVESTMENT AS OF 12/31/97					
CSS EXTRACT FURNISHED 7/14/98 BY PAT MCCLELLAN (404/927-8116					
					REGULATED
			CAP/	COST	INVESTMENT
STATE	ACCT	FRC	MTCE	POOL	BY FRC
TN	2111	20	C	1	10793249
TN	2112	40	C	1	49719340
TN	2112	40	C	3	230282
TN	2112	40	C	4	283534
TN	2112	40	C	5	19935
TN	2112	40	C	6	4891106
TN	2115	340	C	5	1120470
TN	2116	540	C	1	32625218
TN	2116	540	C	2	946265
TN	2121	10	C	1	189975
TN	2121	10	C	2	142535902
TN	2121	10	C	3	17815369
TN	2121	10	C	4	14776939
TN	2121	10	C	5	11424347
TN	2121	10	C	6	10892304
TN	2121	10	C	7	4722831
TN	2121	10	C	8	33851745
TN	2121	110	C	1	5448
TN	2121	110	C	2	4087651
TN	2121	110	C	3	510910
TN	2121	110	C	4	423774
TN	2121	110	C	5	327628
TN	2121	110	C	6	312370
TN	2121	110	C	7	135442
TN	2121	110	C	8	970802
TN	2122	30	C	1	329464
TN	2122	30	C	2	2724291
TN	2122	130	C	2	47713
TN	2123	430	C	1	395522
TN	2123	430	C	2	3463429
TN	2123	658	C	3	7372098
TN	2123	668	C	3	490394
TN	2123	718	C	3	1212213
TN	2123	728	C	3	-16333
TN	2123	768	C	3	1042
TN	2124	530	C	2	137940307
TN	2124	630	C	3	74430754
TN	2124	633	C	3	19400847
TN	2124	730	C	3	-77067
TN	2211	77	C	1	942392
TN	2211	77	C	2	3771378
TN	2211	77	C	3	4567583

TN	2211	77	C	4	59488576
TN	2212	377	C	1	176705
TN	2212	377	C	2	15780389
TN	2212	377	C	3	548442
TN	2212	377	C	4	723927509
TN	2212	377	C	5	88322280
TN	2220	117	C	1	6516689
TN	2220	117	C	2	12959739
TN	2231	67	C	1	2262647
TN	2231	167	C	1	41774
TN	2232	57	C	1	61093357
TN	2232	157	C	1	14917449
TN	2232	257	C	1	368862759
TN	2232	257	C	3	235094889
TN	2232	357	C	1	85652244
TN	2232	357	C	4	416814332
TN	2311	318	C	1	29808
TN	2341	158	C	1	5045200
TN	2341	458	C	1	2016524
TN	2341	468	C	1	426973
TN	2362	378	C	1	2452869
TN	2362	558	C	1	10430275
TN	2362	828	C	1	199095
TN	2362	858	C	1	11422900
TN	2362	868	C	1	15308
TN	2362	958	C	1	1717377
TN	2411	1	C	1	133364203
TN	2421	12	C	1	42906213
TN	2421	22	C	1	558194419
TN	2421	248	C	1	268754
TN	2421	812	C	3	863223
TN	2421	812	C	4	1788655
TN	2421	822	C	3	21690638
TN	2421	822	C	4	44955002
TN	2422	5	C	1	226273966
TN	2422	85	C	3	19370606
TN	2422	85	C	4	40150199
TN	2423	45	C	1	793174985
TN	2423	548	C	1	208694
TN	2423	845	C	3	15004357
TN	2423	845	C	4	28760987
TN	2424	6	C	1	1086933
TN	2424	86	C	3	39087
TN	2424	86	C	4	81036
TN	2426	52	C	1	19796067
TN	2426	852	C	3	130369
TN	2441	4	C	1	192554326
TN	2681	50	C	1	1357285
TN	2681	53	C	6	5166352

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TN	2681	450	C	4	2
TN	2682	350	C	1	6139019
TN	2682	353	C	4	19899
TN	2682	950	C	2	75488

Year-to-Date
DECEMBER 1997
Regulated MR

ACCT	SRC	FRC	TN	BST
6112	1100		9,579,231.66	71,764,169.57
6112	1900		-	-
6112	2100		-	-
6112	2900		-	-
6113	0	140M	(8,638,382.99)	(66,935,753.47)
6113	0	141M	48,272.78	288,878.55
6113	0		473,385.34	4,430,809.01
6114	1100	240M	-	-
6114	1100		13,748.22	243,187.70
6114	1900		-	-
6114	9000	240NM	-	-
6114	9000	840M	-	-
6115	0	340M	-	9,123.27
6115	0		48,463.95	460,871.80
6116	1100	540M	-	-
6116	1100		3,330,285.84	39,429,145.97
6116	1900		-	-
6116	9000	940M	(3,759,589.62)	(42,200,078.00)
6116	9000		299,065.48	2,653,330.88
6121	1000	10M	-	-
6121	1000	10R	422,774.50	9,518,692.95
6121	1000	110M	-	-
6121	1000		114,773.13	2,045,715.56
6121	8000	810M	35,234,135.02	252,544,372.78
6121	8000		-	-
6122	1000	130M	-	-
6122	1000		511.54	7,180.86
6122	2000	230M	-	-
6122	2000	30M	-	-
6122	2000	31M	652,107.38	14,669,330.05
6123	1000	430M	121.46	121.46
6123	1000		1,303,154.53	11,617,977.76
6123	2000	658M	-	-
6123	2000		951,484.45	12,912,293.29
6124	0		-	15.70
6124	1010	530M	-	-
6124	1010		258,042.35	2,254,574.54
6124	1020	630M	508.04	4,515.22
6124	1020		1,821,135.94	4,596,254.88
6124	1030	633M	-	-
6124	1030		1,986,210.13	33,326,170.17
6124	2000	930M	-	-
			11,698,687.45	104,617,323.76

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6124	2000										11,669,751.75	101,948,022.46
6211	0										3,608,373.65	68,937,785.66
6211	1000	77M									-	-
6211	1000	77R									-	-
6211	8000	877M									-	-
6211	8000										-	-
6211	9000	977M									-	-
6212	0										-	-
6212	1000	377M									53,420,872.42	427,706,160.98
6212	1000	377R									-	-
6212	8000	887M									-	-
6212	8000										-	-
6215	1000	37M									-	-
6215	1000	37R									-	-
6215	1900	937M									-	-
6215	2000	47M									-	-
6215	2000	47R									-	-
6215	3000	17M									-	-
6215	3000	17R									-	-
6220	1000	117M									-	-
6220	1000	117R									1,713,702.08	21,333,144.49
6220	3000	417M									-	-
6220	3000	417R									-	-
6231	2200	167M									-	-
6231	2200	167R									5,767.89	280,540.85
6231	2300	67M									-	-
6231	2300	67R									524.40	308,878.12
6232	1100	157M									-	-
6232	1100	157R									233,255.59	2,155,471.89
6232	1200	257M									-	-
6232	1200	257R									11,369,122.15	91,544,956.49
6232	1200	D257M									-	-
6232	1200	D257R									-	115,728.08
6232	1200	F257M									-	-
6232	1200	F257R									1,242.93	9,238,501.88
6232	1200										-	-
6232	1300	357M									-	-
6232	1300	357R									7,630,706.80	70,552,416.93
6232	1300	F357M									-	-
6232	1300	F357R									-	-
6232	1300	T357M									-	-
6232	1300	T357R									625.92	2,406,860.09
6232	1300										-	-
6232	1800	857M									-	-
6232	1800										-	-
6232	2100	457M									-	-
6232	2100	457R									3,474.47	67,653.49
6232	2900	57M									-	-
6232	2900	57R									521,985.26	6,290,528.69
6311	1000	418M									-	-
											144,037.00	1,814,409.61

6311	1000	418NM								-	-
6311	1000	428NM								-	-
6311	1000	BD18M								-	-
6311	1000	BF28M								-	-
6311	2000									-	-
6311	2100	108BI								-	-
6311	2100									-	-
6311	2200	108BP								-	-
6311	2300	108BR								-	-
6311	2400	108BW								-	-
6311	2900									-	-
6341	1000	158M								-	-
6341	1000	258M								296,170.07	3,507,145.66
6341	1000	258NM								-	-
6341	1000	58NM								-	-
6341	2000									-	-
6341	2100	208BI								2,839.17	39,777.36
6341	2100									-	-
6341	2200	208BP								-	-
6341	2300	208BR								-	-
6341	2400	208BW								-	-
6341	2900									-	-
6351	1000	188E								-	-
6351	1000	188M								97,959.92	821,079.15
6351	1000	188Y								1,284,452.79	7,492,884.98
6351	1000	189E								(25,497.69)	(324,087.95)
6351	1000	189M								12,655.51	47,685.13
6351	1000	189Y								27,180.04	230,760.89
6351	1000	88E								4,413.68	53,590.70
6351	1000	88M								2.27	1,810.29
6351	1000	88Y								59.48	3,986.21
6351	1000	89E								-	301.05
6351	1000	89M								332.28	584.04
6351	1000	89Y								-	2,723.76
6351	1000									-	115.56
6351	2000	288E								-	-
6351	2000	288M								3,906.33	81,475.80
6351	2000	288Y								3,615.05	181,605.40
6351	2000	289E								332.54	2,577.11
6351	2000	289M								3,220.81	6,916.17
6351	2000	289Y								571.51	1,653.47
6351	3000	78E								721.98	1,802.12
6351	3000	78M								14,838.43	52,850.38
6351	3000	78Y								4,332.53	19,433.61
6351	9000	988E								-	177.04
6351	9000	988M								20,770.14	737,967.16
6351	9000	988Y								94,852.89	2,748,877.20
6351	9000	989E								8,733.39	363,172.81
6351	9000	989M								3,995.66	29,011.63
6351	9000	989Y								138.92	2,694.07
6362	1000	358M								-	29.88
										-	-

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6362	1000	358NM								-	-
6362	1000	378M								1,196,435.49	12,856,829.61
6362	2000	558M								521,376.79	5,310,562.97
6362	3000	758M								-	-
6362	3000	B758M								-	-
6362	3000	D758M								-	-
6362	3000	F758M								-	-
6362	4110	97BI								-	-
6362	4110									-	-
6362	4120	97BP								-	-
6362	4120									-	-
6362	4130	97BR								-	-
6362	4130									-	-
6362	4140	97BW								-	-
6362	4140									-	-
6362	4190									-	-
6362	4210	98BI								-	-
6362	4210	98EI								-	-
6362	4210	98FI								-	-
6362	4210	98KI								-	-
6362	4210									-	-
6362	4220	98BP								-	-
6362	4220	98EP								-	-
6362	4230	98BR								-	-
6362	4230	98ER								-	-
6362	4230	98FR								-	-
6362	4230	98KR								-	-
6362	4230									-	-
6362	4240	98BW								-	-
6362	4240	98EW								-	-
6362	4240	98FW								-	-
6362	4240	98KW								-	-
6362	4240									-	-
6362	4290									-	-
6362	5110	308BI								-	-
6362	5110									-	-
6362	5120	308BP								-	-
6362	5130	308BR								-	-
6362	5140	308BW								-	-
6362	5190									-	-
6362	5210	408BI								-	-
6362	5210									-	-
6362	5220	408BP								-	-
6362	5230	408BR								-	-
6362	5240	408BW								-	-
6362	5290									-	-
6362	6000									-	-
6362	6100	108BP								-	-
6362	6100	108BR								-	-
6362	6100	108BW								-	-
6362	6200	208BP								-	-

6362	6200	208BR								-	-
6362	6200	208BW								-	-
6362	7000									-	-
6362	9100	928M								1,433,440.38	12,003,729.37
6362	9900	68E								6,073.07	295,748.36
6362	9900	68M								5,104,083.39	46,067,150.78
6362	9900	68R								4,006,644.10	35,119,974.82
6362	9900	68Y								-	-
6362	9900	948NM								278,163.34	1,314,799.29
6362	9900	958M								-	-
6362	9900	958NM								518,363.93	5,215,642.84
6362	9900	968NM								-	-
6362	9900	978NM								(8,101.00)	(239,665.00)
6362	9900	988NM								-	-
6362	9900	B958M								(16,666.66)	(162,045.67)
6362	9900	BD28M								-	-
6362	9900	BF28M								-	-
6362	9900	D958M								-	-
6362	9900	F958M								-	4,661.83
6362	9900									-	5,889.10
6411	0									16,666.66	162,045.67
6411	1000	1M								11,256,576.04	70,615,841.84
6411	1000	1R								-	-
6411	1000	21M								-	-
6411	1000	21R								-	-
6421	1000	248M								-	-
6421	1000	312M								10,109,042.51	71,006,871.07
6421	1000	322M								-	87.30
6421	1000	322NM								398.48	1,126.57
6421	1000	348M								-	-
6421	1000									-	71.36
6421	1100	12M								36,908,563.42	231,420,428.56
6421	1100	12R								-	-
6421	1100	22M								-	-
6421	1100	22R								-	-
6421	1100	298M								-	-
6421	1100	B12M								-	-
6421	1100	B22M								-	-
6421	2000	398M								-	-
6421	2000	812M								231,525.43	1,959,389.81
6421	2000	812R								3,949.84	12,304.88
6421	2000	822M								-	-
6421	2000	822R								34,509.66	110,012.12
6421	2000	D12M								-	-
6421	2000	D12R								-	3,324.28
6421	2000	D22M								-	-
6421	2000	F12M								-	2,922.20
6421	2000	F12R								-	58,656.69
6421	2000	F22M								-	-
6421	2000	F22R								-	48,855.46
6421	2000	T12M								-	-
										-	1,042.06

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6421	2000	T22M								198.16	6,430.56
6421	2000	T22R								-	-
6421	2000									276,813.88	1,000,128.44
6421	2900	982M								-	-
6422	1000	35M								249.87	743.56
6422	1000	5M								5,970,536.60	59,642,220.71
6422	1000	5R								-	-
6422	1000									-	-
6422	1100	B5M								-	-
6422	1800									-	-
6422	2000	85M								-	-
6422	2000	85R								25,553.87	220,684.18
6422	2000	D5M								-	-
6422	2000	D5R								-	4,356.23
6422	2000	F5M								-	-
6422	2000	F5R								10,872.72	532,648.93
6422	2000	T5M								-	-
6422	2000	T5R								476.65	14,041.48
6422	2000									-	-
6422	2100	BF5R								136,959.91	1,282,273.29
6422	2900	985M								-	-
6423	1000	445M								-	-
6423	1000	445NM								-	94,977.25
6423	1000	448M								-	-
6423	1000	448NM								-	22.48
6423	1000	45M								-	-
6423	1000	45R								39,585,813.97	447,338,235.40
6423	1000	548M								-	-
6423	1000	598M								7,561,232.77	85,425,531.75
6423	1000									2,295,927.34	24,534,104.29
6423	1100	B45M								-	-
6423	1100	B45R								-	-
6423	1800									-	-
6423	2000	498M								-	-
6423	2000	845M								99,762.34	1,517,140.39
6423	2000	845R								10,634.08	261,950.18
6423	2000	D45M								-	-
6423	2000	D45R								-	53,236.16
6423	2000	F45M								-	-
6423	2000	F45R								1,048.47	191,292.60
6423	2000	T45M								-	-
6423	2000	T45R								-	54,924.31
6423	2000									-	-
6423	2100	B845R								65,361.67	1,703,700.85
6423	2100	BD45M								-	-
6423	2100	BD45R								-	-
6423	2100	BF45M								-	-
6423	2100	BF45R								-	-
6423	2800	856M								-	-
6424	1000	6M								-	-
6424	1000	6R								-	70,271.40
										-	-

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6424	1800										-	-
6424	2000	86M									-	-
6424	2000	86R									-	-
6424	2000	F6M									-	-
6424	2000	T6M									-	-
6424	2000										-	-
6426	1000	352M									-	2,777.66
6426	1000	52E									-	6,153.83
6426	1000	52M									-	-
6426	1000	52R									197,320.98	2,647,522.33
6426	1000	52Y									-	-
6426	1000										-	-
6426	2000	852M									-	-
6426	2000	852R									-	3,080.27
6426	2000	D52M									-	-
6426	2000	F52M									-	-
6426	2000	F52R									-	-
6426	2000	T52M									-	-
6426	2000										-	-
6431	0	3M									-	18,665.24
6431	0	3R									-	-
6441	0	4M									-	-
6441	0	4R									744,730.14	9,183,060.22
6441	0										-	-
6441	8000										-	-
											-	-

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Average 1998-2000 Expense Projections (YEARLY)

SCALE=000

Account	Description	Tennessee	BST
6110	Network Support	1,451	5,720
6120	General Support	67,844	195,440
6210	CO Switching	59,428	177,082
6220	CO Opeator Systems	1,830	7,800
6230	CO Transmission	21,139	66,899
6310	Inf/Org/Term	14,106	43,986
6410	Cable & Wire	128,078	396,513
	Total	293,876	2,680,323

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SUMMARY OF CURRENT COST / BOOK COST RATIO

	Description	ACCT	FRC	TN
Gen Support	Motor Vehicles	2112		1.120
Gen Support	Aircraft	2113		0.000
Gen Support	Garage Work Equip	2115		1.360
Gen Support	Other Work Equip	2116		1.215
Gen Support	Buildings	2121	10	2.110
Gen Support	Furniture	2122		1.383
Gen Support	Office Support Equip	2123		1.114
Cen Office	Computers	2124	530	0.619
Cen Office	Analog-ESS	2211	77	1.603
Cen Office	Digital ESS	2212	377	1.103
Cen Office	Step-by-Step	2215		0.000
Cen Office	Operator Systems	2220	117	1.068
Cen Office	Radio System	2231	67	1.379
Cen Office	Circuit-DDS	2232	157	0.978
IOT	Circuit-Other than DSS	2232	357	0.999
IOT	Station Apparatus	2311		1.038
IOT	PBX	2341		1.006
Ca and Wire	Public Telephone	2351		1.091
Ca and Wire	Other Terminal Equipment	2362		1.012
Ca and Wire	Poles	2411	1	2.624
Ca and Wire	Aerial Cable-Metallic	2421	22	1.569
Ca and Wire	Aerial Cable-Fiber	2421	812	0.912
Ca and Wire	Underground Cable-Metallic	2422	5	1.572
Ca and Wire	Underground cable-Fiber	2422	85	0.845
Ca and Wire	Buried cable-Metallic	2423	45	1.425
Ca and Wire	Buried Cable-Fiber	2423	845	0.972
Ca and Wire	Submarine Cable	2424	6	1.455
Ca and Wire	Intrabuilding cable-Metal	2426	52	1.373
Ca and Wire	Intrabuilding Cable-Fiber	2426	852	0.918
IOT	Aerial Wire			0.000
Gen Support	Conduit Systems	2441	4	1.795
? Gen Support	Official Comm Equip	?		1.043

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BELLSOUTH TELECOMMUNICATIONS
NET ADDTIONS (Gross Cap - Retirements)
1998

INVESTMENT DATA - NET ADDITIONS

SCALE = 000

	TN	BST
TOTAL GENERAL SUPPORT ASSETS	28,477	387,141
LAND	50	1,989
BUILDINGS	12,472	83,919
MOTOR VEHICLES	3,975	56,375
GARAGE WORK EQPT	75	-136
OTHER WORK EQPT	750	15,580
FURNITURE	-520	-1,735
OFFICE SUPPORT EQUIPMENT	-230	1,239
VOICE COMMUNICATIONS	-675	-4,255
GENERAL PURPOSE COMPUTERS	10,916	122,553
DATA COMMUNICATIONS	1,664	111,612
TOTAL CENTRAL OFC ASSETS MINUS DLE	73,586	667,085
ANALOG ELECTRONIC SWITCHING	-325	-74,910
DIGITAL ELECTRONIC SWITCHING	50,340	557,604
OPERATOR SERVICES	231	6,984
RADIO	-18	-2,900
DIGITAL DATA SYSTEMS	-144	-6,953
CIRCUIT OTHER	23,502	187,260
TOTAL INFO.ORIG./TERMINATION	1,865	28,950
PUBLIC TELEPHONE	0	0
STATION APPARATUS	0	61
LARGE PBX	280	4,125
OTHER TERMINAL EQUIPMENT	1,585	24,763
TOTAL OUTSIDE NETWORK	155,800	1,374,550
DIGITAL LOOP ELECTRONICS (DLE)	63,000	424,100
CABLE & WIRE	92,800	950,450
METALLIC - AERIAL CABLE	28,886	208,306
NON-METALLIC - AERIAL CABLE	9,113	59,255
METALLIC - UNDERGROUND CABLE	2,632	25,997
NON-METALLIC - UNDERGROUND CABLE	4,303	66,453
METALLIC - BURIED CABLE	32,392	428,233
NON-METALLIC - BURIED CABLE	4,384	79,574
METALLIC - SUBMARINE CABLE	0	-420
NON-METALLIC - SUBMARINE CABLE	0	-123
METALLIC - INTRABUILDING NETWORK CABLE	-410	947
NON-METALLIC - INTRABUILDING NETWORK CABLE	0	-33
POLES	5,375	23,356
CONDUIT	6,125	58,906
TOTAL NET ADDITIONS	259,728	2,457,727

BELLSOUTH TELECOMMUNICATIONS INVESTMENT DATA - NET ADDITIONS
NET ADDTIONS (Gross Cap - Retirements)
1999

SCALE = 000

	TN	BST
TOTAL GENERAL SUPPORT ASSETS	16,047	268,174
LAND	50	1,490
BUILDINGS	6,141	66,520
MOTOR VEHICLES	3,850	54,950
GARAGE WORK EQPT	70	-195
OTHER WORK EQPT	525	12,160
FURNITURE	-525	-4,070
OFFICE SUPPORT EQUIPMENT	-235	990
VOICE COMMUNICATIONS	-705	-5,045
GENERAL PURPOSE COMPUTERS	5,934	51,371
DATA COMMUNICATIONS	942	90,003
TOTAL CENTRAL OFC ASSETS MINUS DLE	50,091	542,251
ANALOG ELECTRONIC SWITCHING	-2,600	-100,650
DIGITAL ELECTRONIC SWITCHING	34,600	491,176
OPERATOR SERVICES	477	3,069
RADIO	-19	-618
DIGITAL DATA SYSTEMS	-320	-1,991
CIRCUIT OTHER	17,953	151,265
TOTAL INFO.ORIG./TERMINATION	1,545	13,895
PUBLIC TELEPHONE	0	0
STATION APPARATUS	0	44
LARGE PBX	232	2,225
OTHER TERMINAL EQUIPMENT	1,313	11,626
TOTAL OUTSIDE NETWORK	153,600	1,350,338
DIGITAL LOOP ELECTRONICS (DLE)	63,400	406,400
CABLE & WIRE	90,200	943,938
METALLIC - AERIAL CABLE	28,666	210,032
NON-METALLIC - AERIAL CABLE	8,585	58,773
METALLIC - UNDERGROUND CABLE	2,602	26,305
NON-METALLIC - UNDERGROUND CABLE	4,017	65,509
METALLIC - BURIED CABLE	32,142	428,052
NON-METALLIC - BURIED CABLE	4,098	79,418
METALLIC - SUBMARINE CABLE	0	-491
NON-METALLIC - SUBMARINE CABLE	0	0
METALLIC - INTRABUILDING NETWORK CABLE	-410	1,090
NON-METALLIC - INTRABUILDING NETWORK CABLE	0	-31
POLES	4,835	20,030
CONDUIT	5,665	55,252
TOTAL NET ADDITIONS	221,283	2,174,658

BELLSOUTH TELECOMMUNICATIONS
NET ADDTIONS (Gross Cap - Retirements)
2000

INVESTMENT DATA - NET ADDITIONS

SCALE = 000

	TN	BST
TOTAL GENERAL SUPPORT ASSETS	21,691	340,680
LAND	50	1,490
BUILDINGS	6,200	67,200
MOTOR VEHICLES	3,785	54,290
GARAGE WORK EQPT	65	-265
OTHER WORK EQPT	495	11,870
FURNITURE	-530	-4,095
OFFICE SUPPORT EQUIPMENT	-240	925
VOICE COMMUNICATIONS	-745	-5,270
GENERAL PURPOSE COMPUTERS	11,750	126,000
DATA COMMUNICATIONS	861	88,535
TOTAL CENTRAL OFC ASSETS MINUS DLE	52,393	588,493
ANALOG ELECTRONIC SWITCHING	-1,800	-70,550
DIGITAL ELECTRONIC SWITCHING	36,000	488,110
OPERATOR SERVICES	478	2,956
RADIO	-21	880
DIGITAL DATA SYSTEMS	-425	-1,109
CIRCUIT OTHER	18,162	168,206
TOTAL INFO.ORIG./TERMINATION	1,530	13,605
PUBLIC TELEPHONE	0	0
STATION APPARATUS	0	41
LARGE PBX	230	2,166
OTHER TERMINAL EQUIPMENT	1,301	11,398
TOTAL OUTSIDE NETWORK	152,900	1,352,545
DIGITAL LOOP ELECTRONICS (DLE)	63,500	413,650
CABLE & WIRE	89,400	938,895
METALLIC - AERIAL CABLE	28,666	208,056
NON-METALLIC - AERIAL CABLE	8,408	58,811
METALLIC - UNDERGROUND CABLE	2,602	25,754
NON-METALLIC - UNDERGROUND CABLE	3,690	65,274
METALLIC - BURIED CABLE	32,142	425,864
NON-METALLIC - BURIED CABLE	3,801	79,257
METALLIC - SUBMARINE CABLE	0	-491
NON-METALLIC - SUBMARINE CABLE	0	0
METALLIC - INTRABUILDING NETWORK CABLE	-410	994
NON-METALLIC - INTRABUILDING NETWORK CABLE	0	-33
POLES	4,835	20,144
CONDUIT	5,665	55,264
TOTAL NET ADDITIONS	228,514	2,295,322

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TENNESSEE DOCKET NO 99-00430
APPENDIX A
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

Capital Cost Model Calculations

Source: BellSouth's Capital Cost Calculator

BASIC ECONOMIC INPUTS FOR CAPITAL COST CALCULATOR

8/23/99

Number	Description	Value
1	Debt Ratio	0.4000
2	Debt Interest Rate	.0707
3	Income Tax Rate	0.3871
4	Investment	$1.00
5	Cost of Money (Rate of Return)	.0993
6	Cost of Equity	0.118367
7		
8	Timestamp: 2/12/99 7:59:02 AM	

Cost of Money = User Input or
COE * (1 - Debt Ratio) + (Debt Ratio * Debt Interest Rate)

Cost of Equity = User Input or
(COM - Debt Ratio * Debt Interest Rate) / (1 - Debt Ratio)

Source: BellSouth's Capital Cost Calculator

USOA Part 32 ACCOUNTS INPUT FACTORS FOR CAPITAL COST CALCULATOR

8/23/99

Number	Description	FRC	Life (Years)	Net Salvage
1	Buildings	10C	43	.01
2	Land	20C	98.0	1.0000
3				
4	Motor Vehicles	40C	8	.16
5	Spc Purpose Vehicles	240C	8	.16
6	Garage Work Equip	340C	23	-.01
7	Other Work Equip	540C	23	-.01
8				
9	Furniture	130C	18	0.0900
10	Ofc Support Equip	430C	12	.28
11				
12	Corp Comm Equip	718C	6	.28
13	Gen Purpose Comp, Other	530C	7	.02
14	G P Comp, Data Cont & Wrksta	630C	7	.02
15				
16	Analog Elec Switch	77C	4.2	.03
17	Digital Elec Switch	377C	17	.04
18				
19	Operator Systems	117C	14	.05
20				
21	Radio	67C	14.5	0
22				
23	Digital Circ - DDS	157C	8	.02
24	Digital Circ - Pair Gain	257C	11	0.0000
25	Digital Circ - Other	357C	11	0.0000
26	Analog Circ - Pair Gain	457C	11	0
27	Analog Circ - Other	57C	11	0
28				
29	Large PBX	158C	6	-.04
30	Other Terminal Equip	378C	6.0	.03
31				
32	Poles	1C	37	-.48
33	Aerial Ca - Metal - Bldg Enter	12C	20	-.15
34	Aerial Ca - Metal	22C	20	-.15
35	Aerial Ca - Fiber - Bldg Enter	812C	30	-.20
36	Aerial Ca - Fiber	822C	30	-.2
37	Buried Ca - Metal	45C	21	-.05
38	Buried Ca - Fiber	845C	30	-.09
39	Underground Ca - Metal	5C	25	-.08
40	Underground Ca - Fiber	85C	30	-.2
41	Submarine Ca - Metal	6C	25	-.01
42	Submarine Ca - Fiber	86C	25	-.01
43	INTA Bldg Ntwk Ca - Metal	52C	22	-.1
44	INTA Bldg Ntwk Ca - Fiber	852C	22	-.1
45				
46	Conduit Systems	4C	65	-.05
47				
48	Timestamp: 2/12/99 7:59:02 AM			

Source: BellSouth's Capital Cost Calculator

CAPITAL COST MODEL CALCULATIONS - Page 1

8/23/99

Nbr	Description	FRC	Life (Years)	COM	AP	Phi	Net Salvage	Adj Invest
1	Buildings	10C	43	.0993	0.1010	0.4517	.01	0.9900
2	Land	20C	98.0	.0993	0.0993	0.4517	1.0000	0.0000
3								
4	Motor Vehicles	40C	8	.0993	0.1870	0.4517	.16	0.8400
5	Spc Purpose Vehicles	240C	8	.0993	0.1870	0.4517	.16	0.8400
6	Garage Work Equip	340C	23	.0993	0.1120	0.4517	-.01	1.0100
7	Other Work Equip	540C	23	.0993	0.1120	0.4517	-.01	1.0100
8								
9	Furniture	130C	18	.0993	0.1214	0.4517	0.0900	0.9100
10	Ofc Support Equip	430C	12	.0993	0.1463	0.4517	.28	0.7200
11								
12	Corp Comm Equip	718C	6	.0993	0.2291	0.4517	.28	0.7200
13	Gen Purpose Comp, Other	530C	7	.0993	0.2049	0.4517	.02	0.9800
14	G P Comp, Data Cont & Wrksta	630C	7	.0993	0.2049	0.4517	.02	0.9800
15								
16	Analog Elec Switch	77C	4.2	.0993	0.3027	0.4517	.03	0.9700
17	Digital Elec Switch	377C	17	.0993	0.1241	0.4517	.04	0.9600
18								
19	Operator Systems	117C	14	.0993	0.1352	0.4517	.05	0.9500
20								
21	Radio	67C	14.5	.0993	0.1330	0.4517	0	1.0000
22								
23	Digital Circ - DDS	157C	8	.0993	0.1870	0.4517	.02	0.9800
24	Digital Circ - Pair Gain	257C	11	.0993	0.1535	0.4517	0.0000	1.0000
25	Digital Circ - Other	357C	11	.0993	0.1535	0.4517	0.0000	1.0000
26	Analog Circ - Pair Gain	457C	11	.0993	0.1535	0.4517	0	1.0000
27	Analog Circ - Other	57C	11	.0993	0.1535	0.4517	0	1.0000
28								
29	Large PBX	158C	6	.0993	0.2291	0.4517	-.04	1.0400
30	Other Terminal Equip	378C	6.0	.0993	0.2291	0.4517	.03	0.9700
31								
32	Poles	1C	37	.0993	0.1024	0.4517	-.48	1.4800
33	Aerial Ca - Metal - Bldg Enter	12C	20	.0993	0.1169	0.4517	-.15	1.1500
34	Aerial Ca - Metal	22C	20	.0993	0.1169	0.4517	-.15	1.1500
35	Aerial Ca - Fiber - Bldg Enter	812C	30	.0993	0.1055	0.4517	-.20	1.2000
36	Aerial Ca - Fiber	822C	30	.0993	0.1055	0.4517	-.2	1.2000
37	Buried Ca - Metal	45C	21	.0993	0.1151	0.4517	-.05	1.0500
38	Buried Ca - Fiber	845C	30	.0993	0.1055	0.4517	-.09	1.0900
39	Underground Ca - Metal	5C	25	.0993	0.1096	0.4517	-.08	1.0800
40	Underground Ca - Fiber	85C	30	.0993	0.1055	0.4517	-.2	1.2000
41	Submarine Ca - Metal	6C	25	.0993	0.1096	0.4517	-.01	1.0100
42	Submarine Ca - Fiber	86C	25	.0993	0.1096	0.4517	-.01	1.0100
43	INTA Bldg Ntwk Ca - Metal	52C	22	.0993	0.1134	0.4517	-.1	1.1000
44	INTA Bldg Ntwk Ca - Fiber	852C	22	.0993	0.1134	0.4517	-.1	1.1000
45								
46	Conduit Systems	4C	65	.0993	0.0995	0.4517	-.05	1.0500
47								
48	Timestamp: 2/12/99 7:59:18 AM	Deflt						

Life Years = Input
Rate of Return (COM, Cost of Money) = Input
A/P = (COM * (1 + COM)^Life) / (((1 + COM)^Life) - 1)
Phi = (Income Tax Rate / (1 - Income Tax Rate)) * (1 - ((Debt Ratio * Debt Interest Rate) / COM))
Net Salvage = Input
Adjusted Investment = (1 - Net Salvage) * Investment

000152

Calculations rounded to four (4) decimal places.

Source: BellSouth's Capital Cost Calculator

CAPITAL COST MODEL CALCULATIONS - Page 2

8/23/99

Number	Description	FRC	Depreciation	ACFC COM	ACFC Tax	Cap Exp
1	Buildings	10C	0.0230	0.0780	0.0352	**0.1362**
2	Land	20C	0.0000	0.0993	0.0449	**0.1442**
3						
4	Motor Vehicles	40C	0.1050	0.0679	0.0307	**0.2036**
5	Spc Purpose Vehicles	240C	0.1050	0.0679	0.0307	**0.2036**
6	Garage Work Equip	340C	0.0439	0.0682	0.0308	**0.1429**
7	Other Work Equip	540C	0.0439	0.0682	0.0308	**0.1429**
8						
9	Furniture	130C	0.0506	0.0688	0.0311	**0.1505**
10	Ofc Support Equip	430C	0.0600	0.0731	0.0330	**0.1661**
11						
12	Corp Comm Equip	718C	0.1200	0.0728	0.0329	**0.2257**
13	Gen Purpose Comp, Other	530C	0.1400	0.0628	0.0284	**0.2312**
14	G P Comp, Data Cont & Wrksta	630C	0.1400	0.0628	0.0284	**0.2312**
15						
16	Analog Elec Switch	77C	0.2310	0.0656	0.0296	**0.3262**
17	Digital Elec Switch	377C	0.0565	0.0667	0.0301	**0.1532**
18						
19	Operator Systems	117C	0.0679	0.0656	0.0296	**0.1631**
20						
21	Radio	67C	0.0690	0.0640	0.0289	**0.1619**
22						
23	Digital Circ - DDS	157C	0.1225	0.0627	0.0283	**0.2135**
24	Digital Circ - Pair Gain	257C	0.0909	0.0626	0.0283	**0.1817**
25	Digital Circ - Other	357C	0.0909	0.0626	0.0283	**0.1817**
26	Analog Circ - Pair Gain	457C	0.0909	0.0626	0.0283	**0.1817**
27	Analog Circ - Other	57C	0.0909	0.0626	0.0283	**0.1817**
28						
29	Large PBX	158C	0.1733	0.0610	0.0276	**0.2619**
30	Other Terminal Equip	378C	0.1617	0.0636	0.0287	**0.2540**
31						
32	Poles	1C	0.0400	0.0639	0.0288	**0.1327**
33	Aerial Ca - Metal - Bldg Enter	12C	0.0575	0.0620	0.0280	**0.1476**
34	Aerial Ca - Metal	22C	0.0575	0.0620	0.0280	**0.1476**
35	Aerial Ca - Fiber - Bldg Enter	812C	0.0400	0.0667	0.0301	**0.1368**
36	Aerial Ca - Fiber	822C	0.0400	0.0667	0.0301	**0.1368**
37	Buried Ca - Metal	45C	0.0500	0.0658	0.0297	**0.1456**
38	Buried Ca - Fiber	845C	0.0363	0.0697	0.0315	**0.1375**
39	Underground Ca - Metal	5C	0.0432	0.0672	0.0304	**0.1408**
40	Underground Ca - Fiber	85C	0.0400	0.0667	0.0301	**0.1368**
41	Submarine Ca - Metal	6C	0.0404	0.0693	0.0313	**0.1410**
42	Submarine Ca - Fiber	86C	0.0404	0.0693	0.0313	**0.1410**
43	INTA Bldg Ntwk Ca - Metal	52C	0.0500	0.0648	0.0293	**0.1441**
44	INTA Bldg Ntwk Ca - Fiber	852C	0.0500	0.0648	0.0293	**0.1441**
45						
46	Conduit Systems	4C	0.0162	0.0834	0.0377	**0.1372**
47						
48	Timestamp: 2/12/99 7:59:18 AM	Deflt				

Depreciation = Adjusted Investment / Life Years
ACFC COM = (Investment * A/P) - Depreceiation
ACFC Income Tax = ACFC COM * Phi
Capital Expense = Depreciation + ACFC COM + ACFC Income Tax

Calculations rounded to four (4) decimal places.

Source: BellSouth's Capital Cost Calculator

TENNESSEE DOCKET NO 99-00430
APPENDIX A
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

State & Federal Income Taxes

File: fitsit97.xls

1997 Tax Information

	Tennessee
Federal Income Tax (FIT) Rate	35.00%
State Income Tax (SIT) Rate	6.00%
Allows FIT deduct on SIT	No
Are Rates Same for Retail vs Wholesale?	Yes

000155

TENNESSEE DOCKET NO 99-00430
APPENDIX A
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

Labor Rates

File: laborate.xls

SUMMARY

State	JFC/Payband	Description	Direct Labor Date	Direct Labor Rate	Telric Labor Rate	Telric Labor Date
RW	400X	Address & Facility Inventory (AFIG)	7-15-98	$ 33.90	$ 33.90	7-15-98
RW	4M1X	Address & Facility Inventory (AFIG)	7-15-98	$ 33.90	$ 33.90	7-15-98
RW	401X	Work Management Center (WMC)	7-15-98	$ 34.37	$ 34.37	7-15-98
RW	410X	Install & Mtce - Pots	7-15-98	$ 41.00	$ 41.00	7-15-98
RW	411X	Install & Mtce - Spec Svcs (SSIM)	7-15-98	$ 44.45	$ 44.45	7-15-98
RW	420X	Outside Plant Constr (OSPC)	7-15-98	$ 45.05	$ 45.05	7-15-98
RW	421X	Outside Plant Constr (OSPC)	7-15-98	$ 45.05	$ 45.05	7-15-98
RW	424X	Outside Plant Admin Cntr (OPAC)	7-15-98	$ 34.41	$ 34.41	7-15-98
RW	422X	Cable Repair Technician (CRT)	7-15-98	$ 46.96	$ 46.96	7-15-98
RW	423X	Cable Repair Technician (CRT)	7-15-98	$ 46.96	$ 46.96	7-15-98
RW	425X	Cable Repair Technician (CRT)	7-15-98	$ 46.96	$ 46.96	7-15-98
RW	426X	Cable Repair Technician (CRT)	7-15-98	$ 46.96	$ 46.96	7-15-98
RW	430X	CO Install & Mtce Field - Switch Eq	7-15-98	$ 44.88	$ 44.88	7-15-98
RW	431X	CO Install & Mtce Field - Ckt & Fac	7-15-98	$ 42.88	$ 42.88	7-15-98
RW	431XB	CO I&M Field, Basic Time - Ckt & Fac	7-15-98	$ 41.24	$ 41.24	7-15-98
RW	431XO	CO I&M Field, OT - Ckt & Fac	7-15-98	$ 52.06	$ 52.06	7-15-98
RW	431XP	CO I&M Field, Prem Time - Ckt & Fac	7-15-98	$ 62.88	$ 62.88	7-15-98
RW	4321	Recent Chng Line Trans (RCMAG)	7-15-98	$ 38.86	$ 38.86	7-15-98
RW	4N1X	Recent Chng Line Trans (RCMAG)	7-15-98	$ 38.86	$ 38.86	7-15-98
RW	4320	Switch & Trunk Based Translations	7-15-98	$ 45.34	$ 45.34	7-15-98
RW	4N2X	Switch & Trunk Based Translations	7-15-98	$ 45.34	$ 45.34	7-15-98
RW	4322	CO Install, Mtce & Admin - Software	7-15-98	$ 49.48	$ 49.48	7-15-98
RW	4323	CO Install, Mtce & Admin - Software	7-15-98	$ 49.48	$ 49.48	7-15-98
RW	4324	CO Install, Mtce & Admin - Software	7-15-98	$ 49.48	$ 49.48	7-15-98
RW	4331	Trunk & Carrier Group (TCG)	7-15-98	$ 43.55	$ 43.55	7-15-98
RW	4342	Trunk & Carrier Group (TCG)	7-15-98	$ 43.55	$ 43.55	7-15-98
RW	473X	Trunk & Carrier Group (TCG)	7-15-98	$ 43.55	$ 43.55	7-15-98
RW	4N5X	Trunk & Carrier Group (TCG)	7-15-98	$ 43.55	$ 43.55	7-15-98
RW	4330	Network Reliability Center (NRC)	7-15-98	$ 37.80	$ 37.80	7-15-98
RW	4341	Network Reliability Center (NRC)	7-15-98	$ 37.80	$ 37.80	7-15-98
RW	4LXX	Network Reliability Center (NRC)	7-15-98	$ 37.80	$ 37.80	7-15-98
RW	4332	Proactive Analysis/Repair Ctr (PAR)	7-15-98	$ 35.77	$ 35.77	7-15-98
RW	4PXX	Proactive Analysis/Repair Ctr (PAR)	7-15-98	$ 35.77	$ 35.77	7-15-98
RW	470X	Circuit Provisioning Group (CPG)	7-15-98	$ 37.06	$ 37.06	7-15-98
RW	4N4X	Circuit Provisioning Group (CPG)	7-15-98	$ 37.06	$ 37.06	7-15-98
RW	471X	Acc Cust Advocate Cntr (ACAC)	7-15-98	$ 38.31	$ 38.31	7-15-98
RW	471XB	Acc Cust Adv Cntr, Bas Time (ACAC)	7-15-98	$ 37.09	$ 37.09	7-15-98
RW	471XO	Acc Cust Adv Cntr, OT (ACAC)	7-15-98	$ 46.99	$ 46.99	7-15-98
RW	471XP	Acc Cust Adv Cntr, Prem Time (ACAC)	7-15-98	$ 56.88	$ 56.88	7-15-98
RW	4AXX	Acc Cust Advocate Cntr (ACAC)	7-15-98	$ 38.31	$ 38.31	7-15-98
RW	472X	Equip Bill Accuracy Cont (EBAC)	7-15-98	$ 38.56	$ 38.56	7-15-98
RW	4N3X	Equip Bill Accuracy Cont (EBAC)	7-15-98	$ 38.56	$ 38.56	7-15-98
RW	4BXX	Business Repair Center (BRC)	7-15-98	$ 39.11	$ 39.11	7-15-98
RW	4RXX	Residence Repair Center (RRC)	7-15-98	$ 34.89	$ 34.89	7-15-98
RW	4WXX	Work Management Center (WMC)	7-15-98	$ 34.37	$ 34.37	7-15-98
RW	30XX	Land And Buildings (FG10)	7-15-98	$ 67.04	$ 67.04	7-15-98
RW	350X	Land And Buildings (FG10)	7-15-98	$ 67.04	$ 67.04	7-15-98
RW	31XX	Ntwk & Eng Planning (FG20)	7-15-98	$ 56.20	$ 56.20	7-15-98
RW	34XX	Ntwk & Eng Planning (FG20)	7-15-98	$ 56.20	$ 56.20	7-15-98
RW	3AXX	Ntwk & Eng Planning (FG20)	7-15-98	$ 56.20	$ 56.20	7-15-98
RW	3BXX	Ntwk & Eng Planning (FG20)	7-15-98	$ 56.20	$ 56.20	7-15-98

RW	341X	Ntwk Plug-In Admin (PICS)	7-15-98	$	36.96	$ 36.96	7-15-98
RW	3A2X	Ntwk Plug-In Admin (PICS)	7-15-98	$	36.96	$ 36.96	7-15-98
RW	32XX	Outside Plant Eng (FG30)	7-15-98	$	47.97	$ 47.97	7-15-98
RW	356X	Outside Plant Eng (FG30)	7-15-98	$	47.97	$ 47.97	7-15-98
RW	1200	Cabs Accounting	7-15-98	$	43.32	$ 43.32	7-15-98
RW	2300	Customer Point Of Contact - ICSC	7-15-98	$	44.86	$ 44.86	7-15-98
RW	2300B	Cust Pnt Of Cont, Basic Time - ICSC	7-15-98	$	44.00	$ 44.00	7-15-98
RW	2300O	Cust Pnt Of Cont, OT - ICSC	7-15-98	$	53.06	$ 53.06	7-15-98
RW	2300P	Cust Pnt Of Cont, Prem Time - ICSC	7-15-98	$	62.11	$ 62.11	7-15-98
RW	2120	Pots Operator	7-15-98	$	32.58	$ 32.58	7-15-98
RW	2940	Directory Assistance Operator	7-15-98	$	29.69	$ 29.69	7-15-98
RW	2600	Coin Collector	7-15-98	$	35.83	$ 35.83	7-15-98
RW	2E40	Collections Rep - Residence	7-15-98	$	35.30	$ 35.30	7-15-98
RW	2840	Collections Rep - Business	7-15-98	$	34.65	$ 34.65	7-15-98
RW	2E50	Bus Ofc Svc Rep - Residence	7-15-98	$	37.73	$ 37.73	7-15-98
RW	2E70	Bus Ofc Svc Rep - Residence	7-15-98	$	37.73	$ 37.73	7-15-98
RW	2850	Bus Ofc Svc Rep - Business	7-15-98	$	37.39	$ 37.39	7-15-98
RW	2870	Bus Ofc Svc Rep - Business	7-15-98	$	37.39	$ 37.39	7-15-98
RW	1240	Comptrollers Clerical	7-15-98	$	40.86	$ 40.86	7-15-98
RW	1250	Comptrollers Clerical	7-15-98	$	40.86	$ 40.86	7-15-98
RW	1260	Comptrollers Clerical	7-15-98	$	40.86	$ 40.86	7-15-98
RW	1270	Comptrollers Clerical	7-15-98	$	40.86	$ 40.86	7-15-98
RW	2700	Network Services Clerical	7-15-98	$	37.19	$ 37.19	7-15-98
RW	2730	Network Services Clerical	7-15-98	$	37.19	$ 37.19	7-15-98
RW	AEWC	Acct Executive w/Sales Comp	7-15-98	$	73.78	$ 73.78	7-15-98
RW	AEWOC	Acct Executive wo/Sales Comp	7-15-98	$	59.93	$ 59.93	7-15-98
RW	SDWC	Systems Designer w/Sales Com	7-15-98	$	67.26	$ 67.26	7-15-98
RW	SDWOC	Systems Designer wo/Sales Com	7-15-98	$	61.84	$ 61.84	7-15-98
RW	SVCC	Service Consultant	7-15-98	$	45.01	$ 45.01	7-15-98
RW	NWPB56	Network Pay Band 56	7-15-98	$	43.90	$ 43.90	7-15-98
RW	NWPB57	Network Pay Band 57	7-15-98	$	45.69	$ 45.69	7-15-98
RW	NWPB58	Network Pay Band 58	7-15-98	$	50.31	$ 50.31	7-15-98
RW	NWPB59	Network Pay Band 59	7-15-98	$	55.78	$ 55.78	7-15-98
RW	NWPB61	Network Pay Band 61	7-15-98	$	68.43	$ 68.43	7-15-98
RW	NWWS10	Network Wage Scale 10	7-15-98	$	32.96	$ 32.96	7-15-98
RW	MKPB56	Marketing Pay Band 56	7-15-98	$	43.28	$ 43.28	7-15-98
RW	MKPB57	Marketing Pay Band 57	7-15-98	$	45.08	$ 45.08	7-15-98
RW	MKPB58	Marketing Pay Band 58	7-15-98	$	49.39	$ 49.39	7-15-98
RW	MKPB59	Marketing Pay Band 59	7-15-98	$	55.17	$ 55.17	7-15-98
RW	MKPB61	Marketing Pay Band 61	7-15-98	$	67.85	$ 67.85	7-15-98
RW	MKWS10	Marketing Wage Scale 10	7-15-98	$	32.31	$ 32.31	7-15-98
RW	ITPB54	IT Pay Band 54	7-15-98	$	38.59	$ 38.59	7-15-98
RW	ITPB55	IT Pay Band 55	7-15-98	$	40.53	$ 40.53	7-15-98
RW	ITPB56	IT Pay Band 56	7-15-98	$	46.03	$ 46.03	7-15-98
RW	ITPB57	IT Pay Band 57	7-15-98	$	47.82	$ 47.82	7-15-98
RW	ITPB58	IT Pay Band 58	7-15-98	$	52.44	$ 52.44	7-15-98
RW	ITPB59	IT Pay Band 59	7-15-98	$	57.92	$ 57.92	7-15-98
RW	ITPB60	IT Pay Band 60	7-15-98	$	64.53	$ 64.53	7-15-98
RW	ITPB61	IT Pay Band 61	7-15-98	$	70.60	$ 70.60	7-15-98
RW	ITWS10	IT Wage Scale 10	7-15-98	$	35.06	$ 35.06	7-15-98
RW	ITWS14	IT Wage Scale 14	7-15-98	$	36.02	$ 36.02	7-15-98
RW	ITWS16	IT Wage Scale 16	7-15-98	$	36.68	$ 36.68	7-15-98
RW	ITWS18	IT Wage Scale 18	7-15-98	$	37.18	$ 37.18	7-15-98
RW	ITWS32	IT Wage Scale 32	7-15-98	$	43.73	$ 43.73	7-15-98

RW	FRPB56	Finance/Regualtory Pay Band 56	7-15-98	$ 41.72	$ 41.72	7-15-98
RW	FRPB57	Finance/Regualtory Pay Band 57	7-15-98	$ 43.50	$ 43.50	7-15-98
RW	FRPB58	Finance/Regualtory Pay Band 58	7-15-98	$ 48.12	$ 48.12	7-15-98
RW	FRPB59	Finance/Regualtory Pay Band 59	7-15-98	$ 53.59	$ 53.59	7-15-98
RW	FRPB61	Finance/Regualtory Pay Band 61	7-15-98	$ 66.24	$ 66.24	7-15-98
RW	FRWS10	Finance/Regualtory Wage Scale 10	7-15-98	$ 30.78	$ 30.78	7-15-98
RW	FRWS16	Finance/Regulatory Wage Scale 16	7-15-98	$ 32.39	$ 32.39	7-15-98

1998 - 2000 TELRIC LABOR RATES			7-15-98
PLANT WORK CENTERS	**JFC**	**REGIONAL**	**REFERENCE**
ADDRESS & FACILITY INVENTORY (AFIG)	400X 4M1X	$ 33.90	TELRIC DETAIL H11
INSTALL & MTCE - POTS	410X	$ 41.00	TELRIC DETAIL H13
INSTALL & MTCE - SPEC SVCS (SSIM)	411X	$ 44.45	TELRIC DETAIL H14
OUTSIDE PLANT CONSTRUCTION (OSPC)	420X 421X	$ 45.05	TELRIC DETAIL H15
OUTSIDE PLANT ADMIN CENTER (OPAC)	424X	$ 34.41	TELRIC DETAIL H16
CABLE REPAIR TECHNICIAN (CRT)	422X 423X 425X 426X	$ 46.96	TELRIC DETAIL H17
CO INSTALL & MTCE FIELD - SWITCH EQUIP	430X	$ 44.88	TELRIC DETAIL H18
CO INSTALL & MTCE FIELD - CIRCUIT & FAC	431X	$ 42.88	TELRIC DETAIL H19
RECENT CHANGE LINE TRANSLATIONS (RCMAG)	4321 4N1X	$ 38.86	TELRIC DETAIL H20
SWITCH & TRUNK BASED TRANSLATIONS	4320 4N2X	$ 45.34	TELRIC DETAIL H21
CO INSTALL, MTCE & ADMIN - SOFTWARE	4322 4323 4324	$ 49.48	TELRIC DETAIL H22
TRUNK & CARRIER GROUP (TCG)	4331 4342 473X 4N5X	$ 43.55	TELRIC DETAIL H23
NETWORK RELIABILITY CENTER (NRC)	4330 4341 4LXX	$ 37.80	TELRIC DETAIL H24
PROACTIVE ANALYSIS & REPAIR CTR (PAR)	4332 4PXX	$ 35.77	TELRIC DETAIL H25
CIRCUIT PROVISIONING GROUP (CPG)	470X 4N4X	$ 37.06	TELRIC DETAIL H26
ACCESS CUSTOMER ADVOCATE CENTER (ACAC)	471X 4AXX	$ 38.31	TELRIC DETAIL H27
EQUIPMENT BILLING ACCURACY CONT (EBAC)	472X 4N3X	$ 38.56	TELRIC DETAIL H28
BUSINESS REPAIR CENTER (BRC)	4BXX	$ 39.11	TELRIC DETAIL H29
RESIDENCE REPAIR CENTER (RRC)	4RXX	$ 34.89	TELRIC DETAIL H30
WORK MANAGEMENT CENTER (WMC)	4WXX 401X	$ 34.37	TELRIC DETAIL H31
ENGINEERING FORCE GROUPS	**JFC**	**REGIONAL**	**REFERENCE**
LAND AND BUILDINGS (FG10)	30XX 350X	$ 67.04	TELRIC DETAIL H43
NETWORK & ENGINEERING PLANNING (FG20)	31XX 34XX 3AXX 3BXX	$ 56.20	TELRIC DETAIL H44
NETWORK PLUG-IN ADMINISTRATION (PICS)	341X 3A2X	$ 36.96	TELRIC DETAIL H45
OUTSIDE PLANT ENGINEERING (FG30)	32XX 356X	$ 47.97	TELRIC DETAIL H46
COST GROUPS	**JFC**	**REGIONAL**	**REFERENCE**
CABS ACCOUNTING	1200	$ 43.32	TELRIC DETAIL H56
CUSTOMER POINT OF CONTACT - ICSC/LSCS	2300	$ 44.86	TELRIC DETAIL H57
POTS OPERATOR	2120	$ 32.58	TELRIC DETAIL H58
DIRECTORY ASSISTANCE OPERATOR	2940	$ 29.69	TELRIC DETAIL H59
COIN COLLECTOR	2600	$ 35.83	TELRIC DETAIL H60
COLLECTIONS REP - RESIDENCE	2E40	$ 35.30	TELRIC DETAIL H61
COLLECTIONS REP - BUSINESS	2840	$ 34.65	TELRIC DETAIL H62
BUS OFC SVC REP - RESIDENCE	2E50 2E70	$ 37.73	TELRIC DETAIL H63
BUS OFC SVC REP - BUSINESS	2850 2870	$ 37.39	TELRIC DETAIL H64
COMPTROLLERS CLERICAL	1240 1250 1260 1270	$ 40.86	TELRIC DETAIL H65
NETWORK SERVICES CLERICAL	2700 2730	$ 37.19	TELRIC DETAIL H66
ACCOUNT EXECUTIVE	NOT APPLICABLE		
WITH SALES COMPENSATION		$ 73.78	TELRIC DETAIL H80
WITHOUT SALES COMPENSATION		$ 59.93	TELRIC DETAIL H81
SYSTEMS DESIGNER	NOT APPLICABLE		
WITH SALES COMPENSATION		$ 67.26	TELRIC DETAIL H83
WITHOUT SALES COMPENSATION		$ 61.84	TELRIC DETAIL H84
SERVICE CONSULTANT	NOT APPLICABLE	$ 45.01	TELRIC DETAIL H85

			7-15-98
1998 - 2000 TELRIC LABOR RATES			
BST IT	**HOURLY RATE**		**REFERENCE**
PAY BAND 54	$	38.59	TELRIC IT PB DETAIL H11
PAY BAND 55	$	40.53	TELRIC IT PB DETAIL H12
PAY BAND 56	$	46.03	TELRIC IT PB DETAIL H13
PAY BAND 57	$	47.82	TELRIC IT PB DETAIL H14
PAY BAND 58	$	52.44	TELRIC IT PB DETAIL H15
PAY BAND 59	$	57.92	TELRIC IT PB DETAIL H16
PAY BAND 60	$	64.53	TELRIC IT PB DETAIL H17
PAY BAND 61	$	70.60	TELRIC IT PB DETAIL H18
WAGE SCALE 10	$	35.06	TELRIC IT PB DETAIL H19
WAGE SCALE 14	$	36.02	TELRIC IT PB DETAIL H20
WAGE SCALE 16	$	36.68	TELRIC IT PB DETAIL H21
WAGE SCALE 18	$	37.18	TELRIC IT PB DETAIL H22
WAGE SCALE 32	$	43.73	TELRIC IT PB DETAIL H23

			7-15-98
1998 - 2000 TELRIC LABOR RATES			
BST MARKETING	**HOURLY RATE**		**REFERENCE**
PAY BAND 56	$	43.28	TELRIC MKTG PB DETAIL H11
PAY BAND 57	$	45.08	TELRIC MKTG PB DETAIL H12
PAY BAND 58	$	49.39	TELRIC MKTG PB DETAIL H13
PAY BAND 59	$	55.17	TELRIC MKTG PB DETAIL H14
PAY BAND 61	$	67.85	TELRIC MKTG PB DETAIL H15
WAGE SCALE 10	$	32.31	TELRIC MKTG PB DETAIL H16

			7-15-98
1998 - 2000 TELRIC LABOR RATES			
BST NETWORK	**HOURLY RATE**		**REFERENCE**
PAY BAND 56	$	43.90	TELRIC NTWK PB DETAIL H11
PAY BAND 57	$	45.69	TELRIC NTWK PB DETAIL H12
PAY BAND 58	$	50.31	TELRIC NTWK PB DETAIL H13
PAY BAND 59	$	55.78	TELRIC NTWK PB DETAIL H14
PAY BAND 61	$	68.43	TELRIC NTWK PB DETAIL H15
WAGE SCALE 10	$	32.96	TELRIC NTWK PB DETAIL H16

7-15-98

1998 - 2000 TELRIC LABOR RATES

BST FINANCE/REGULATORY	HOURLY RATE	REFERENCE
PAY BAND 56	$ 41.72	TELRIC FINANCE PB DETAIL H11
PAY BAND 57	$ 43.50	TELRIC FINANCE PB DETAIL H12
PAY BAND 58	$ 48.12	TELRIC FINANCE PB DETAIL H13
PAY BAND 59	$ 53.59	TELRIC FINANCE PB DETAIL H14
PAY BAND 61	$ 66.24	TELRIC FINANCE PB DETAIL H15
WAGE SCALE 10	$ 30.78	TELRIC FINANCE PB DETAIL H16
WAGE SCALE 16	$ 32.39	TELRIC FINANCE PB DETAIL H17

TELRIC SECURITY SUM

SECURITY ESCORT			7-15-98
	1998 - 2000 TELRIC		REFERENCE
ACAC			
BASIC	$	37.09	SECURITY ACAC B15
OVERTIME	$	46.99	SECURITY ACAC B26
PREMIUM	$	56.88	SECURITY ACAC B37
COIM - CIR & FAC			
BASIC	$	41.24	SECURITY COIM-CIR&FAC B15
OVERTIME	$	52.06	SECURITY COIM-CIR&FAC B26
PREMIUM	$	62.88	SECURITY COIM-CIR&FAC B37
ICSC/LCSC			
BASIC	$	44.00	SECURITY ICSC LCSC B15
OVERTIME	$	53.06	SECURITY ICSC LCSC B26
PREMIUM	$	62.11	SECURITY ICSC LCSC B37

1998 - 2000 DIRECTLY ASSIGNED LABOR RATES			7-15-98
PLANT WORK CENTERS	**JFC**	**REGIONAL**	**REFERENCE**
ADDRESS & FACILITY INVENTORY (AFIG)	400X 4M1X	$ 33.90	DIR ASSG DETAIL F10
INSTALL & MTCE - POTS	410X	$ 41.00	DIR ASSG DETAIL F12
INSTALL & MTCE - SPEC SVCS (SSIM)	411X	$ 44.45	DIR ASSG DETAIL F13
OUTSIDE PLANT CONSTRUCTION (OSPC)	420X 421X	$ 45.05	DIR ASSG DETAIL F14
OUTSIDE PLANT ADMIN CENTER (OPAC)	424X	$ 34.41	DIR ASSG DETAIL F15
CABLE REPAIR TECHNICIAN (CRT)	422X 423X 425X 426X	$ 46.96	DIR ASSG DETAIL F16
CO INSTALL & MTCE FIELD - SWITCH EQUIP	430X	$ 44.88	DIR ASSG DETAIL F17
CO INSTALL & MTCE FIELD - CIRCUIT & FAC	431X	$ 42.88	DIR ASSG DETAIL F18
RECENT CHANGE LINE TRANSLATIONS (RCMAG)	4321 4N1X	$ 38.86	DIR ASSG DETAIL F19
SWITCH & TRUNK BASED TRANSLATIONS	4320 4N2X	$ 45.34	DIR ASSG DETAIL F20
CO INSTALL, MTCE & ADMIN - SOFTWARE	4322 4323,4324	$ 49.48	DIR ASSG DETAIL F21
TRUNK & CARRIER GROUP (TCG)	4331 4342 473X 4N5X	$ 43.55	DIR ASSG DETAIL F22
NETWORK RELIABILITY CENTER (NRC)	4330 4341 4LXX	$ 37.80	DIR ASSG DETAIL F23
PROACTIVE ANALYSIS & REPAIR CTR (PAR)	4332 4PXX	$ 35.77	DIR ASSG DETAIL F24
CIRCUIT PROVISIONING GROUP (CPG)	470X 4N4X	$ 37.06	DIR ASSG DETAIL F25
ACCESS CUSTOMER ADVOCATE CENTER (ACAC)	471X 4AXX	$ 38.31	DIR ASSG DETAIL F26
EQUIPMENT BILLING ACCURACY CONT (EBAC)	472X 4N3X	$ 38.56	DIR ASSG DETAIL F27
BUSINESS REPAIR CENTER (BRC)	4BXX	$ 39.11	DIR ASSG DETAIL F28
RESIDENCE REPAIR CENTER (RRC)	4RXX	$ 34.89	DIR ASSG DETAIL F29
WORK MANAGEMENT CENTER (WMC)	4WXX 401X	$ 34.37	DIR ASSG DETAIL F30
ENGINEERING FORCE GROUPS	**JFC**	**REGIONAL**	**REFERENCE**
LAND AND BUILDINGS (FG10)	30XX 350X	$ 67.04	DIR ASSG DETAIL F37
NETWORK & ENGINEERING PLANNING (FG20)	31XX 34XX 3AXX 3BXX	$ 56.20	DIR ASSG DETAIL F38
NETWORK PLUG-IN ADMINISTRATION (PICS)	341X 3A2X	$ 36.96	DIR ASSG DETAIL F39
OUTSIDE PLANT ENGINEERING (FG30)	32XX 356X	$ 47.97	DIR ASSG DETAIL F40
COST GROUPS	**JFC**	**REGIONAL**	**REFERENCE**
CABS ACCOUNTING	1200	$ 43.32	DIR ASSG DETAIL F49
CUSTOMER POINT OF CONTACT - ICSC/LSCS	2300	$ 44.86	DIR ASSG DETAIL F50
POTS OPERATOR	2120	$ 32.58	DIR ASSG DETAIL F51
DIRECTORY ASSISTANCE OPERATOR	2940	$ 29.69	DIR ASSG DETAIL F52
COIN COLLECTOR	2600	$ 35.83	DIR ASSG DETAIL F53
COLLECTIONS REP - RESIDENCE	2E40	$ 35.30	DIR ASSG DETAIL F54
COLLECTIONS REP - BUSINESS	2840	$ 34.65	DIR ASSG DETAIL F55
BUS OFC SVC REP - RESIDENCE	2E50 2E70	$ 37.73	DIR ASSG DETAIL F56
BUS OFC SVC REP - BUSINESS	2850 2870	$ 37.39	DIR ASSG DETAIL F57
COMPTROLLERS CLERICAL	1240 1250 1260 1270	$ 40.86	DIR ASSG DETAIL F58
NETWORK SERVICES CLERICAL	2700 2730	$ 37.19	DIR ASSG DETAIL F59
ACCOUNT EXECUTIVE	NOT APPLICABLE		
WITH SALES COMPENSATION		$ 73.78	DIR ASSG DETAIL F61
WITHOUT SALES COMPENSATION		$ 59.93	DIR ASSG DETAIL F62
SYSTEMS DESIGNER	NOT APPLICABLE		
WITH SALES COMPENSATION		$ 67.26	DIR ASSG DETAIL F64
WITHOUT SALES COMPENSATION		$ 61.84	DIR ASSG DETAIL F65
SERVICE CONSULTANT	NOT APPLICABLE	$ 45.01	DIR ASSG DETAIL F66

			7-15-98
1998 - 2000 DIRECTLY ASSIGNED LABOR RATES			
	1998 - 2000		
	DIRECTLY		
BST IT	ASSIGNED		REFERENCE
PAY BAND 54	$	38.59	DIR ASSG IT PB DETAIL E10
PAY BAND 55	$	40.53	DIR ASSG IT PB DETAIL E11
PAY BAND 56	$	46.03	DIR ASSG IT PB DETAIL E12
PAY BAND 57	$	47.82	DIR ASSG IT PB DETAIL E13
PAY BAND 58	$	52.44	DIR ASSG IT PB DETAIL E14
PAY BAND 59	$	57.92	DIR ASSG IT PB DETAIL E15
PAY BAND 60	$	64.53	DIR ASSG IT PB DETAIL E16
PAY BAND 61	$	70.60	DIR ASSG IT PB DETAIL E17
WAGE SCALE 10	$	35.06	DIR ASSG IT PB DETAIL E18
WAGE SCALE 14	$	36.02	DIR ASSG IT PB DETAIL E19
WAGE SCALE 16	$	36.68	DIR ASSG IT PB DETAIL E20
WAGE SCALE 18	$	37.18	DIR ASSG IT PB DETAIL E21
WAGE SCALE 32	$	43.73	DIR ASSG IT PB DETAIL E22

			7-15-98
1998 - 2000 DIRECTLY ASSIGNED LABOR RATES			
	1998 - 2000		
	DIRECTLY		
BST MARKETING	ASSIGNED		REFERENCE
PAY BAND 56	$	43.28	DIR ASSG MKTG PB DETAIL E10
PAY BAND 57	$	45.08	DIR ASSG MKTG PB DETAIL E11
PAY BAND 58	$	49.39	DIR ASSG MKTG PB DETAIL E12
PAY BAND 59	$	55.17	DIR ASSG MKTG PB DETAIL E13
PAY BAND 61	$	67.85	DIR ASSG MKTG PB DETAIL E14
WAGE SCALE 10	$	32.31	DIR ASSG MKTG PB DETAIL E15

			7-15-98
1998 - 2000 DIRECTLY ASSIGNED LABOR RATES			
	1998 - 2000		
	DIRECTLY		
BST NETWORK	ASSIGNED		REFERENCE
PAY BAND 56	$	43.90	DIR ASSG NTWK PB DETAIL E10
PAY BAND 57	$	45.69	DIR ASSG NTWK PB DETAIL E11
PAY BAND 58	$	50.31	DIR ASSG NTWK PB DETAIL E12
PAY BAND 59	$	55.78	DIR ASSG NTWK PB DETAIL E13
PAY BAND 61	$	68.43	DIR ASSG NTWK PB DETAIL E14
WAGE SCALE 10	$	32.96	DIR ASSG NTWK PB DETAIL E15

			7-15-98
1998 - 2000 DIRECTLY ASSIGNED LABOR RATES			
		1998 - 2000	
		DIRECTLY	
BST FINANCE/REGULATORY		**ASSIGNED**	**REFERENCE**
PAY BAND 56	$	41.72	DIR ASSG FIN PB DETAIL E10
PAY BAND 57	$	43.50	DIR ASSG FIN PB DETAIL E11
PAY BAND 58	$	48.12	DIR ASSG FIN PB DETAIL E12
PAY BAND 59	$	53.59	DIR ASSG FIN PB DETAIL E13
PAY BAND 61	$	66.24	DIR ASSG FIN PB DETAIL E14
WAGE SCALE 10	$	30.78	DIR ASSG FIN PB DETAIL E15
WAGE SCALE 16	$	32.39	DIR ASSG FIN PB DETAIL E16

SECURITY DIR ASSG SUM

SECURITY ESCORT			7-15-98
	1998 - 2000		
	DIRECTLY ASSIGNED		REFERENCE
ACAC			
BASIC	$	37.09	SECURITY DIR ASSG ACAC B12
OVERTIME	$	46.99	SECURITY DIR ASSG ACAC B21
PREMIUM	$	56.88	SECURITY DIR ASSG ACAC B30
COIM - CIR & FAC			
BASIC	$	41.24	SECURITY DIR ASSG COIM-CIR&FAC B12
OVERTIME	$	52.06	SECURITY DIR ASSG COIM-CIR&FAC B21
PREMIUM	$	62.88	SECURITY DIR ASSG COIM-CIR&FAC B30
ICSC/LCSC			
BASIC	$	44.00	SECURITY DIR ASSG ICSC LCSC B12
OVERTIME	$	53.06	SECURITY DIR ASSG ICSC LCSC B21
PREMIUM	$	62.11	SECURITY DIR ASSG ICSC LCSC B30

SHARED LABOR FACTOR	
	1997 - 1999
	SHARED
PLANT WORK CENTERS	LABOR FACTOR
ADDRESS & FACILITY INVENTORY (AFIG)	0.0000
WORK MANAGEMENT CENTER (WMC) - JFC 401X	0.0000
INSTALLATION & MTCE - POTS	0.0000
INSTALLATION & MTCE - SPEC SVCS (SSIM)	0.0000
OUTSIDE PLANT CONSTRUCTION (OSPC)	0.0000
OUTSIDE PLANT ADMIN CENTER (OPAC)	0.0000
CABLE REPAIR TECHNICIAN (CRT)	0.0000
CO INSTALL & MTCE FIELD - SWITCH EQUIP	0.0000
CO INSTALL & MTCE - CIRCUIT & FACILITY	0.0000
RECENT CHANGE LINE TRANS (RCMAG)	0.0000
SWITCH & TRUNK BASED TRANSLATIONS	0.0000
CO INSTALL, MTCE & ADMIN - SOFTWARE	0.0000
TRUNK & CARRIER GROUP (TCG)	0.0000
NETWORK RELIABILITY CENTER (NRC)	0.0000
PROACTIVE ANALYSIS & REPAIR CTR (PAR)	0.0000
CIRCUIT PROVISIONING GROUP (CPG)	0.0000
ACCESS CUSTOMER ADVOCATE CTR (ACAC)	0.0000
EQUIP BILLING ACCURACY CONTROL (EBAC)	0.0000
BUSINESS REPAIR CENTER (BRC)	0.0000
RESIDENCE REPAIR CENTER (RRC)	0.0000
WORK MANAGEMENT CENTER (WMC) - JFC 4WX	0.0000
ENGINEERING FORCE GROUPS	
LAND & BUILDINGS (FG10)	0.0000
NETWORK & ENGINEERING PLANNING (FG20)	0.0000
NETWORK PLUG-IN ADMINISTRATION (PICS)	0.0000
OUTSIDE PLANT ENGINEERING (FG30)	0.0000
COST GROUPS	
CARRIER ACCESS BILLING SYSTEM (CABS)	0.0000
CUSTOMER POINT OF CONTACT - ICSC/LCSC	0.0000
POTS OPERATOR	0.0000
DIRECTORY ASSISTANCE OPERATOR	0.0000
COIN COLLECTOR	0.0000
COLLECTIONS REPRESENTATIVE - RES	0.0000
COLLECTIONS REPRESENTATIVE - BUS	0.0000
BUSINESS OFFICE SERVICE REP - RES	0.0000
BUSINESS OFFICE SERVICE REP - BUS	0.0000
COMPTROLLERS CLERICAL	0.0000
NETWORK SERVICES CLERICAL	0.0000
ACCOUNT EXECUTIVE	
WITH SALES COMPENSATION	0.0000
WITHOUT SALES COMPENSATION	0.0000
SYSTEMS DESIGNER	
WITH SALES COMPENSATION	0.0000
WITHOUT SALES COMPENSATION	0.0000
SERVICE CONSULTANT	0.0000
OTHER THAN IOT, COE & OSP	0.0000

1998 - 2000 TELRIC INFLATION RATE				
PLANT AND COST GROUPS				
1998 -	2.8%	1.028000		
1999 -	3.0%	1.058840	(1.028000*1.030)	
2000 -	3.2%	1.092723	(1.058840*1.032)	
		3.179563	/ 3 =	**1.059854**
ENGINEERING COST GROUPS				
1998 -	2.8%	1.028000		
1999 -	3.0%	1.058840	(1.028000*1.030)	
2000 -	3.2%	1.092723	(1.058840*1.032)	
		3.179563	/ 3 =	**1.059854**
AS OF 9-97				
SOURCE: BELLSOUTH REGION TELEPHONE PLANT INDEXES				

TELRIC DETAIL

A	B	C	D	E	F	G	H
	1998 - 2000 TELRIC LABOR RATES						7-15-98
PLANT WORK CENTERS	DIRECT S&W*	OTHER DIRECT**	SHARED LABOR FACTOR***	SHARED COSTS (B*D)	LABOR RATES (B+C+E)	1998 - 2000 INFLATION FACTOR****	1998 - 2000 TELRIC LABOR RATES (F*G)
ADDRESS & FACILITY INVENTORY (AFIG)	$ 24.23	$ 7.76	0.0000	$ -	$ 31.98	1.059854	$ 33.90
INSTALLATION & MTCE - POTS	$ 27.78	$ 10.90	0.0000	$ -	$ 38.68	1.059854	$ 41.00
INSTALLATION & MTCE - SPEC SVCS (SSIM)	$ 30.66	$ 11.29	0.0000	$ -	$ 41.94	1.059854	$ 44.45
OUTSIDE PLANT CONSTRUCTION (OSPC)	$ 29.58	$ 12.93	0.0000	$ -	$ 42.51	1.059854	$ 45.05
OUTSIDE PLANT ADMIN CENTER (OPAC)	$ 23.49	$ 8.98	0.0000	$ -	$ 32.46	1.059854	$ 34.41
CABLE REPAIR TECHNICIAN (CRT)	$ 31.58	$ 12.73	0.0000	$ -	$ 44.31	1.059854	$ 46.96
CO INSTALL & MTCE FIELD - SWITCH EQUIP	$ 30.30	$ 12.05	0.0000	$ -	$ 42.35	1.059854	$ 44.88
CO INSTALL & MTCE - CIRCUIT & FACILITY	$ 28.75	$ 11.70	0.0000	$ -	$ 40.46	1.059854	$ 42.88
RECENT CHANGE LINE TRANS (RCMAG)	$ 25.11	$ 11.56	0.0000	$ -	$ 36.66	1.059854	$ 38.86
SWITCH & TRUNK BASED TRANSLATIONS	$ 30.72	$ 12.06	0.0000	$ -	$ 42.78	1.059854	$ 45.34
CO INSTALL, MTCE & ADMIN - SOFTWARE	$ 35.37	$ 11.31	0.0000	$ -	$ 46.68	1.059854	$ 49.48
TRUNK & CARRIER GROUP (TCG)	$ 29.18	$ 11.91	0.0000	$ -	$ 41.09	1.059854	$ 43.55
NETWORK RELIABILITY CENTER (NRC)	$ 25.28	$ 10.38	0.0000	$ -	$ 35.66	1.059854	$ 37.80
PROACTIVE ANALYSIS & REPAIR CTR (PAR)	$ 25.87	$ 7.88	0.0000	$ -	$ 33.75	1.059854	$ 35.77
CIRCUIT PROVISIONING GROUP (CPG)	$ 24.97	$ 10.00	0.0000	$ -	$ 34.97	1.059854	$ 37.06
ACCESS CUSTOMER ADVOCATE CTR (ACAC)	$ 27.88	$ 8.27	0.0000	$ -	$ 36.14	1.059854	$ 38.31
EQUIP BILLING ACCURACY CONTROL (EBAC)	$ 24.85	$ 11.54	0.0000	$ -	$ 36.39	1.059854	$ 38.56
BUSINESS REPAIR CENTER (BRC)	$ 28.62	$ 8.29	0.0000	$ -	$ 36.90	1.059854	$ 39.11
RESIDENCE REPAIR CENTER (RRC)	$ 24.26	$ 8.66	0.0000	$ -	$ 32.92	1.059854	$ 34.89
WORK MANAGEMENT CENTER (WMC)	$ 24.65	$ 7.77	0.0000	$ -	$ 32.43	1.059854	$ 34.37
* TOTAL DIR ASSG WORK SHEETS D19+22+26							
** TOTAL DIR ASSG WORK SHEETS D31-D26-D22-D19							
*** SHARED LABOR FACTOR							
**** INFL FACTOR E14							

TELRIC DETAIL

A	B	C	D	E	F	G	H
ENGINEERING FORCE GROUPS	**DIRECT S&W***	**OTHER DIRECT****	**SHARED LABOR FACTOR*****	**SHARED COSTS (B*D)**	**LABOR RATES (B+C+E)**	**1998 - 2000 INFLATION FACTOR******	**1998 - 2000 TELRIC LABOR RATES (F*G)**
LAND & BUILDINGS (FG10)	$ 47.56	$ 15.70	0	$ -	$ 63.26	1.059854	$ 67.04
NETWORK & ENGINEERING PLANNING (FG20)	$ 40.53	$ 12.50	0	$ -	$ 53.03	1.059854	$ 56.20
NETWORK PLUG-IN ADMINISTRATION (PICS)	$ 25.74	$ 9.13	0	$ -	$ 34.87	1.059854	$ 36.96
OUTSIDE PLANT ENGINEERING (FG30)	$ 34.60	$ 10.66	0	$ -	$ 45.26	1.059854	$ 47.97
*** TOTAL DIR ASSG WORK SHEETS D18**							
**** TOTAL DIR ASSG WORK SHEETS D22-D18**							
***** SHARED LABOR FACTOR**							
****** INFL FACTOR E26**							
COST GROUPS	**DIRECT S&W***	**OTHER DIRECT****	**SHARED LABOR FACTOR*****	**SHARED COSTS (B*D)**	**LABOR RATES (B+C+E)**	**1998 - 2000 INFLATION FACTOR******	**1998 - 2000 TELRIC LABOR RATES (F*G)**
CARRIER ACCESS BILLING SYSTEM (CABS)	$ 26.97	$ 13.91	0	$ -	$ 40.88	1.059854	$ 43.32
CUSTOMER POINT OF CONTACT - ICSC/LCSC	$ 25.33	$ 16.99	0	$ -	$ 42.32	1.059854	$ 44.86
POTS OPERATOR	$ 23.79	$ 6.94	0	$ -	$ 30.74	1.059854	$ 32.58
DIRECTORY ASSISTANCE OPERATOR	$ 21.19	$ 6.83	0	$ -	$ 28.01	1.059854	$ 29.69
COIN COLLECTOR	$ 26.96	$ 6.85	0	$ -	$ 33.80	1.059854	$ 35.83
COLLECTIONS REPRESENTATIVE - RES	$ 25.77	$ 7.54	0	$ -	$ 33.31	1.059854	$ 35.30
COLLECTIONS REPRESENTATIVE - BUS	$ 25.07	$ 7.62	0	$ -	$ 32.69	1.059854	$ 34.65
BUSINESS OFFICE SERVICE REP - RES	$ 27.97	$ 7.63	0	$ -	$ 35.60	1.059854	$ 37.73
BUSINESS OFFICE SERVICE REP - BUS	$ 27.46	$ 7.82	0	$ -	$ 35.28	1.059854	$ 37.39
COMPTROLLERS CLERICAL	$ 25.43	$ 13.12	0	$ -	$ 38.56	1.059854	$ 40.86
NETWORK SERVICES CLERICAL	$ 27.27	$ 7.82	0	$ -	$ 35.09	1.059854	$ 37.19
*** TOTAL DIR ASSG WORK SHEETS D19**							
**** TOTAL DIR ASSG WORK SHEETS D22-D19**							
***** SHARED LABOR FACTOR**							

TELRIC DETAIL

**** INFL FACTOR E14 A COST GROUPS (CONTINUED)	B DIRECT S&W*	C OTHER DIRECT**	D SHARED LABOR FACTOR***	E SHARED COSTS (B*D)	F LABOR RATES (B+C+E)	G 1998 - 2000 INFLATION FACTOR****	H 1998 - 2000 TELRIC LABOR RATES (F*G)
ACCOUNT EXECUTIVE							
WITH SALES COMPENSATION	$ 56.38	$ 13.23	0	$ -	$ 69.61	1.059854	$ 73.78
WITHOUT SALES COMPENSATION	$ 45.80	$ 10.74	0	$ -	$ 56.55	1.059854	$ 59.93
SYSTEMS DESIGNER							
WITH SALES COMPENSATION	$ 51.40	$ 12.06	0	$ -	$ 63.46	1.059854	$ 67.26
WITHOUT SALES COMPENSATION	$ 47.26	$ 11.08	0	$ -	$ 58.34	1.059854	$ 61.84
SERVICE CONSULTANT	$ 34.39	$ 8.07	0	$ -	$ 42.47	1.059854	$ 45.01
* TOTAL DIR ASSG WORK SHEET AE SD SC							
** TOTAL DIR ASSG WORK SHEET AE SD SC							
*** SHARED LABOR FACTOR							
**** INFL FACTOR E14							

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: ADDRESS AND FACILITY INVENTORY			
WCT: AFIG			
JFC: 400X OR 4M1X			
		1996	**1997**
		CLASSIFIED	**CLASSIFIED**
	1996	**HOURLY COST**	**HOURLY COST**
COMPONENT	**DOLLARS****	**(B/B32)**	**(C*B3)**
DIRECT LABOR-PRODUCTIVE	$20,767,037.17	$15.97	$16.40
DIRECT LABOR-PREMIUM	$696,625.21	$0.54	$0.55
DIRECT LABOR-OTHER EMP	$934,334.70	$0.72	$0.74
DIRECT LABOR-ANN PD ABS	$2,983,591.45	$2.29	$2.36
DIRECT ADMINISTRATION	$5,292,146.29	$4.07	$4.18
TOTAL DIRECT LABOR	$30,673,734.82	$23.59	$24.23
DIRECT LABOR-OTHER COST	$533,163.49	$0.41	$0.42
DIRECT LABOR-OTH COST-BC	$0.00	$0.00	$0.00
OTHER TOOLS-SALARIES	$0.00	$0.00	$0.00
OTHER TOOLS-BENEFITS	$0.00	$0.00	$0.00
OTHER TOOLS-RENTS	$0.00	$0.00	$0.00
OTHER TOOLS-OTHER	$0.00	$0.00	$0.00
MOTOR VEHICLES-SALARIES	$166.13	$0.00	$0.00
MOTOR VEHICLES-BENEFITS	$39.65	$0.00	$0.00
MOTOR VEHICLES-RENTS	$15.64	$0.00	$0.00
MOTOR VEHICLES-OTHER	$1,202.92	$0.00	$0.00
BENEFITS	$9,286,366.89	$7.14	$7.33
TOTAL DIRECTLY ASSIGNED	$40,494,689.54	$31.14	$31.98
TOTAL CLASSIFIED HOURS	1,300,291.00		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: INSTALLATION AND MTCE - POTS			
WCT: I&MPOTS			
JFC: 410X			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR - PRODUCTIVE	$ 293,113,391.21	$ 18.90	$ 19.41
DIRECT LABOR - PREMIUM	$ 36,749,886.67	$ 2.37	$ 2.43
DIRECT LABOR - OTHER EMPLOYEE	$ 8,805,705.73	$ 0.57	$ 0.58
DIRECT LABOR - ANNUAL PAID ABSENCE	$ 35,490,861.81	$ 2.29	$ 2.35
DIRECT ADMINISTRATION	$ 41,092,889.82	$ 2.65	$ 2.72
TOTAL DIRECT LABOR	$ 415,252,735.24	$ 26.78	$ 27.50
DIRECT LABOR - OTHER COSTS	$ 9,915,902.30	$ 0.64	$ 0.66
DIRECT LABOR - OTHER COSTS - BC	$ -	$ -	$ -
OTHER TOOLS - SALARIES	$ 651,295.94	$ 0.04	$ 0.04
OTHER TOOLS - BENEFITS	$ 200,032.46	$ 0.01	$ 0.01
OTHER TOOLS - RENTS	$ 480,665.55	$ 0.03	$ 0.03
OTHER TOOLS - OTHER	$ 17,063,990.60	$ 1.10	$ 1.13
MOTOR VEHICLES - SALARIES	$ 3,571,284.18	$ 0.23	$ 0.24
MOTOR VEHICLES - BENEFITS	$ 1,048,184.19	$ 0.07	$ 0.07
MOTOR VEHICLES - RENTS	$ 1,702,720.98	$ 0.11	$ 0.11
MOTOR VEHICLES - OTHER	$ 18,096,258.31	$ 1.17	$ 1.20
BENEFITS	$ 116,059,106.18	$ 7.49	$ 7.69
TOTAL DIRECTLY ASSIGNED	$ 584,042,175.93	$ 37.67	$ 38.68
TOTAL CLASSIFIED PROD HOURS	15,505,130.29		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: INSTALLATION & MTCE - SPECIAL SERVICES			
WCT: SSIM			
JFC: 4110			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR - PRODUCTIVE	$ 56,009,546.61	$ 21.69	$ 22.27
DIRECT LABOR - PREMIUM	$ 5,803,083.87	$ 2.25	$ 2.31
DIRECT LABOR - OTHER EMPLOYEE	$ 1,421,513.87	$ 0.55	$ 0.57
DIRECT LABOR - ANNUAL PAID ABSENCE	$ 6,049,415.27	$ 2.34	$ 2.41
DIRECT ADMINISTRATION	$ 7,125,736.54	$ 2.76	$ 2.83
TOTAL DIRECT LABOR	$ 76,409,296.16	$ 29.59	$ 30.38
DIRECT LABOR - OTHER COSTS	$ 2,625,976.81	$ 1.02	$ 1.04
DIRECT LABOR - OTHER COSTS - BC	$ -	$ -	$ -
OTHER TOOLS - SALARIES	$ 95,054.97	$ 0.04	$ 0.04
OTHER TOOLS - BENEFITS	$ 29,239.56	$ 0.01	$ 0.01
OTHER TOOLS - RENTS	$ 70,863.99	$ 0.03	$ 0.03
OTHER TOOLS - OTHER	$ 2,500,621.59	$ 0.97	$ 0.99
MOTOR VEHICLES - SALARIES	$ 586,514.07	$ 0.23	$ 0.23
MOTOR VEHICLES - BENEFITS	$ 171,063.04	$ 0.07	$ 0.07
MOTOR VEHICLES - RENTS	$ 264,735.94	$ 0.10	$ 0.11
MOTOR VEHICLES - OTHER	$ 2,963,712.92	$ 1.15	$ 1.18
BENEFITS	$ 19,756,722.69	$ 7.65	$ 7.86
TOTAL DIRECTLY ASSIGNED	$ 105,473,801.74	$ 40.84	$ 41.94
TOTAL CLASSIFIED PROD HOURS	2,582,681.02		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: OUTSIDE PLANT CONSTRUCTION			
WCT: OSPC			
JFC: 420X OR 421X			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR - PRODUCTIVE	$ 155,896,205.91	$ 20.09	$ 20.63
DIRECT LABOR - PREMIUM	$ 8,753,828.19	$ 1.13	$ 1.16
DIRECT LABOR - OTHER EMPLOYEE	$ 6,487,978.93	$ 0.84	$ 0.86
DIRECT LABOR - ANNUAL PAID ABSENCE	$ 19,817,979.99	$ 2.55	$ 2.62
DIRECT ADMINISTRATION	$ 29,392,458.82	$ 3.79	$ 3.89
TOTAL DIRECT LABOR	$ 220,348,451.84	$ 28.39	$ 29.16
DIRECT LABOR - OTHER COSTS	$ 7,297,604.01	$ 0.94	$ 0.97
DIRECT LABOR - OTHER COSTS - BC	$ -	$ -	$ -
OTHER TOOLS - SALARIES	$ 324,187.80	$ 0.04	$ 0.04
OTHER TOOLS - BENEFITS	$ 99,284.23	$ 0.01	$ 0.01
OTHER TOOLS - RENTS	$ 206,043.72	$ 0.03	$ 0.03
OTHER TOOLS - OTHER	$ 8,381,558.92	$ 1.08	$ 1.11
MOTOR VEHICLES - SALARIES	$ 2,852,690.71	$ 0.37	$ 0.38
MOTOR VEHICLES - BENEFITS	$ 849,310.45	$ 0.11	$ 0.11
MOTOR VEHICLES - RENTS	$ 1,471,970.90	$ 0.19	$ 0.19
MOTOR VEHICLES - OTHER	$ 14,882,348.57	$ 1.92	$ 1.97
BENEFITS	$ 64,520,731.87	$ 8.31	$ 8.54
TOTAL DIRECTLY ASSIGNED	$ 321,234,183.02	$ 41.39	$ 42.51
TOTAL CLASSIFIED PROD HOURS	7,760,965.04		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: OUTSIDE PLANT ADMINISTRATION CENTER			
WCT: OPAC			
JFC: 424X			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR - PRODUCTIVE	$ 10,700,954.29	$ 15.68	$ 16.10
DIRECT LABOR - PREMIUM	$ 206,523.19	$ 0.30	$ 0.31
DIRECT LABOR - OTHER EMPLOYEE	$ 529,764.71	$ 0.78	$ 0.80
DIRECT LABOR - ANNUAL PAID ABSENCE	$ 1,711,135.10	$ 2.51	$ 2.57
DIRECT ADMINISTRATION	$ 2,463,655.70	$ 3.61	$ 3.71
TOTAL DIRECT LABOR	$ 15,612,032.99	$ 22.87	$ 23.49
DIRECT LABOR - OTHER COSTS	$ 657,132.05	$ 0.96	$ 0.99
DIRECT LABOR - OTHER COSTS - BC	$ -	$ -	$ -
OTHER TOOLS - SALARIES	$ -	$ -	$ -
OTHER TOOLS - BENEFITS	$ -	$ -	$ -
OTHER TOOLS - RENTS	$ -	$ -	$ -
OTHER TOOLS - OTHER	$ -	$ -	$ -
MOTOR VEHICLES - SALARIES	$ -	$ -	$ -
MOTOR VEHICLES - BENEFITS	$ -	$ -	$ -
MOTOR VEHICLES - RENTS	$ -	$ -	$ -
MOTOR VEHICLES - OTHER	$ -	$ -	$ -
BENEFITS	$ 5,310,175.39	$ 7.78	$ 7.99
TOTAL DIRECTLY ASSIGNED	$ 21,579,340.43	$ 31.61	$ 32.46
TOTAL CLASSIFIED PROD HOURS	682,645.56		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: CABLE REPAIR TECHNICIAN			
WCT: CRT			
JFC: 422X OR 423X OR 425X OR 426X			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR - PRODUCTIVE	$ 143,901,243.54	$ 20.46	$ 21.01
DIRECT LABOR - PREMIUM	$ 19,481,078.66	$ 2.77	$ 2.84
DIRECT LABOR - OTHER EMPLOYEE	$ 5,725,641.82	$ 0.81	$ 0.84
DIRECT LABOR - ANNUAL PAID ABSENCE	$ 18,355,953.10	$ 2.61	$ 2.68
DIRECT ADMINISTRATION	$ 25,884,288.98	$ 3.68	$ 3.78
TOTAL DIRECT LABOR	$ 213,348,206.10	$ 30.33	$ 31.15
DIRECT LABOR - OTHER COSTS	$ 5,744,956.20	$ 0.82	$ 0.84
DIRECT LABOR - OTHER COSTS - BC	$ -	$ -	$ -
OTHER TOOLS - SALARIES	$ 301,738.03	$ 0.04	$ 0.04
OTHER TOOLS - BENEFITS	$ 92,319.34	$ 0.01	$ 0.01
OTHER TOOLS - RENTS	$ 183,140.85	$ 0.03	$ 0.03
OTHER TOOLS - OTHER	$ 7,601,887.85	$ 1.08	$ 1.11
MOTOR VEHICLES - SALARIES	$ 2,654,988.32	$ 0.38	$ 0.39
MOTOR VEHICLES - BENEFITS	$ 772,679.10	$ 0.11	$ 0.11
MOTOR VEHICLES - RENTS	$ 1,127,060.67	$ 0.16	$ 0.16
MOTOR VEHICLES - OTHER	$ 13,429,958.55	$ 1.91	$ 1.96
BENEFITS	$ 58,225,008.52	$ 8.28	$ 8.50
TOTAL DIRECTLY ASSIGNED	$ 303,481,943.53	$ 43.14	$ 44.31
TOTAL CLASSIFIED PROD HOURS	7,034,659.01		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: CO INSTALLATION & MTCE - CIRCUIT & FACILITY			
WCT: COIM-CIR & FAC			
JFC: 431X			
		1996	**1997**
		CLASSIFIED	**CLASSIFIED**
	1996	**HOURLY COST**	**HOURLY COST**
COMPONENT	**DOLLARS****	**(B/B32)**	**(C*B3)**
DIRECT LABOR - PRODUCTIVE	$ 41,494,225.63	$ 19.88	$ 20.42
DIRECT LABOR - PREMIUM	$ 3,134,795.31	$ 1.50	$ 1.54
DIRECT LABOR - OTHER EMPLOYEE	$ 1,529,570.99	$ 0.73	$ 0.75
DIRECT LABOR - ANNUAL PAID ABSENCE	$ 5,637,555.36	$ 2.70	$ 2.77
DIRECT ADMINISTRATION	$ 6,429,727.89	$ 3.08	$ 3.16
TOTAL DIRECT LABOR	$ 58,225,875.18	$ 27.90	$ 28.65
DIRECT LABOR - OTHER COSTS	$ 3,366,047.94	$ 1.61	$ 1.66
DIRECT LABOR - OTHER COSTS - BC	$ 94.40	$ 0.00	$ 0.00
OTHER TOOLS - SALARIES	$ 72,170.93	$ 0.03	$ 0.04
OTHER TOOLS - BENEFITS	$ 22,286.48	$ 0.01	$ 0.01
OTHER TOOLS - RENTS	$ 33,011.29	$ 0.02	$ 0.02
OTHER TOOLS - OTHER	$ 1,895,485.70	$ 0.91	$ 0.93
MOTOR VEHICLES - SALARIES	$ 137,268.19	$ 0.07	$ 0.07
MOTOR VEHICLES - BENEFITS	$ 39,692.14	$ 0.02	$ 0.02
MOTOR VEHICLES - RENTS	$ 53,645.46	$ 0.03	$ 0.03
MOTOR VEHICLES - OTHER	$ 658,370.24	$ 0.32	$ 0.32
BENEFITS	$ 17,711,009.58	$ 8.49	$ 8.72
TOTAL DIRECTLY ASSIGNED	$ 82,214,957.53	$ 39.39	$ 40.46
TOTAL CLASSIFIED PROD HOURS	2,087,108.85		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: CO INSTALLATION AND MTCE FIELD - SWITCH EQUIP			
WCT: COIM-SW EQ			
JFC: 430X			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR - PRODUCTIVE	$ 77,413,727.48	$ 21.42	$ 22.00
DIRECT LABOR - PREMIUM	$ 4,974,801.00	$ 1.38	$ 1.41
DIRECT LABOR - OTHER EMPLOYEE	$ 2,626,166.98	$ 0.73	$ 0.75
DIRECT LABOR - ANNUAL PAID ABSENCE	$ 9,871,074.66	$ 2.73	$ 2.81
DIRECT ADMINISTRATION	$ 11,330,657.69	$ 3.14	$ 3.22
TOTAL DIRECT LABOR	$ 106,216,427.81	$ 29.40	$ 30.19
DIRECT LABOR - OTHER COSTS	$ 6,313,990.24	$ 1.75	$ 1.79
DIRECT LABOR - OTHER COSTS - BC	$ 140.51	$ 0.00	$ 0.00
OTHER TOOLS - SALARIES	$ 141,888.03	$ 0.04	$ 0.04
OTHER TOOLS - BENEFITS	$ 43,266.63	$ 0.01	$ 0.01
OTHER TOOLS - RENTS	$ 129,493.17	$ 0.04	$ 0.04
OTHER TOOLS - OTHER	$ 3,307,011.46	$ 0.92	$ 0.94
MOTOR VEHICLES - SALARIES	$ 248,584.76	$ 0.07	$ 0.07
MOTOR VEHICLES - BENEFITS	$ 71,058.80	$ 0.02	$ 0.02
MOTOR VEHICLES - RENTS	$ 92,408.11	$ 0.03	$ 0.03
MOTOR VEHICLES - OTHER	$ 1,248,962.60	$ 0.35	$ 0.35
BENEFITS	$ 31,183,978.52	$ 8.63	$ 8.86
TOTAL DIRECTLY ASSIGNED	$ 148,997,210.64	$ 41.24	$ 42.35
TOTAL CLASSIFIED PROD HOURS	3,613,360.58		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: RECENT CHANGE MEMORY LINE TRANSLATION			
WCT: RCMAG			
JFC: 4321 OR 4N1X			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR-PRODUCTIVE	$9,627,740.30	$16.09	$16.52
DIRECT LABOR-PREMIUM	$703,316.51	$1.18	$1.21
DIRECT LABOR-OTHER EMP	$417,025.35	$0.70	$0.72
DIRECT LABOR-ANN PD ABS	$1,587,096.44	$2.65	$2.72
DIRECT ADMINISTRATION	$2,237,899.06	$3.74	$3.84
TOTAL DIRECT LABOR	$14,573,077.66	$24.35	$25.01
DIRECT LABOR-OTHER COST	$996,889.16	$1.67	$1.71
DIRECT LABOR-OTH COST-BC	$35.08	$0.00	$0.00
OTHER TOOLS-SALARIES	$20,115.95	$0.03	$0.03
OTHER TOOLS-BENEFITS	$6,154.23	$0.01	$0.01
OTHER TOOLS-RENTS	$12,128.21	$0.02	$0.02
OTHER TOOLS-OTHER	$510,688.45	$0.85	$0.88
MOTOR VEHICLES-SALARIES	$38,160.91	$0.06	$0.07
MOTOR VEHICLES-BENEFITS	$10,925.19	$0.02	$0.02
MOTOR VEHICLES-RENTS	$15,890.38	$0.03	$0.03
MOTOR VEHICLES-OTHER	$194,706.46	$0.33	$0.33
BENEFITS	$4,987,138.03	$8.33	$8.56
TOTAL DIRECTLY ASSIGNED	$21,365,909.71	$35.70	$36.66
TOTAL CLASSIFIED HOURS	598,511.50		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: SWITCH AND TRUNK BASED TRANSLATIONS			
WCT: TRANSLATIONS			
JFC: 432X OR 4N2X			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR - PRODUCTIVE	$ 14,216,474.48	$20.69	$21.25
DIRECT LABOR - PREMIUM	$ 1,291,663.99	$1.88	$1.93
DIRECT LABOR - OTHER EMPLOYEE	$ 502,307.41	$0.73	$0.75
DIRECT LABOR - ANNUAL PAID ABSENCE	$ 1,870,076.80	$2.72	$2.80
DIRECT ADMINISTRATION	$ 2,597,286.30	$3.78	$3.88
TOTAL DIRECT LABOR	$ 20,477,808.98	$29.81	$30.61
DIRECT LABOR - OTHER COSTS	$ 1,153,275.91	$1.68	$1.72
DIRECT LABOR - OTHER COSTS - BC	$ 36.88	$0.00	$0.00
OTHER TOOLS - SALARIES	$ 23,773.15	$0.03	$0.04
OTHER TOOLS - BENEFITS	$ 7,224.62	$0.01	$0.01
OTHER TOOLS - RENTS	$ 12,095.45	$0.02	$0.02
OTHER TOOLS - OTHER	$ 596,665.21	$0.87	$0.89
MOTOR VEHICLES - SALARIES	$ 46,979.99	$0.07	$0.07
MOTOR VEHICLES - BENEFITS	$ 13,306.41	$0.02	$0.02
MOTOR VEHICLES - RENTS	$ 16,744.06	$0.02	$0.03
MOTOR VEHICLES - OTHER	$ 238,415.06	$0.35	$0.36
BENEFITS	$ 6,027,415.87	$8.77	$9.01
TOTAL DIRECTLY ASSIGNED	$ 28,613,741.59	$41.65	$42.78
TOTAL CLASSIFIED PROD HOURS	686,970.22		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

SOFTWARE

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: CO INSTALLATION, MAINTENANCE AND ADMINISTRATION-SOFTWARE			
WCT: SOFTWARE			
JFC: 4322 OR 4323 OR 4324			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR-PRODUCTIVE	$187,293.48	$27.45	$28.19
DIRECT LABOR-PREMIUM	$8,947.20	$1.31	$1.35
DIRECT LABOR-OTHER EMP	$8,659.32	$1.27	$1.30
DIRECT LABOR-ANN PD ABS	$17,357.96	$2.54	$2.61
DIRECT ADMINISTRATION	$12,689.40	$1.86	$1.91
TOTAL DIRECT LABOR	$234,947.36	$34.44	$35.37
DIRECT LABOR-OTHER COST	$6,891.94	$1.01	$1.04
DIRECT LABOR-OTH COST-BC	$0.00	$0.00	$0.00
OTHER TOOLS-SALARIES	$5.83	$0.00	$0.00
OTHER TOOLS-BENEFITS	$1.64	$0.00	$0.00
OTHER TOOLS-RENTS	$0.08	$0.00	$0.00
OTHER TOOLS-OTHER	$3,610.20	$0.53	$0.54
MOTOR VEHICLES-SALARIES	$24.86	$0.00	$0.00
MOTOR VEHICLES-BENEFITS	$8.62	$0.00	$0.00
MOTOR VEHICLES-RENTS	$59.52	$0.01	$0.01
MOTOR VEHICLES-OTHER	$170.18	$0.02	$0.03
BENEFITS	$64,423.23	$9.44	$9.70
TOTAL DIRECTLY ASSIGNED	$310,143.46	$45.46	$46.68
TOTAL CLASSIFIED HOURS	6822.76		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION REGION:*	1.027		
STATE: REGION			
FG/FSG: TRUNK AND CARRIER GROUP			
WCT: TCG			
JFC: 4331 OR 4342 OR 473X OR 4N5X			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOULY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR - PRODUCTIVE	$ 7,385,510.60	$20.17	$20.71
DIRECT LABOR - PREMIUM	$ 361,466.28	$0.99	$1.01
DIRECT LABOR - OTHER EMPLOYEE	$ 264,876.68	$0.72	$0.74
DIRECT LABOR - ANNUAL PAID ABSENCE	$ 990,453.24	$2.70	$2.78
DIRECT ADMINISTRATION	$ 1,370,358.11	$3.74	$3.84
TOTAL DIRECT LABOR	$ 10,372,664.91	$28.33	$29.09
DIRECT LABOR - OTHER COSTS	$ 634,109.03	$1.73	$1.78
DIRECT LABOR - OTHER COSTS - BC	$ 25.21	$0.00	$0.00
OTHER TOOLS - SALARIES	$ 10,570.65	$0.03	$0.03
OTHER TOOLS - BENEFITS	$ 3,285.57	$0.01	$0.01
OTHER TOOLS - RENTS	$ 3,821.75	$0.01	$0.01
OTHER TOOLS - OTHER	$ 277,042.12	$0.76	$0.78
MOTOR VEHICLES - SALARIES	$ 21,850.11	$0.06	$0.06
MOTOR VEHICLES - BENEFITS	$ 6,222.74	$0.02	$0.02
MOTOR VEHICLES - RENTS	$ 8,615.66	$0.02	$0.02
MOTOR VEHICLES - OTHER	$ 110,357.33	$0.30	$0.31
BENEFITS	$ 3,202,466.06	$8.75	$8.98
TOTAL DIRECTLY ASSIGNED	$ 14,651,031.14	$40.01	$41.09
TOTAL CLASSIFIED PROD HOURS	366,195.54		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: NETWORK RELIABILITY CENTER			
WCT: NRC			
JFC: 4LXX OR 4330 OR 4341			
		1996	1997
		PRODUCTIVE	PRODUCTIVE
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR - PRODUCTIVE	$ 5,622,421.97	$17.18	$17.64
DIRECT LABOR - PREMIUM	$ 547,748.91	$1.67	$1.72
DIRECT LABOR - OTHER EMPLOYEE	$ 226,115.87	$0.69	$0.71
DIRECT LABOR - ANNUAL PAID ABSENCE	$ 830,317.30	$2.54	$2.61
DIRECT ADMINISTRATION	$ 809,148.85	$2.47	$2.54
TOTAL DIRECT LABOR	$ 8,035,752.91	$24.55	$25.21
DIRECT LABOR - OTHER COSTS	$ 806,879.24	$2.47	$2.53
DIRECT LABOR - OTHER COSTS - BC	$ -	$0.00	$0.00
OTHER TOOLS - SALARIES	$ 344.20	$0.00	$0.00
OTHER TOOLS - BENEFITS	$ 116.64	$0.00	$0.00
OTHER TOOLS - RENTS	$ 24.27	$0.00	$0.00
OTHER TOOLS - OTHER	$ 17,266.29	$0.05	$0.05
MOTOR VEHICLES - SALARIES	$ 21,734.94	$0.07	$0.07
MOTOR VEHICLES - BENEFITS	$ 6,457.55	$0.02	$0.02
MOTOR VEHICLES - RENTS	$ 12,303.75	$0.04	$0.04
MOTOR VEHICLES - OTHER	$ 57,591.63	$0.18	$0.18
BENEFITS	$ 2,407,015.27	$7.35	$7.55
TOTAL DIRECTLY ASSIGNED	$ 11,365,486.69	$34.72	$35.66
TOTAL PRODUCTIVE HOURS	327,299.89		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: PROACTIVE ANALYSIS AND REPAIR CENTER			
WCT: PAR			
JFC: 4PXX OR 4332			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR-PRODUCTIVE	$744,785.41	$17.23	$17.69
DIRECT LABOR-PREMIUM	$5,416.72	$0.13	$0.13
DIRECT LABOR-OTHER EMP	$30,145.58	$0.70	$0.72
DIRECT LABOR-ANN PD ABS	$100,632.79	$2.33	$2.39
DIRECT ADMINISTRATION	$207,864.42	$4.81	$4.94
TOTAL DIRECT LABOR	$1,088,844.92	$25.19	$25.87
DIRECT LABOR-OTHER COST	$21,668.28	$0.50	$0.51
DIRECT LABOR-OTH COST-BC	$0.00	$0.00	$0.00
OTHER TOOLS-SALARIES	$29.18	$0.00	$0.00
OTHER TOOLS-BENEFITS	$8.71	$0.00	$0.00
OTHER TOOLS-RENTS	$1.82	$0.00	$0.00
OTHER TOOLS-OTHER	$715.28	$0.02	$0.02
MOTOR VEHICLES-SALARIES	$60.74	$0.00	$0.00
MOTOR VEHICLES-BENEFITS	$16.57	$0.00	$0.00
MOTOR VEHICLES-RENTS	$0.42	$0.00	$0.00
MOTOR VEHICLES-OTHER	$173.46	$0.00	$0.00
BENEFITS	$309,237.42	$7.15	$7.35
TOTAL DIRECTLY ASSIGNED	$1,420,756.80	$32.86	$33.75
TOTAL CLASSIFIED HOURS	43,231.25		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: CIRCUIT PROVISIONING GROUP			
WCT: CPG			
JFC: 470X OR 4N4X			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR - PRODUCTIVE	$ 9,042,764.47	$16.62	$17.07
DIRECT LABOR - PREMIUM	$ 240,423.35	$0.44	$0.45
DIRECT LABOR - OTHER EMPLOYEE	$ 380,143.67	$0.70	$0.72
DIRECT LABOR - ANNUAL PAID ABSENCE	$ 1,456,469.39	$2.68	$2.75
DIRECT ADMINISTRATION	$ 2,104,619.55	$3.87	$3.97
TOTAL DIRECT LABOR	$ 13,224,420.43	$24.31	$24.97
DIRECT LABOR - OTHER COSTS	$ 817,903.09	$1.50	$1.54
DIRECT LABOR - OTHER COSTS - BC	$ 23.77	$0.00	$0.00
OTHER TOOLS - SALARIES	$ 82.12	$0.00	$0.00
OTHER TOOLS - BENEFITS	$ 26.52	$0.00	$0.00
OTHER TOOLS - RENTS	$ 16.95	$0.00	$0.00
OTHER TOOLS - OTHER	$ 2,265.60	$0.00	$0.00
MOTOR VEHICLES - SALARIES	$ 115.75	$0.00	$0.00
MOTOR VEHICLES - BENEFITS	$ 44.12	$0.00	$0.00
MOTOR VEHICLES - RENTS	$ 137.83	$0.00	$0.00
MOTOR VEHICLES - OTHER	$ 477.99	$0.00	$0.00
BENEFITS	$ 4,476,221.70	$0.00	$0.00
TOTAL DIRECTLY ASSIGNED	$ 18,521,735.87	$34.05	$34.97
TOTAL CLASSIFIED PROD HOURS	543,952.00		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: ACCESS CUSTOMER ADVOCATE CENTER			
WCT: ACAC			
JFC: 4AXX OR 471X			
		1996	1997
		PRODUCTIVE	INFLATED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR - PRODUCTIVE	$ 1,202,074.42	$18.19	$18.68
DIRECT LABOR - PREMIUM	$ 73,913.25	$1.12	$1.15
DIRECT LABOR - OTHER EMPLOYEE	$ 42,109.64	$0.64	$0.65
DIRECT LABOR - ANNUAL PAID ABSENCE	$ 166,637.80	$2.52	$2.59
DIRECT ADMINISTRATION	$ 309,049.41	$4.68	$4.80
TOTAL DIRECT LABOR	$ 1,793,784.52	$27.14	$27.87
DIRECT LABOR - OTHER COSTS	$ 57,651.93	$0.87	$0.90
DIRECT LABOR - OTHER COSTS - BC	$ -	$0.00	$0.00
OTHER TOOLS - SALARIES	$ 29.24	$0.00	$0.00
OTHER TOOLS - BENEFITS	$ 9.71	$0.00	$0.00
OTHER TOOLS - RENTS	$ 2.24	$0.00	$0.00
OTHER TOOLS - OTHER	$ 898.75	$0.01	$0.01
MOTOR VEHICLES - SALARIES	$ 306.70	$0.00	$0.00
MOTOR VEHICLES - BENEFITS	$ 70.46	$0.00	$0.00
MOTOR VEHICLES - RENTS	$ 279.81	$0.00	$0.00
MOTOR VEHICLES - OTHER	$ 1,471.46	$0.02	$0.02
BENEFITS	$ 471,595.10	$7.13	$7.33
TOTAL DIRECTLY ASSIGNED	$ 2,326,099.92	$35.19	$36.14
TOTAL PRODUCTIVE HOURS	66,096.58		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: EQUIPMENT BILLING ACCURACY CONTROL			
WCT: EBAC			
JFC: 472X OR 4N3X			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR-PRODUCTIVE	$1,996,679.45	$16.32	$16.76
DIRECT LABOR-PREMIUM	$91,003.96	$0.74	$0.76
DIRECT LABOR-OTHER EMP	$86,583.73	$0.71	$0.73
DIRECT LABOR-ANN PD ABS	$322,454.47	$2.63	$2.71
DIRECT ADMINISTRATION	$450,965.09	$3.69	$3.78
TOTAL DIRECT LABOR	$2,947,686.70	$24.09	$24.74
DIRECT LABOR-OTHER COST	$198,466.05	$1.62	$1.67
DIRECT LABOR-OTH COST-BC	$4.67	$0.00	$0.00
OTHER TOOLS-SALARIES	$4,436.33	$0.04	$0.04
OTHER TOOLS-BENEFITS	$1,322.66	$0.01	$0.01
OTHER TOOLS-RENTS	$3,956.21	$0.03	$0.03
OTHER TOOLS-OTHER	$110,091.25	$0.90	$0.92
MOTOR VEHICLES-SALARIES	$8,965.16	$0.07	$0.08
MOTOR VEHICLES-BENEFITS	$2,572.17	$0.02	$0.02
MOTOR VEHICLES-RENTS	$3,175.88	$0.03	$0.03
MOTOR VEHICLES-OTHER	$44,076.68	$0.36	$0.37
BENEFITS	$1,010,985.17	$8.26	$8.48
TOTAL DIRECTLY ASSIGNED	$4,335,738.93	$35.43	$36.39
TOTAL CLASSIFIED HOURS	122,374.50		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: BUSINESS REPAIR CENTER			
WCT: BRC			
JFC: 4BXX			
		1996	**1997**
		CLASSIFIED	**CLASSIFIED**
	1996	**HOURLY COST**	**HOURLY COST**
COMPONENT	**DOLLARS****	**(B/B32)**	**(C*B3)**
DIRECT LABOR-PRODUCTIVE	$20,742,404.71	$18.94	$19.46
DIRECT LABOR-PREMIUM	$1,686,270.39	$1.54	$1.58
DIRECT LABOR-OTHER EMP	$1,484,224.07	$1.36	$1.39
DIRECT LABOR-ANN PD ABS	$3,146,818.17	$2.87	$2.95
DIRECT ADMINISTRATION	$3,441,459.11	$3.14	$3.23
TOTAL DIRECT LABOR	$30,501,176.45	$27.86	$28.61
DIRECT LABOR-OTHER COST	$514,441.86	$0.47	$0.48
DIRECT LABOR-OTH COST-BC	$7.26	$0.00	$0.00
OTHER TOOLS-SALARIES	$242.05	$0.00	$0.00
OTHER TOOLS-BENEFITS	$82.84	$0.00	$0.00
OTHER TOOLS-RENTS	$74.89	$0.00	$0.00
OTHER TOOLS-OTHER	$13,736.12	$0.01	$0.01
MOTOR VEHICLES-SALARIES	$5,180.16	$0.00	$0.00
MOTOR VEHICLES-BENEFITS	$1,618.39	$0.00	$0.00
MOTOR VEHICLES-RENTS	$2,972.94	$0.00	$0.00
MOTOR VEHICLES-OTHER	$20,511.80	$0.02	$0.02
BENEFITS	$8,281,421.72	$7.56	$7.77
TOTAL DIRECTLY ASSIGNED	$39,341,466.48	$35.93	$36.90
TOTAL CLASSIFIED HOURS	1,094,881.25		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: RESIDENCE REPAIR CENTER			
WCT: RRC			
JFC: 4RXX			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR-PRODUCTIVE	$7,402,890.40	$15.44	$15.85
DIRECT LABOR-PREMIUM	$658,872.75	$1.37	$1.41
DIRECT LABOR-OTHER EMP	$393,338.58	$0.82	$0.84
DIRECT LABOR-ANN PD ABS	$1,129,071.66	$2.35	$2.42
DIRECT ADMINISTRATION	$1,741,062.48	$3.63	$3.73
TOTAL DIRECT LABOR	$11,325,235.87	$23.62	$24.26
DIRECT LABOR-OTHER COST	$98,561.13	$0.21	$0.21
DIRECT LABOR-OTH COST-BC	$0.00	$0.00	$0.00
OTHER TOOLS-SALARIES	$0.00	$0.00	$0.00
OTHER TOOLS-BENEFITS	$0.00	$0.00	$0.00
OTHER TOOLS-RENTS	$0.00	$0.00	$0.00
OTHER TOOLS-OTHER	$0.00	$0.00	$0.00
MOTOR VEHICLES-SALARIES	$1,012.18	$0.00	$0.00
MOTOR VEHICLES-BENEFITS	$272.58	$0.00	$0.00
MOTOR VEHICLES-RENTS	$319.61	$0.00	$0.00
MOTOR VEHICLES-OTHER	$4,693.99	$0.01	$0.01
BENEFITS	$3,939,398.87	$8.22	$8.44
TOTAL DIRECTLY ASSIGNED	$15,369,494.23	$32.05	$32.92
TOTAL CLASSIFIED HOURS	479,529.25		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: WORK MANAGEMENT CENTER			
WCT: WMC			
JFC: 4WXX OR 401X			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B32)	(C*B3)
DIRECT LABOR - PRODUCTIVE	$ 29,221,595.01	$ 15.52	$ 15.94
DIRECT LABOR - PREMIUM	$ 1,454,467.12	$ 0.77	$ 0.79
DIRECT LABOR - OTHER EMPLOYEE	$ 1,356,262.39	$ 0.72	$ 0.74
DIRECT LABOR - ANNUAL PAID ABSENCE	$ 4,340,668.73	$ 2.31	$ 2.37
DIRECT ADMINISTRATION	$ 8,820,855.65	$ 4.69	$ 4.81
TOTAL DIRECT LABOR	$ 45,193,848.90	$ 24.01	$ 24.65
DIRECT LABOR - OTHER COSTS	$ 830,562.12	$ 0.44	$ 0.45
DIRECT LABOR - OTHER COSTS - BC	$ -	$ -	$ -
OTHER TOOLS - SALARIES	$ -	$ -	$ -
OTHER TOOLS - BENEFITS	$ -	$ -	$ -
OTHER TOOLS - RENTS	$ -	$ -	$ -
OTHER TOOLS - OTHER	$ -	$ -	$ -
MOTOR VEHICLES - SALARIES	$ 4,394.43	$ 0.00	$ 0.00
MOTOR VEHICLES - BENEFITS	$ 1,441.18	$ 0.00	$ 0.00
MOTOR VEHICLES - RENTS	$ 3,138.21	$ 0.00	$ 0.00
MOTOR VEHICLES - OTHER	$ 20,770.03	$ 0.01	$ 0.01
BENEFITS	$ 13,384,005.02	$ 7.11	$ 7.30
TOTAL DIRECTLY ASSIGNED	$ 59,438,159.89	$ 31.57	$ 32.43
TOTAL CLASSIFIED PROD HOURS	1,882,565.00		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: LAND AND BUILDINGS (FG10)			
JFC: 30XX OR 0030 OR 350X			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B23)	(C*B3)
DIRECT ENG-PRODUCTIVE	$5,416,377.00	$30.82	$31.65
DIRECT ENG-PREMIUM	$5,636.00	$0.03	$0.03
DIRECT ENG-OTHER EMP	$838,645.00	$4.77	$4.90
DIRECT ENG-ANN PD ABS	$637,632.00	$3.63	$3.73
DIRECT ADMINISTRATION	$1,240,520.00	$7.06	$7.25
TOTAL DIRECT LABOR	$8,138,810.00	$46.31	$47.56
DIRECT ENG-OTHER COSTS	$971,879.00	$5.53	$5.68
DIRECT ENG-OTHER-BC	$0.00	$0.00	$0.00
BENEFITS	$1,714,429.00	$9.76	$10.02
TOTAL DIRECTLY ASSIGNED	$10,825,118.00	$61.59	$63.26
TOTAL CLASSIFIED HOURS	175,747.00		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: NETWORK AND ENGINEERING PLANNING (FG20)			
JFC: 0031 OR 0036 OR 31XX OR 34XX OR 3A0X OR 3A1 OR 3A2 OR 3B1X			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B23)	(C*B3)
DIRECT ENG-PRODUCTIVE	$50,185,617.00	$25.70	$26.39
DIRECT ENG-PREMIUM	$414,942.00	$0.21	$0.22
DIRECT ENG-OTHER EMP	$7,480,794.00	$3.83	$3.93
DIRECT ENG-ANN PD ABS	$6,813,944.00	$3.49	$3.58
DIRECT ADMINISTRATION	$12,177,768.00	$6.24	$6.40
TOTAL DIRECT LABOR	$77,073,065.00	$39.46	$40.53
DIRECT ENG-OTHER COSTS	$6,912,226.00	$3.54	$3.63
DIRECT ENG-OTHER-BC	$0.00	$0.00	$0.00
BENEFITS	$16,849,312.00	$8.63	$8.86
TOTAL DIRECTLY ASSIGNED	$100,834,603.00	$51.63	$53.03
TOTAL CLASSIFIED HOURS	1,952,963.00		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: NETWORK PLUG-IN ADMINISTRATION (PICS)			
JFC: 3A2X OR 341X			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	**DOLLARS****	**(B/B23)**	**(C*B3)**
DIRECT ENG-PRODUCTIVE	$1,215,509.34	$16.04	$16.47
DIRECT ENG-PREMIUM	$75,492.60	$1.00	$1.02
DIRECT ENG-OTHER EMP	$130,531.31	$1.72	$1.77
DIRECT ENG-ANN PD ABS	$197,718.23	$2.61	$2.68
DIRECT ADMINISTRATION	$280,041.06	$3.70	$3.80
TOTAL DIRECT LABOR	$1,899,292.55	$25.07	$25.74
DIRECT ENG-OTHER COSTS	$114,813.13	$1.52	$1.56
DIRECT ENG-OTHER-BC	$0.00	$0.00	$0.00
BENEFITS	$558,821.89	$7.37	$7.57
TOTAL DIRECTLY ASSIGNED	$2,572,927.57	$33.96	$34.87
TOTAL CLASSIFIED HOURS	75,773.00		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
FG/FSG: OUTSIDE PLANT ENGINEERING (FG30)			
JFC: 0032 OR 32XX OR 356X			
		1996	1997
		CLASSIFIED	CLASSIFIED
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B23)	(C*B3)
DIRECT ENG-PRODUCTIVE	$93,878,832.00	$22.26	$22.86
DIRECT ENG-PREMIUM	$1,043,839.00	$0.25	$0.25
DIRECT ENG-OTHER EMP	$11,466,632.00	$2.72	$2.79
DIRECT ENG-ANN PD ABS	15579213.00	$4.77	$4.90
DIRECT ADMINISTRATION	$20,108,042.00	$4.77	$4.90
TOTAL DIRECT LABOR	$142,076,558.00	$33.69	$34.60
DIRECT ENG-OTHER COSTS	$7,089,252.00	$1.68	$1.73
DIRECT ENG-OTHER-BC	$0.00	$0.00	$0.00
BENEFITS	$36,693,327.00	$8.70	$8.94
TOTAL DIRECTLY ASSIGNED	$185,859,137.00	$44.07	$45.26
TOTAL CLASSIFIED HOURS	4,216,929.00		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
GROUP: CARRIER ACCESS BILLING SYSTEM (CABS)			
JFC: 1200			
		1996	1997
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B23)	(C*B3)
DIRECT LABOR-PRODUCTIVE	$2,578,216.32	$18.53	$19.03
ADMINISTRATIVE CLERICAL	$54,256.78	$0.39	$0.40
DIRECT ADMINISTRATION	$354,419.33	$2.55	$2.62
DIRECT LABOR-PREMIUM	$11,228.64	$0.08	$0.08
DIRECT LABOR-ANN PD ABS	$260,831.07	$1.87	$1.93
TRAINING	$0.00	$0.00	$0.00
DIRECT LABOR-OTHER EMP	$394,241.92	$2.83	$2.91
TOTAL DIRECT LABOR	$3,598,937.28	$26.26	$26.97
DIRECT LABOR-OTHER COST	$42.00	$0.00	$0.00
BENEFITS	$1,884,023.84	$13.54	$13.91
TOTAL DIRECTLY ASSIGNED	$5,483,003.12	$39.80	$40.88
TOTAL HOURS	139,119.94		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
GROUP: CUSTOMER POINT OF CONTACT-ICSC/LCSC			
JFC: 2300			
		1996	1997
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B23)	(C*B3)
DIRECT LABOR-PRODUCTIVE	$5,333,747.99	$16.64	$17.09
ADMINISTRATIVE CLERICAL	$278,193.18	$0.87	$0.89
DIRECT ADMINISTRATION	$1,093,135.54	$3.41	$3.50
DIRECT LABOR-PREMIUM	$253,304.88	$0.79	$0.81
DIRECT LABOR-ANN PD ABS	$738,210.57	$2.30	$2.37
TRAINING	$0.00	$0.00	$0.00
DIRECT LABOR-OTHER EMP	$208,883.61	$0.65	$0.67
TOTAL DIRECT LABOR	$7,905,475.77	$24.67	$25.33
DIRECT LABOR-OTHER COST	$5,656.50	$0.02	$0.02
BENEFITS	$5,296,990.76	$16.53	$16.97
TOTAL DIRECTLY ASSIGNED	$13,208,123.03	$41.21	$42.32
TOTAL HOURS	320,490.84		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
GROUP: OPERATOR SERVICES (POTS)			
JFC: 2120 OR 2129 OR 212G			
		1996	1997
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B23)	(C*B3)
DIRECT LABOR-PRODUCTIVE	$22,421,436.96	$15.10	$15.51
ADMINISTRATIVE CLERICAL	$89,084.16	$0.06	$0.06
DIRECT ADMINISTRATION	$2,311,589.80	$1.56	$1.60
DIRECT LABOR-PREMIUM	$1,480,095.96	$1.00	$1.02
DIRECT LABOR-ANN PD ABS	$3,853,768.12	$2.60	$2.67
TRAINING	$0.00	$0.00	$0.00
DIRECT LABOR-OTHER EMP	$4,240,278.89	$2.86	$2.93
TOTAL DIRECT LABOR	$34,396,253.89	$23.17	$23.79
DIRECT LABOR-OTHER COST	$65,749.81	$0.04	$0.05
BENEFITS	$9,974,393.07	$6.72	$6.90
TOTAL DIRECTLY ASSIGNED	$44,436,396.77	$29.93	$30.74
TOTAL HOURS	1,484,736.06		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

DIR ASST OPER

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
GROUP: DIRECTORY ASSISTANCE			
JFC: 2940 OR 2949 OR 294G			
		1996	1997
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B23)	(C*B3)
DIRECT LABOR-PRODUCTIVE	$84,034,521.44	$14.75	$15.15
ADMINISTRATIVE CLERICAL	$0.00	$0.00	$0.00
DIRECT ADMINISTRATION	$5,250,054.66	$0.92	$0.95
DIRECT LABOR-PREMIUM	$5,070,960.29	$0.89	$0.91
DIRECT LABOR-ANN PD ABS	$13,024,914.19	$2.29	$2.35
TRAINING	$0.00	$0.00	$0.00
DIRECT LABOR-OTHER EMP	$10,163,335.16	$1.78	$1.83
TOTAL DIRECT LABOR	$117,543,785.74	$20.63	$21.19
DIRECT LABOR-OTHER COST	$144,712.98	$0.03	$0.03
BENEFITS	$37,739,210.16	$6.62	$6.80
TOTAL DIRECTLY ASSIGNED	$155,427,708.88	$27.28	$28.01
TOTAL HOURS	5,698,241.82		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
GROUP: COIN COLLECTOR			
JFC: 2600 OR 260G			
		1996	1997
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B23)	(C*B3)
DIRECT LABOR-PRODUCTIVE	$5,156,591.68	$17.25	$17.71
ADMINISTRATIVE CLERICAL	$421,571.80	$1.41	$1.45
DIRECT ADMINISTRATION	$846,133.46	$2.83	$2.91
DIRECT LABOR-PREMIUM	$531,024.11	$1.78	$1.82
DIRECT LABOR-ANN PD ABS	$691,612.21	$2.31	$2.38
TRAINING	$0.00	$0.00	$0.00
DIRECT LABOR-OTHER EMP	$200,455.45	$0.67	$0.69
TOTAL DIRECT LABOR	$7,847,388.71	$26.25	$26.96
DIRECT LABOR-OTHER COST	$1,165.50	$0.00	$0.00
BENEFITS	$1,992,137.48	$6.66	$6.84
TOTAL DIRECTLY ASSIGNED	$9,840,691.69	$32.91	$33.80
TOTAL HOURS	298,987.09		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
GROUP: COLLECTIONS REP-RESIDENCE			
JFC: 2E40 OR 2E4G			
		1996	1997
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B23)	(C*B3)
DIRECT LABOR-PRODUCTIVE	$40,225,062.20	$16.67	$17.12
ADMINISTRATIVE CLERICAL	$3,235,351.80	$1.34	$1.38
DIRECT ADMINISTRATION	$4,496,677.20	$1.86	$1.91
DIRECT LABOR-PREMIUM	$1,756,578.39	$0.73	$0.75
DIRECT LABOR-ANN PD ABS	$5,992,543.58	$2.48	$2.55
TRAINING	$0.00	$0.00	$0.00
DIRECT LABOR-OTHER EMP	$4,860,214.20	$2.01	$2.07
TOTAL DIRECT LABOR	$60,566,427.37	$25.09	$25.77
DIRECT LABOR-OTHER COST	$43,874.00	$0.02	$0.02
BENEFITS	$17,668,267.79	$7.32	$7.52
TOTAL DIRECTLY ASSIGNED	$78,278,569.16	$32.43	$33.31
TOTAL HOURS	2,413,700.12		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
GROUP: COLLECTIONS REP-BUSINESS			
JFC: 2840 OR 284G			
		1996	1997
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B23)	(C*B3)
DIRECT LABOR-PRODUCTIVE	$7,015,243.41	$16.39	$16.83
ADMINISTRATIVE CLERICAL	$543,720.97	$1.27	$1.30
DIRECT ADMINISTRATION	$986,201.16	$2.30	$2.37
DIRECT LABOR-PREMIUM	$176,064.52	$0.41	$0.42
DIRECT LABOR-ANN PD ABS	$1,029,902.37	$2.41	$2.47
TRAINING	$0.00	$0.00	$0.00
DIRECT LABOR-OTHER EMP	$699,420.43	$1.63	$1.68
TOTAL DIRECT LABOR	$10,450,552.86	$24.41	$25.07
DIRECT LABOR-OTHER COST	$5,811.00	$0.01	$0.01
BENEFITS	$3,171,093.82	$7.41	$7.61
TOTAL DIRECTLY ASSIGNED	$13,627,457.68	$31.83	$32.69
TOTAL HOURS	428,126.75		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
GROUP: SERVICE REP-RESIDENCE			
JFC: 2E50 OR 2570 OR 2E5G OR 2E7G			
		1996	1997
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B23)	(C*B3)
DIRECT LABOR-PRODUCTIVE	$134,733,682.37	$17.70	$18.18
ADMINISTRATIVE CLERICAL	$11,114,002.82	$1.46	$1.50
DIRECT ADMINISTRATION	$18,703,117.40	$2.46	$2.52
DIRECT LABOR-PREMIUM	$8,515,830.49	$1.12	$1.15
DIRECT LABOR-ANN PD ABS	$18,195,022.23	$2.39	$2.45
TRAINING	$0.00	$0.00	$0.00
DIRECT LABOR-OTHER EMP	$16,058,420.98	$2.11	$2.17
TOTAL DIRECT LABOR	$207,320,076.29	$27.23	$27.97
DIRECT LABOR-OTHER COST	$248,764.42	$0.03	$0.03
BENEFITS	$56,282,318.30	$7.39	$7.59
TOTAL DIRECTLY ASSIGNED	$263,851,159.01	$34.66	$35.60
TOTAL HOURS	7,612,330.70		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
GROUP: SERVICE REP-BUSINESS			
JFC: 2850 OR 2870 OR 2880 OR 285G OR 287G OR 288G			
		1996	1997
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B23)	(C*B3)
DIRECT LABOR-PRODUCTIVE	$31,963,354.14	$17.61	$18.08
ADMINISTRATIVE CLERICAL	$2,359,798.91	$1.30	$1.34
DIRECT ADMINISTRATION	$5,420,291.69	$2.99	$3.07
DIRECT LABOR-PREMIUM	$1,261,150.51	$0.69	$0.71
DIRECT LABOR-ANN PD ABS	$4,905,651.67	$2.70	$2.78
TRAINING	$0.00	$0.00	$0.00
DIRECT LABOR-OTHER EMP	$2,623,952.83	$1.45	$1.48
TOTAL DIRECT LABOR	$48,534,199.75	$26.74	$27.46
DIRECT LABOR-OTHER COST	$26,123.50	$0.01	$0.01
BENEFITS	$13,797,535.71	$7.60	$7.81
TOTAL DIRECTLY ASSIGNED	$62,357,858.96	$34.35	$35.28
TOTAL HOURS	1,815,229.93		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
GROUP: COMPTROLLERS CLERICAL			
JFC: 1240 OR 1250 OR 1260 OR 1270			
		1996	1997
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B23)	(C*B3)
DIRECT LABOR-PRODUCTIVE	$17,011,712.79	$17.05	$17.51
ADMINISTRATIVE CLERICAL	$712,129.08	$0.71	$0.73
DIRECT ADMINISTRATION	$1,545,230.42	$1.55	$1.59
DIRECT LABOR-PREMIUM	$1,106,955.98	$1.11	$1.14
DIRECT LABOR-ANN PD ABS	$1,715,562.33	$1.72	$1.77
TRAINING	$0.00	$0.00	$0.00
DIRECT LABOR-OTHER EMP	$2,611,722.54	$2.62	$2.69
TOTAL DIRECT LABOR	$24,703,313.14	$24.77	$25.43
DIRECT LABOR-OTHER COST	$1,921.50	$0.00	$0.00
BENEFITS	$12,742,931.69	$12.77	$13.12
TOTAL DIRECTLY ASSIGNED	$37,448,166.33	$37.54	$38.56
TOTAL HOURS	997,509.00		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

A	B	C	D
INFLATION FACTOR:*	1.027		
STATE: REGION			
GROUP: NETWORK SERVICES CLERICAL			
JFC: 2700 OR 2730			
		1996	1997
	1996	HOURLY COST	HOURLY COST
COMPONENT	DOLLARS**	(B/B23)	(C*B3)
DIRECT LABOR-PRODUCTIVE	$6,077,541.30	$17.65	$18.13
ADMINISTRATIVE CLERICAL	$86,419.90	$0.25	$0.26
DIRECT ADMINISTRATION	$1,188,266.84	$3.45	$3.54
DIRECT LABOR-PREMIUM	$151,970.69	$0.44	$0.45
DIRECT LABOR-ANN PD ABS	$664,828.85	$1.93	$1.98
TRAINING	$0.00	$0.00	$0.00
DIRECT LABOR-OTHER EMP	$973,896.24	$2.83	$2.91
TOTAL DIRECT LABOR	$9,142,923.82	$26.56	$27.27
DIRECT LABOR-OTHER COST	$2,648.07	$0.01	$0.01
BENEFITS	$2,618,596.28	$7.61	$7.81
TOTAL DIRECTLY ASSIGNED	$11,764,168.17	$34.17	$35.09
TOTAL HOURS	344,293.44		
*BELLSOUTH REGION TELEPHONE PLANT INDEXES			
**DATA EXTRACT FROM FINANCIAL PROCESSOR			

DIRECTLY ASSIGNED LABOR RATES FOR ACCOUNT EXECUTIVE, SYSTEMS DESIGNER AND SERVICE CONSULTANT		
INFLATION FACTOR:*	1.027	
	1996	1997 HOURLY RATE
ACCOUNT EXECUTIVE	**HOURLY RATE**	**(B*B4)**
DIRECT SALARIES AND WAGES	$ 54.90	$ 56.38
OTHER DIRECT	$ 12.88	$ 13.23
DIRECTLY ASSIGNED WITH SALES COMP	**$ 67.78**	**$ 69.61**
DIRECT SALARIES AND WAGES	$ 44.60	$ 45.80
OTHER DIRECT	$ 10.46	$ 10.74
DIRECTLY ASSIGNED WITHOUT SALES COMP	**$ 55.06**	**$ 56.55**
SYSTEMS DESIGNER		
DIRECT SALARIES AND WAGES	$ 50.05	$ 51.40
OTHER DIRECT	$ 11.74	$ 12.06
DIRECTLY ASSIGNED WITH SALES COMP	**$ 61.79**	**$ 63.46**
DIRECT SALARIES AND WAGES	$ 46.02	$ 47.26
OTHER DIRECT	$ 10.79	$ 11.08
DIRECTLY ASSIGNED WITHOUT SALES COMP	**$ 56.81**	**$ 58.34**
SERVICE CONSULTANT		
DIRECT SALARIES AND WAGES	$ 33.49	$ 34.39
OTHER DIRECT	$ 7.86	$ 8.07
DIRECTLY ASSIGNED	**$ 41.35**	**$ 42.47**
*BELLSOUTH REGION TELEPHONE PLANT INDEXES		
SOURCE: FINANCE DEPARTMENT/BELLSOUTH BUSINESS SYSTEMS		

TELRIC IT PB DETAIL

A	B	C	D	E	F	G	H
1998 - 2000 TELRIC LABOR RATES							7-15-98
BST IT	DIRECT S&W*	OTHER DIRECT**	SHARED LABOR FACTOR***	SHARED COSTS (B*D)	LABOR RATES (B+C+E)	1998 - 2000 INFLATION FACTOR****	1998 - 2000 TELRIC LABOR RATES (F*G)
PAY BAND 54	$ 25.95	$ 10.46	0	$ -	$ 36.41	1.059854	$ 38.59
PAY BAND 55	$ 27.38	$ 10.86	0	$ -	$ 38.24	1.059854	$ 40.53
PAY BAND 56	$ 31.46	$ 11.97	0	$ -	$ 43.43	1.059854	$ 46.03
PAY BAND 57	$ 32.79	$ 12.33	0	$ -	$ 45.12	1.059854	$ 47.82
PAY BAND 58	$ 36.22	$ 13.26	0	$ -	$ 49.48	1.059854	$ 52.44
PAY BAND 59	$ 40.28	$ 14.37	0	$ -	$ 54.65	1.059854	$ 57.92
PAY BAND 60	$ 45.18	$ 15.71	0	$ -	$ 60.89	1.059854	$ 64.53
PAY BAND 61	$ 49.68	$ 16.93	0	$ -	$ 66.61	1.059854	$ 70.60
WAGE SCALE 10	$ 23.33	$ 9.75	0	$ -	$ 33.08	1.059854	$ 35.06
WAGE SCALE 14	$ 24.05	$ 9.94	0	$ -	$ 33.99	1.059854	$ 36.02
WAGE SCALE 16	$ 24.53	$ 10.08	0	$ -	$ 34.61	1.059854	$ 36.68
WAGE SCALE 18	$ 24.90	$ 10.18	0	$ -	$ 35.08	1.059854	$ 37.18
WAGE SCALE 32	$ 29.76	$ 11.50	0	$ -	$ 41.26	1.059854	$ 43.73
*IT PAY BAND B6:B23							
**IT PAY BAND B24:B29							
***SHARED LABOR FACTOR B56							
**** INFL FACTOR E14							

000213

IT PAY BAND

BST IT
AREA: REGION
SOURCE: FINANCIAL MANAGEMENT/EXPENSE ACTUALS - BY EXTC DETAIL

COMPONENT	PAY BAND 54	PAY BAND 55	PAY BAND 56	PAY BAND 57	PAY BAND 58	PAY BAND 59	PAY BAND 60	PAY BAND 61
BASIC SALARIES	$ 17.63	$ 19.06	$ 23.14	$ 24.47	$ 27.90	$ 31.96	$ 36.86	$ 41.36
CLERICAL WAGES	$ 3.87	$ 3.87	$ 3.87	$ 3.87	$ 3.87	$ 3.87	$ 3.87	$ 3.87
PREMIUM OT-MGMT	$ 0.23	$ 0.23	$ 0.23	$ 0.23	$ 0.23	$ 0.23	$ 0.23	$ 0.23
PREMIUM OT-NON-MGMT	$ 0.18	$ 0.18	$ 0.18	$ 0.18	$ 0.18	$ 0.18	$ 0.18	$ 0.18
PAID ABSENCE-MGMT	$ 0.47	$ 0.47	$ 0.47	$ 0.47	$ 0.47	$ 0.47	$ 0.47	$ 0.47
PAID ABSENCE-NON-MGMT	$ 0.53	$ 0.53	$ 0.53	$ 0.53	$ 0.53	$ 0.53	$ 0.53	$ 0.53
IND INCENT AWARD-MGMT	$ 0.90	$ 0.90	$ 0.90	$ 0.90	$ 0.90	$ 0.90	$ 0.90	$ 0.90
IND INCENT AWARD-NON-MGMT	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
INCENT PROT PLAN-MGMT	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
INCENT PROT PLAN-NON-MGMT	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
MKT INC PAY-MGMT	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
MKT INC PAY-NON-MGMT	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TEAM INCENT AWARD-MGMT	$ 1.65	$ 1.65	$ 1.65	$ 1.65	$ 1.65	$ 1.65	$ 1.65	$ 1.65
TEAM INCENT AWARD-NON-MGM	$ 0.11	$ 0.11	$ 0.11	$ 0.11	$ 0.11	$ 0.11	$ 0.11	$ 0.11
OTHER PLANS-MGMT	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13
OTHER PLANS-NON-MGMT	$ 0.02	$ 0.02	$ 0.02	$ 0.02	$ 0.02	$ 0.02	$ 0.02	$ 0.02
ALL OTHER-MGMT	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16
ALL OTHER-NON-MGMT	$ 0.07	$ 0.07	$ 0.07	$ 0.07	$ 0.07	$ 0.07	$ 0.07	$ 0.07
PENSIONS/BENEFITS	$ 5.09	$ 5.38	$ 6.18	$ 6.44	$ 7.11	$ 7.91	$ 8.87	$ 9.75
TAXES	$ 1.98	$ 2.09	$ 2.40	$ 2.50	$ 2.76	$ 3.07	$ 3.45	$ 3.79
CONFERENCE & TRAVEL	$ 1.11	$ 1.11	$ 1.11	$ 1.11	$ 1.11	$ 1.11	$ 1.11	$ 1.11
RELOCATION	$ 0.36	$ 0.36	$ 0.36	$ 0.36	$ 0.36	$ 0.36	$ 0.36	$ 0.36
SUPPLIES	$ 1.27	$ 1.27	$ 1.27	$ 1.27	$ 1.27	$ 1.27	$ 1.27	$ 1.27
OTHER DIRECT	$ 0.65	$ 0.65	$ 0.65	$ 0.65	$ 0.65	$ 0.65	$ 0.65	$ 0.65
DIRECTLY ASSIGNED	$ 36.41	$ 38.24	$ 43.43	$ 45.12	$ 49.48	$ 54.65	$ 60.89	$ 66.61

IT PAY BAND

BST IT
AREA: REGION
SOURCE: FINANCIAL MANAGEMENT/EXPENSE ACTUALS - BY EXTC DETAIL

COMPONENT	WAGE SCALE 10	WAGE SCALE 14	WAGE SCALE 16	WAGE SCALE 18	WAGE SCALE 32
BASIC SALARIES	$ 15.01	$ 15.73	$ 16.21	$ 16.58	$ 21.44
CLERICAL WAGES	$ 3.87	$ 3.87	$ 3.87	$ 3.87	$ 3.87
PREMIUM OT-MGMT	$ 0.23	$ 0.23	$ 0.23	$ 0.23	$ 0.23
PREMIUM OT-NON-MGMT	$ 0.18	$ 0.18	$ 0.18	$ 0.18	$ 0.18
PAID ABSENCE-MGMT	$ 0.47	$ 0.47	$ 0.47	$ 0.47	$ 0.47
PAID ABSENCE-NON-MGMT	$ 0.53	$ 0.53	$ 0.53	$ 0.53	$ 0.53
IND INCENT AWARD-MGMT	$ 0.90	$ 0.90	$ 0.90	$ 0.90	$ 0.90
IND INCENT AWARD-NON-MGMT	$ -	$ -	$ -	$ -	$ -
INCENT PROT PLAN-MGMT	$ -	$ -	$ -	$ -	$ -
INCENT PROT PLAN-NON-MGMT	$ -	$ -	$ -	$ -	$ -
MKT INC PAY-MGMT	$ -	$ -	$ -	$ -	$ -
MKT INC PAY-NON-MGMT	$ -	$ -	$ -	$ -	$ -
TEAM INCENT AWARD-MGMT	$ 1.65	$ 1.65	$ 1.65	$ 1.65	$ 1.65
TEAM INCENT AWARD-NON-MGM	$ 0.11	$ 0.11	$ 0.11	$ 0.11	$ 0.11
OTHER PLANS-MGMT	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13
OTHER PLANS-NON-MGMT	$ 0.02	$ 0.02	$ 0.02	$ 0.02	$ 0.02
ALL OTHER-MGMT	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16
ALL OTHER-NON-MGMT	$ 0.07	$ 0.07	$ 0.07	$ 0.07	$ 0.07
PENSIONS/BENEFITS	$ 4.58	$ 4.72	$ 4.82	$ 4.89	$ 5.84
TAXES	$ 1.78	$ 1.83	$ 1.87	$ 1.90	$ 2.27
CONFERENCE & TRAVEL	$ 1.11	$ 1.11	$ 1.11	$ 1.11	$ 1.11
RELOCATION	$ 0.36	$ 0.36	$ 0.36	$ 0.36	$ 0.36
SUPPLIES	$ 1.27	$ 1.27	$ 1.27	$ 1.27	$ 1.27
OTHER DIRECT	$ 0.65	$ 0.65	$ 0.65	$ 0.65	$ 0.65
DIRECTLY ASSIGNED	$ 33.08	$ 33.99	$ 34.61	$ 35.08	$ 41.26

TELRIC MKTG PB DETAIL

A	B	C	D	E	F	G	H
1998 - 2000 TELRIC LABOR RATES							7-15-98
BST MARKETING	DIRECT S&W*	OTHER DIRECT**	SHARED LABOR FACTOR***	SHARED COSTS (B*D)	LABOR RATES (B+C+E)	1998 - 2000 INFLATION FACTOR****	1998 - 2000 TELRIC LABOR RATES (F*G)
PAY BAND 56	$ 28.50	$ 12.34	0	$ -	$ 40.84	1.059854	$ 43.28
PAY BAND 57	$ 29.83	$ 12.70	0	$ -	$ 42.53	1.059854	$ 45.08
PAY BAND 58	$ 33.26	$ 13.34	0	$ -	$ 46.60	1.059854	$ 49.39
PAY BAND 59	$ 37.32	$ 14.73	0	$ -	$ 52.05	1.059854	$ 55.17
PAY BAND 61	$ 46.72	$ 17.30	0	$ -	$ 64.02	1.059854	$ 67.85
WAGE SCALE 10	$ 20.37	$ 10.12	0	$ -	$ 30.49	1.059854	$ 32.31
*MARKETING PAY BAND B6:B23							
**MARKETING PAY BAND B24:B29							
***SHARED LABOR FACTOR B56							
**** INFL FACTOR E14							

000216

MARKETING PAY BAND

BST MARKETING
AREA: REGION
SOURCE: FINANCIAL MANAGEMENT/EXPENSE ACTUALS - BY EXTC DETAIL

COMPONENT	PAY BAND 56	PAY BAND 57	PAY BAND 58	PAY BAND 59	PAY BAND 61	WAGE SCALE 10
BASIC SALARIES	$ 23.14	$ 24.47	$ 27.90	$ 31.96	$ 41.36	$ 15.01
CLERICAL WAGES	$ 1.72	$ 1.72	$ 1.72	$ 1.72	$ 1.72	$ 1.72
PREMIUM OT-MGMT	$ 0.02	$ 0.02	$ 0.02	$ 0.02	$ 0.02	$ 0.02
PREMIUM OT-NON-MGMT	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03
PAID ABSENCE-MGMT	$ 0.45	$ 0.45	$ 0.45	$ 0.45	$ 0.45	$ 0.45
PAID ABSENCE-NON-MGMT	$ 0.20	$ 0.20	$ 0.20	$ 0.20	$ 0.20	$ 0.20
IND INCENT AWARD-MGMT	$ 0.88	$ 0.88	$ 0.88	$ 0.88	$ 0.88	$ 0.88
IND INCENT AWARD-NON-MGMT	$ -	$ -	$ -	$ -	$ -	$ -
INCENT PROT PLAN-MGMT	$ -	$ -	$ -	$ -	$ -	$ -
INCENT PROT PLAN-NON-MGMT	$ -	$ -	$ -	$ -	$ -	$ -
MKT INC PAY-MGMT	$ -	$ -	$ -	$ -	$ -	$ -
MKT INC PAY-NON-MGMT	$ -	$ -	$ -	$ -	$ -	$ -
TEAM INCENT AWARD-MGMT	$ 1.72	$ 1.72	$ 1.72	$ 1.72	$ 1.72	$ 1.72
TEAM INCENT AWARD-NON-MGM	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05
OTHER PLANS-MGMT	$ 0.10	$ 0.10	$ 0.10	$ 0.10	$ 0.10	$ 0.10
OTHER PLANS-NON-MGMT	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01
ALL OTHER-MGMT	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16	$ 0.16
ALL OTHER-NON-MGMT	$ 0.02	$ 0.02	$ 0.02	$ 0.02	$ 0.02	$ 0.02
PENSIONS/BENEFITS	$ 5.59	$ 5.85	$ 6.23	$ 7.31	$ 9.16	$ 3.99
TAXES	$ 2.17	$ 2.27	$ 2.53	$ 2.84	$ 3.56	$ 1.55
CONFERENCE & TRAVEL	$ 2.43	$ 2.43	$ 2.43	$ 2.43	$ 2.43	$ 2.43
RELOCATION	$ 0.37	$ 0.37	$ 0.37	$ 0.37	$ 0.37	$ 0.37
SUPPLIES	$ 0.89	$ 0.89	$ 0.89	$ 0.89	$ 0.89	$ 0.89
OTHER DIRECT	$ 0.89	$ 0.89	$ 0.89	$ 0.89	$ 0.89	$ 0.89
DIRECTLY ASSIGNED	$ 40.84	$ 42.53	$ 46.60	$ 52.05	$ 64.02	$ 30.49

TELRIC NTWK PB DETAIL

A	B	C	D	E	F	G	H
			1998 - 2000 TELRIC LABOR RATES				7-15-98
BST NETWORK	DIRECT S&W*	OTHER DIRECT**	SHARED LABOR FACTOR***	SHARED COSTS (B*D)	LABOR RATES (B+C+E)	1998 - 2000 INFLATION FACTOR****	1998 - 2000 TELRIC LABOR RATES (F*G)
PAY BAND 56	$ 28.73	$ 12.69	0	$ -	$ 41.42	1.059854	$ 43.90
PAY BAND 57	$ 30.06	$ 13.05	0	$ -	$ 43.11	1.059854	$ 45.69
PAY BAND 58	$ 33.49	$ 13.98	0	$ -	$ 47.47	1.059854	$ 50.31
PAY BAND 59	$ 37.55	$ 15.08	0	$ -	$ 52.63	1.059854	$ 55.78
PAY BAND 61	$ 46.95	$ 17.62	0	$ -	$ 64.57	1.059854	$ 68.43
WAGE SCALE 10	$ 20.60	$ 10.50	0	$ -	$ 31.10	1.059854	$ 32.96
*NETWORK PAY BAND B6:B23							
**NETWORK PAY BAND B24:B29							
***SHARED LABOR FACTOR B47							
**** INFL FACTOR E14							

000218

NETWORK PAY BAND

BST NETWORK
AREA: REGION
SOURCE: FINANCIAL MANAGEMENT/EXPENSE ACTUALS - BY EXTC DETAIL

COMPONENT	PAY BAND 56	PAY BAND 57	PAY BAND 58	PAY BAND 59	PAY BAND 61	WAGE SCALE 10
BASIC SALARIES	$ 23.14	$ 24.47	$ 27.90	$ 31.96	$ 41.36	$ 15.01
CLERICAL WAGES	$ 1.59	$ 1.59	$ 1.59	$ 1.59	$ 1.59	$ 1.59
PREMIUM OT-MGMT	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01
PREMIUM OT-NON-MGMT	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01
PAID ABSENCE-MGMT	$ 0.53	$ 0.53	$ 0.53	$ 0.53	$ 0.53	$ 0.53
PAID ABSENCE-NON-MGMT	$ 0.17	$ 0.17	$ 0.17	$ 0.17	$ 0.17	$ 0.17
IND INCENT AWARD-MGMT	$ 1.16	$ 1.16	$ 1.16	$ 1.16	$ 1.16	$ 1.16
IND INCENT AWARD-NON-MGMT	$ -	$ -	$ -	$ -	$ -	$ -
INCENT PROT PLAN-MGMT	$ -	$ -	$ -	$ -	$ -	$ -
INCENT PROT PLAN-NON-MGMT	$ -	$ -	$ -	$ -	$ -	$ -
MKT INC PAY-MGMT	$ -	$ -	$ -	$ -	$ -	$ -
MKT INC PAY-NON-MGMT	$ -	$ -	$ -	$ -	$ -	$ -
TEAM INCENT AWARD-MGMT	$ 1.86	$ 1.86	$ 1.86	$ 1.86	$ 1.86	$ 1.86
TEAM INCENT AWARD-NON-MGM	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05
OTHER PLANS-MGMT	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13
OTHER PLANS-NON-MGMT	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01
ALL OTHER-MGMT	$ 0.02	$ 0.02	$ 0.02	$ 0.02	$ 0.02	$ 0.02
ALL OTHER-NON-MGMT	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05
PENSIONS/BENEFITS	$ 5.60	$ 5.86	$ 6.53	$ 7.32	$ 9.15	$ 4.02
TAXES	$ 2.17	$ 2.27	$ 2.53	$ 2.84	$ 3.55	$ 1.56
CONFERENCE & TRAVEL	$ 2.91	$ 2.91	$ 2.91	$ 2.91	$ 2.91	$ 2.91
RELOCATION	$ 0.74	$ 0.74	$ 0.74	$ 0.74	$ 0.74	$ 0.74
SUPPLIES	$ 0.61	$ 0.61	$ 0.61	$ 0.61	$ 0.61	$ 0.61
OTHER DIRECT	$ 0.66	$ 0.66	$ 0.66	$ 0.66	$ 0.66	$ 0.66
DIRECTLY ASSIGNED	$ 41.42	$ 43.11	$ 47.47	$ 52.63	$ 64.57	$ 31.10

TELRIC FINANCE PB DETAIL

A	B	C	D	E	F	G	H
1998 - 2000 TELRIC LABOR RATES							7-15-98
BST FINANCE/REGULATORY	DIRECT S&W*	OTHER DIRECT**	SHARED LABOR FACTOR***	SHARED COSTS (B*D)	LABOR RATES (B+C+E)	1998 - 2000 INFLATION FACTOR****	1998 - 2000 TELRIC LABOR RATES (F*G)
PAY BAND 56	$ 29.13	$ 10.23	0	$ -	$ 39.36	1.059854	$ 41.72
PAY BAND 57	$ 30.46	$ 10.58	0	$ -	$ 41.04	1.059854	$ 43.50
PAY BAND 58	$ 33.89	$ 11.51	0	$ -	$ 45.40	1.059854	$ 48.12
PAY BAND 59	$ 37.95	$ 12.61	0	$ -	$ 50.56	1.059854	$ 53.59
PAY BAND 61	$ 47.35	$ 15.15	0	$ -	$ 62.50	1.059854	$ 66.24
WAGE SCALE 10	$ 21.00	$ 8.04	0	$ -	$ 29.04	1.059854	$ 30.78
WAGE SCALE 16	$ 22.20	$ 8.36	0	$ -	$ 30.56	1.059854	$ 32.39
*FINANCE PAY BAND B6:B23							
**FINANCE PAY BAND B24:B29							
***SHARED LABOR FACTOR B56							
**** INFL FACTOR E14							

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FINANCE PAY BAND

BST FINANCE/REGULATORY
AREA: REGION
SOURCE: FINANCIAL MANAGEMENT/EXPENSE ACTUALS - BY EXTC DETAIL

COMPONENT	PAY BAND 56	PAY BAND 57	PAY BAND 58	PAY BAND 59	PAY BAND 61	WAGE SCALE 10	WAGE SCALE 16
BASIC SALARIES	$ 23.14	$ 24.47	$ 27.90	$ 31.96	$ 41.36	$ 15.01	$ 16.21
CLERICAL WAGES	$ 2.18	$ 2.18	$ 2.18	$ 2.18	$ 2.18	$ 2.18	$ 2.18
PREMIUM OT-MGMT	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06
PREMIUM OT-NON-MGMT	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01	$ 0.01
PAID ABSENCE-MGMT	$ 0.47	$ 0.47	$ 0.47	$ 0.47	$ 0.47	$ 0.47	$ 0.47
PAID ABSENCE-NON-MGMT	$ 0.28	$ 0.28	$ 0.28	$ 0.28	$ 0.28	$ 0.28	$ 0.28
IND INCENT AWARD-MGMT	$ 0.84	$ 0.84	$ 0.84	$ 0.84	$ 0.84	$ 0.84	$ 0.84
IND INCENT AWARD-NON-MGMT	$ -	$ -	$ -	$ -	$ -	$ -	$ -
INCENT PROT PLAN-MGMT	$ -	$ -	$ -	$ -	$ -	$ -	$ -
INCENT PROT PLAN-NON-MGMT	$ -	$ -	$ -	$ -	$ -	$ -	$ -
MKT INC PAY-MGMT	$ -	$ -	$ -	$ -	$ -	$ -	$ -
MKT INC PAY-NON-MGMT	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TEAM INCENT AWARD-MGMT	$ 1.75	$ 1.75	$ 1.75	$ 1.75	$ 1.75	$ 1.75	$ 1.75
TEAM INCENT AWARD-NON-MGM	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06
OTHER PLANS-MGMT	$ 0.11	$ 0.11	$ 0.11	$ 0.11	$ 0.11	$ 0.11	$ 0.11
OTHER PLANS-NON-MGMT	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ALL OTHER-MGMT	$ 0.20	$ 0.20	$ 0.20	$ 0.20	$ 0.20	$ 0.20	$ 0.20
ALL OTHER-NON-MGMT	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.03
PENSIONS/BENEFITS	$ 5.67	$ 5.92	$ 6.59	$ 7.38	$ 9.21	$ 4.09	$ 4.32
TAXES	$ 2.20	$ 2.30	$ 2.56	$ 2.87	$ 3.58	$ 1.59	$ 1.68
CONFERENCE & TRAVEL	$ 1.11	$ 1.11	$ 1.11	$ 1.11	$ 1.11	$ 1.11	$ 1.11
RELOCATION	$ 0.10	$ 0.10	$ 0.10	$ 0.10	$ 0.10	$ 0.10	$ 0.10
SUPPLIES	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46	$ 0.46
OTHER DIRECT	$ 0.69	$ 0.69	$ 0.69	$ 0.69	$ 0.69	$ 0.69	$ 0.69
DIRECTLY ASSIGNED	$ 39.36	$ 41.04	$ 45.40	$ 50.56	$ 62.50	$ 29.04	$ 30.56

A	B	C
SECURITY ESCORT		**7-15-98**
1998 - 2000 DIRECTLY ASSIGNED - BASIC, OVERTIME, PREMIUM		
ACAC	**HOURLY RATE**	**REFERENCE**
BASIC		
DIRECT S&W	$ 27.87	ACAC D19
LESS PREMIUM	$ 1.15	ACAC D15
DIRECT S&W LESS PREM	$ 26.72	
SHARED COST	$ -	B11*SHARED LABOR FACTOR B22
OTHER DIRECT	$ 8.27	ACAC D31-ACAC D19
BASIC LESS PREMIUM	$ 34.99	
TOTAL 1998 - 2000 TELRIC	**$ 37.09**	B14*INFL FACTOR E14
OVERTIME (1 1/2)		
DIRECT S&W	$ 27.87	ACAC D19
LESS PREMIUM	$ 1.15	ACAC D15
DIRECT S&W LESS PREM	$ 26.72	
1/2 PROD LABOR	$ 9.34	ACAC D14/2
SHARED COST	$ -	B21+B22*SHARED LABOR FACTOR B22
OTHER DIRECT	$ 8.27	ACAC D31-ACAC D19
OT LESS PREM + 1/2 PROD	$ 44.33	
TOTAL 1998 - 2000 TELRIC	**$ 46.99**	B25*INFL FACTOR E14
PREMIUM (2X)		
DIRECT S&W	$ 27.87	ACAC D19
LESS PREMIUM	$ 1.15	ACAC D15
DIRECT S&W LESS PREM	$ 26.72	
1X PROD LABOR	$ 18.68	ACAC D14
SHARED COST	$ -	B32+B33*SHARED LABOR FACTOR B22
OTHER DIRECT	$ 8.27	ACAC D31-ACAC D19
PREM LESS PREM + 1X PROD	$ 53.67	
TOTAL 1998 - 2000 TELRIC	**$ 56.88**	B25*INFL FACTOR E14

A	B	C
SECURITY ESCORT		**7-15-98**
1998 - 2000 DIRECTLY ASSIGNED - BASIC, OVERTIME, PREMIUM		
COIM - CIR & FAC	**HOURLY RATE**	**REFERENCE**
BASIC		
DIRECT S&W	$ 28.75	COIM-CIR&FAC D19+D22+D26
LESS PREMIUM	$ 1.54	COIM-CIR&FAC D15
DIRECT S&W LESS PREM	$ 27.21	
SHARED COST	$ -	B11*SHARED LABOR FACTOR B14
OTHER DIRECT	$ 11.70	COIM-CIR&FAC D31-D19-D22-D26
BASIC LESS PREMIUM	$ 38.91	
TOTAL 1998 - 2000 TELRIC	**$ 41.24**	B14*INFL FACTOR E14
OVERTIME (1 1/2)		
DIRECT S&W	$ 28.75	COIM-CIR&FAC D19+D22+D26
LESS PREMIUM	$ 1.54	COIM-CIR&FAC D15
DIRECT S&W LESS PREM	$ 27.21	
1/2 PROD LABOR	$ 10.21	COIM-CIR&FAC D14/2
SHARED COST	$ -	B21+B22*SHARED LABOR FACTOR B14
OTHER DIRECT	$ 11.70	COIM-CIR&FAC D31-D19-D22-D26
OT LESS PREM + 1/2 PROD	$ 49.12	
TOTAL 1998 - 2000 TELRIC	**$ 52.06**	B25*INFL FACTOR E14
PREMIUM (2X)		
DIRECT S&W	$ 28.75	COIM-CIR&FAC D19+D22+D26
LESS PREMIUM	$ 1.54	COIM-CIR&FAC D15
DIRECT S&W LESS PREM	$ 27.21	
1X PROD LABOR	$ 20.42	COIM-CIR&FAC D14
SHARED COST	$ -	B32+B33*SHARED LABOR FACTOR B14
OTHER DIRECT	$ 11.70	COIM-CIR&FAC D31-D19-D22-D26
PREM LESS PREM + 1X PROD	$ 59.33	
TOTAL 1998 - 2000 TELRIC	**$ 62.88**	B36*INFL FACTOR E14

A	B	C
SECURITY ESCORT		**7-15-98**
1998 - 2000 DIRECTLY ASSIGNED - BASIC, OVERTIME, PREMIUM		
ICSC/LCSC	**HOURLY RATE**	**REFERENCE**
BASIC		
DIRECT S&W	$ 25.33	ICSC LCSC D19
LESS PREMIUM	$ 0.81	ICSC LCSC D15
DIRECT S&W LESS PREM	$ 24.52	
SHARED COST	$ -	B11*SHARED LABOR FACTOR B38
OTHER DIRECT	$ 16.99	ICSC LCSC D22-D19
BASIC LESS PREMIUM	$ 41.51	
TOTAL 1998 - 2000 TELRIC	**$ 44.00**	B14*INFL FACTOR E14
OVERTIME (1 1/2)		
DIRECT S&W	$ 25.33	ICSC LCSC D19
LESS PREMIUM	$ 0.81	ICSC LCSC D15
DIRECT S&W LESS PREM	$ 24.52	
1/2 PROD LABOR	$ 8.55	ICSC LCSC D12/2
SHARED COST	$ -	B21+B22*SHARED LABOR FACTOR B38
OTHER DIRECT	$ 16.99	ICSC LCSC D22-D19
OT LESS PREM + 1/2 PROD	$ 50.06	
TOTAL 1998 - 2000 TELRIC	**$ 53.06**	B25*INFL FACTOR E14
PREMIUM (2X)		
DIRECT S&W	$ 25.33	ICSC LCSC D19
LESS PREMIUM	$ 0.81	ICSC LCSC D15
DIRECT S&W LESS PREM	$ 24.52	
1X PROD LABOR	$ 17.09	ICSC LCSC D12
SHARED COST	$ -	B32+B33*SHARED LABOR FACTOR B38
OTHER DIRECT	$ 16.99	ICSC LCSC D22-D19
PREM LESS PREM + 1X PROD	$ 58.60	
TOTAL 1998 - 2000 TELRIC	**$ 62.11**	B36*INFL FACTOR E14

A	B	C	D	E	F
1998 - 2000 DIRECTLY ASSIGNED LABOR RATES					7-15-98
PLANT WORK CENTERS	JFC	DIRECTLY ASSIGNED	COLUMN C REFERENCE	1998 - 2000 INFLATION FACTOR*	1998 - 2000 DIRECTLY ASSIGNED LABOR RATE (C*E)
ADDRESS & FACILITY INVENTORY (AFIG)	400X 4M1X	$ 31.98	AFIG D31	1.059854	$ 33.90
INSTALL & MTCE - POTS	410X	$ 38.68	I&M POTS D31	1.059854	$ 41.00
INSTALL & MTCE - SPEC SVCS (SSIM)	411X	$ 41.94	SSIM D31	1.059854	$ 44.45
OUTSIDE PLANT CONSTRUCTION (OSPC)	420X 421X	$ 42.51	OSPC D31	1.059854	$ 45.05
OUTSIDE PLANT ADMIN CENTER (OPAC)	424X	$ 32.46	OPAC D31	1.059854	$ 34.41
CABLE REPAIR TECHNICIAN (CRT)	422X 423X 425X 426X	$ 44.31	CRT D31	1.059854	$ 46.96
CO INSTALL & MTCE FIELD - SWITCH EQUIP	430X	$ 42.35	COIM-SW EQ D31	1.059854	$ 44.88
CO INSTALL & MTCE FIELD - CIRCUIT & FAC	431X	$ 40.46	COIM-CIR&FAC D31	1.059854	$ 42.88
RECENT CHANGE LINE TRANSLATIONS (RCMAG)	4321 4N1X	$ 36.66	RCMAG D31	1.059854	$ 38.86
SWITCH & TRUNK BASED TRANSLATIONS	4320 4N2X	$ 42.78	TRANSLATIONS D31	1.059854	$ 45.34
CO INSTALL, MTCE & ADMIN - SOFTWARE	4322 4323,4324	$ 46.68	SOFTWARE D31	1.059854	$ 49.48
TRUNK & CARRIER GROUP (TCG)	4331 4342 473X 4N5X	$ 41.09	TCG D31	1.059854	$ 43.55
NETWORK RELIABILITY CENTER (NRC)	4330 4341 4LXX	$ 35.66	NRC D31	1.059854	$ 37.80
PROACTIVE ANALYSIS & REPAIR CTR (PAR)	4332 4PXX	$ 33.75	PAR D31	1.059854	$ 35.77
CIRCUIT PROVISIONING GROUP (CPG)	470X 4N4X	$ 34.97	CPG D31	1.059854	$ 37.06
ACCESS CUSTOMER ADVOCATE CENTER (ACAC)	471X 4AXX	$ 36.14	ACAC D31	1.059854	$ 38.31
EQUIPMENT BILLING ACCURACY CONT (EBAC)	472X 4N3X	$ 36.39	EBAC D31	1.059854	$ 38.56
BUSINESS REPAIR CENTER (BRC)	4BXX	$ 36.90	BRC D31	1.059854	$ 39.11
RESIDENCE REPAIR CENTER (RRC)	4RXX	$ 32.92	RRC D31	1.059854	$ 34.89
WORK MANAGEMENT CENTER (WMC)	4WXX 401X	$ 32.43	WMC D31	1.059854	$ 34.37
* INFL FACTOR E14					
ENGINEERING FORCE GROUPS	JFC	DIRECTLY ASSIGNED	COLUMN C REFERENCE	1998 - 2000 INFLATION FACTOR*	1998 - 2000 DIRECTLY ASSIGNED LABOR RATE (C*E)
LAND AND BUILDINGS (FG10)	30XX 350X	$ 63.26	FG10 D22	1.059854	$ 67.04
NETWORK & ENGINEERING PLANNING (FG20)	31XX 34XX 3AXX 3BXX	$ 53.03	FG20 D22	1.059854	$ 56.20
NETWORK PLUG-IN ADMINISTRATION (PICS)	341X 3A2X	$ 34.87	PICS D22	1.059854	$ 36.96
OUTSIDE PLANT ENGINEERING (FG30)	32XX 356X	$ 45.26	FG30 D22	1.059854	$ 47.97
* INFL FACTOR E26					

000225

DIR ASSG DETAIL

A	B	C	D	E	F
COST GROUPS	JFC	DIRECTLY ASSIGNED	COLUMN C REFERENCE	1998 - 2000 INFLATION FACTOR*	1998 - 2000 DIRECTLY ASSIGNED LABOR RATE (C*E)
CABS ACCOUNTING	1200	$ 40.88	CABS D22	1.059854	$ 43.32
CUSTOMER POINT OF CONTACT - ICSC/LSCS	2300	$ 42.32	ICSC LCSC D22	1.059854	$ 44.86
POTS OPERATOR	2120	$ 30.74	POTS OPER D22	1.059854	$ 32.58
DIRECTORY ASSISTANCE OPERATOR	2940	$ 28.01	DIR ASST OPER D22	1.059854	$ 29.69
COIN COLLECTOR	2600	$ 33.80	COIN COLL D22	1.059854	$ 35.83
COLLECTIONS REP - RESIDENCE	2E40	$ 33.31	COLL REP-RES D22	1.059854	$ 35.30
COLLECTIONS REP - BUSINESS	2840	$ 32.69	COLL REP-BUS D22	1.059854	$ 34.65
BUS OFC SVC REP - RESIDENCE	2E50 2E70	$ 35.60	SVC REP-RES D22	1.059854	$ 37.73
BUS OFC SVC REP - BUSINESS	2850 2870	$ 35.28	SVC REP-BUS D22	1.059854	$ 37.39
COMPTROLLERS CLERICAL	1240 1250 1260 1270	$ 38.56	COMP CLER D22	1.059854	$ 40.86
NETWORK SERVICES CLERICAL	2700 2730	$ 35.09	NTWK SVC CLER D22	1.059854	$ 37.19
ACCOUNT EXECUTIVE	NOT APPLICABLE				
WITH SALES COMPENSATION		$ 69.61	AE SD SC B8	1.059854	$ 73.78
WITHOUT SALES COMPENSATION		$ 56.55	AE SD SC B12	1.059854	$ 59.93
SYSTEMS DESIGNER	NOT APPLICABLE				
WITH SALES COMPENSATION		$ 63.46	AE SD SC B18	1.059854	$ 67.26
WITHOUT SALES COMPENSATION		$ 58.34	AE SD SC B22	1.059854	$ 61.84
SERVICE CONSULTANT	NOT APPLICABLE	$ 42.47	AE SD SC B28	1.059854	$ 45.01
* INFL FACTOR E14					

000226

DIR ASSG IT PB DETAIL

A	B	C	D	E
1998 - 2000 DIRECTLY ASSIGNED LABOR RATES				7-15-98
BST IT	HOURLY RATE	COLUMN B REFERENCE	1998 - 2000 INFLATION FACTOR*	1998 - 2000 DIRECTLY ASSIGNED (B*D)
PAY BAND 54	$ 36.41	TELRIC IT PB DETAIL B11+C11	1.059854	$ 38.59
PAY BAND 55	$ 38.24	TELRIC IT PB DETAIL B12+C12	1.059854	$ 40.53
PAY BAND 56	$ 43.43	TELRIC IT PB DETAIL B13+C13	1.059854	$ 46.03
PAY BAND 57	$ 45.12	TELRIC IT PB DETAIL B14+C14	1.059854	$ 47.82
PAY BAND 58	$ 49.48	TELRIC IT PB DETAIL B15+C15	1.059854	$ 52.44
PAY BAND 59	$ 54.65	TELRIC IT PB DETAIL B16+C16	1.059854	$ 57.92
PAY BAND 60	$ 60.89	TELRIC IT PB DETAIL B17+C17	1.059854	$ 64.53
PAY BAND 61	$ 66.61	TELRIC IT PB DETAIL B18+C18	1.059854	$ 70.60
WAGE SCALE 10	$ 33.08	TELRIC IT PB DETAIL B19+C19	1.059854	$ 35.06
WAGE SCALE 14	$ 33.99	TELRIC IT PB DETAIL B20+C20	1.059854	$ 36.02
WAGE SCALE 16	$ 34.61	TELRIC IT PB DETAIL B21+C21	1.059854	$ 36.68
WAGE SCALE 18	$ 35.08	TELRIC IT PB DETAIL B22+C22	1.059854	$ 37.18
WAGE SCALE 32	$ 41.26	TELRIC IT PB DETAIL B23+C23	1.059854	$ 43.73
* INFL FACTOR E14				

000227

DIR ASSG MKTG PB DETAIL

A	B	C	D	E
1998 - 2000 DIRECTLY ASSIGNED LABOR RATES				7-15-98
BST MARKETING	HOURLY RATE	COLUMN B REFERENCE	1998 - 2000 INFLATION FACTOR*	1998 - 2000 DIRECTLY ASSIGNED (B*D)
PAY BAND 56	$ 40.84	TELRIC MKTG PB DETAIL B11+C11	1.059854	$ 43.28
PAY BAND 57	$ 42.53	TELRIC MKTG PB DETAIL B12+C12	1.059854	$ 45.08
PAY BAND 58	$ 46.60	TELRIC MKTG PB DETAIL B13+C13	1.059854	$ 49.39
PAY BAND 59	$ 52.05	TELRIC MKTG PB DETAIL B14+C14	1.059854	$ 55.17
PAY BAND 61	$ 64.02	TELRIC MKTG PB DETAIL B15+C15	1.059854	$ 67.85
WAGE SCALE 10	$ 30.49	TELRIC MKTG PB DETAIL B16+C16	1.059854	$ 32.31
* INFL FACTOR E14				

000228

A	B	C	D	E
1998 - 2000 DIRECTLY ASSIGNED LABOR RATES				7-15-98
BST NETWORK	HOURLY RATE	COLUMN B REFERENCE	1998 - 2000 INFLATION FACTOR*	1998 - 2000 DIRECTLY ASSIGNED (B*D)
PAY BAND 56	$ 41.42	TELRIC NTWK PB DETAIL B11+C11	1.059854	$ 43.90
PAY BAND 57	$ 43.11	TELRIC NTWK PB DETAIL B12+C12	1.059854	$ 45.69
PAY BAND 58	$ 47.47	TELRIC NTWK PB DETAIL B13+C13	1.059854	$ 50.31
PAY BAND 59	$ 52.63	TELRIC NTWK PB DETAIL B14+C14	1.059854	$ 55.78
PAY BAND 61	$ 64.57	TELRIC NTWK PB DETAIL B15+C15	1.059854	$ 68.43
WAGE SCALE 10	$ 31.10	TELRIC NTWK PB DETAIL B16+C16	1.059854	$ 32.96
* INFL FACTOR E14				

DIR ASSG FIN PB DETAIL

A	B	C	D	E
1998 - 2000 DIRECTLY ASSIGNED LABOR RATES				7-15-98
BST FINANCE/REGULATORY	HOURLY RATE	COLUMN B REFERENCE	1998 - 2000 INFLATION FACTOR*	1998 - 2000 DIRECTLY ASSIGNED (B*D)
PAY BAND 56	$ 39.36	TELRIC FINANCE PB DETAIL B11+C11	1.059854	$ 41.72
PAY BAND 57	$ 41.04	TELRIC FINANCE PB DETAIL B12+C12	1.059854	$ 43.50
PAY BAND 58	$ 45.40	TELRIC FINANCE PB DETAIL B13+C13	1.059854	$ 48.12
PAY BAND 59	$ 50.56	TELRIC FINANCE PB DETAIL B14+C14	1.059854	$ 53.59
PAY BAND 61	$ 62.50	TELRIC FINANCE PB DETAIL B15+C15	1.059854	$ 66.24
WAGE SCALE 10	$ 29.04	TELRIC FINANCE PB DETAIL B16+C16	1.059854	$ 30.78
WAGE SCALE 16	$ 30.56	TELRIC FINANCE PB DETAIL B17+C17	1.059854	$ 32.39
* INFL FACTOR E14				

000230

A	B	C
SECURITY ESCORT		**7-15-98**
1998 - 2000 DIRECTLY ASSIGNED - BASIC, OVERTIME, PREMIUM		
ACAC	**HOURLY RATE**	**REFERENCE**
BASIC		
DIRECTLY ASSIGNED	$ 36.14	ACAC D31
LESS PREMIUM	$ 1.15	ACAC D15
DA LESS PREM	$ 34.99	
TOTAL 1998 - 2000 DA	**$ 37.09**	B11*INFL FACTOR E14
OVERTIME (1 1/2)		
DIRECTLY ASSIGNED	$ 36.14	ACAC D31
LESS PREMIUM	$ 1.15	ACAC D15
DA LESS PREM	$ 34.99	
1/2 PROD LABOR	$ 9.34	ACAC D14/2
DA LESS PREM +1/2 PROD	$ 44.33	
TOTAL 1998 - 2000 DA	**$ 46.99**	B20*INFL FACTOR E14
PREMIUM (2X)		
DIRECTLY ASSIGNED	$ 36.14	ACAC D31
LESS PREMIUM	$ 1.15	ACAC D15
DA LESS PREM	$ 34.99	
1X PROD LABOR	$ 18.68	ACAC D14
DA LESS PREM + 1X PROD	$ 53.67	
TOTAL 1998 - 2000 DA	**$ 56.88**	B29*INFL FACTOR E14

A	B	C
SECURITY ESCORT		**7-15-98**
1998 - 2000 DIRECTLY ASSIGNED - BASIC, OVERTIME, PREMIUM		
COIM - CIR&FAC	**HOURLY RATE**	**REFERENCE**
BASIC		
DIRECTLY ASSIGNED	$ 40.46	COIM-CIR&FAC D31
LESS PREMIUM	$ 1.54	COIM-CIR&FAC D15
DA LESS PREM	$ 38.91	
TOTAL 1998 - 2000 DA	**$ 41.24**	B11*INFL FACTOR E14
OVERTIME (1 1/2)		
DIRECTLY ASSIGNED	$ 40.46	COIM-CIR&FAC D31
LESS PREMIUM	$ 1.54	COIM-CIR&FAC D15
DA LESS PREM	$ 38.91	
1/2 PROD LABOR	$ 10.21	COIM-CIR&FAC D14/2
DA LESS PREM +1/2 PROD	$ 49.12	
TOTAL 1998 - 2000 DA	**$ 52.06**	B20*INFL FACTOR E14
PREMIUM (2X)		
DIRECTLY ASSIGNED	$ 40.46	COIM-CIR&FAC D31
LESS PREMIUM	$ 1.54	COIM-CIR&FAC D15
DA LESS PREM	$ 38.91	
1X PROD LABOR	$ 20.42	COIM-CIR&FAC D14
DA LESS PREM + 1X PROD	$ 59.33	
TOTAL 1998 - 2000 DA	**$ 62.88**	B29*INFL FACTOR E14

A	B	C
SECURITY ESCORT		**7-15-98**
1998 - 2000 DIRECTLY ASSIGNED - BASIC, OVERTIME, PREMIUM		
ICSC/LCSC	**HOURLY RATE**	**REFERENCE**
BASIC		
DIRECTLY ASSIGNED	$ 42.32	ICSC LCSC D22
LESS PREMIUM	$ 0.81	ICSC LCSC D15
DA LESS PREM	$ 41.51	
TOTAL 1998 - 2000 DA	**$ 44.00**	B11*INFL FACTOR E14
OVERTIME (1 1/2)		
DIRECTLY ASSIGNED	$ 42.32	ICSC LCSC D22
LESS PREMIUM	$ 0.81	ICSC LCSC D15
DA LESS PREM	$ 41.51	
1/2 PROD LABOR	$ 8.55	ICSC LCSC D12/2
DA LESS PREM +1/2 PROD	$ 50.06	
TOTAL 1998 - 2000 DA	**$ 53.06**	B20*INFL FACTOR E14
PREMIUM (2X)		
DIRECTLY ASSIGNED	$ 42.32	ICSC LCSC D22
LESS PREMIUM	$ 0.81	ICSC LCSC D15
DA LESS PREM	$ 41.51	
1X PROD LABOR	$ 17.09	ICSC LCSC D12
DA LESS PREM + 1X PROD	$ 58.60	
TOTAL 1998 - 2000 DA	**$ 62.11**	B29*INFL FACTOR E14

BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF RONALD M. PATE

BEFORE THE TENNESSEE REGULATORY AUTHORITY

DOCKET NO. 99-00430

OCTOBER 15, 1999

Q. PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. AND YOUR BUSINESS ADDRESS.

A. My name is Ronald M. Pate. I am employed by BellSouth Telecommunications, Inc. ("BellSouth") as a Director, Interconnection Services. In this position, I handle certain issues related to local interconnection matters, primarily operations support systems ("OSS"). My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

A. I graduated from Georgia Institute of Technology in Atlanta, Georgia, in 1973, with a Bachelor of Science Degree. In 1984, I received a Masters of Business Administration from Georgia State University. My professional career spans over twenty-five years of general management experience in operations, logistics management, human resources, sales and marketing. I joined BellSouth in 1987, and have held various positions of increasing responsibility.

FILE

Q. HAVE YOU TESTIFIED PREVIOUSLY?

A. Yes. I have testified before the Alabama, Florida, South Carolina and Louisiana Public Service Commissions.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide BellSouth's position on Issue Nos. 2 sub-part (b)(1), 2(a)(i)(2), 2(g), and 3(m) raised by ITC^DeltaCom Communications, Inc. ("ITC^DeltaCom") in its Petition for Arbitration filed with the Tennessee Regulatory Authority ("Authority") on June 11, 1999.

Issue 2, 2(a)(iv), 2(b)(i) and 6(a)
a) What is the definition of parity?
b) Pursuant to this definition, should BellSouth be required to provide the following and if so, under what conditions and at what rates: (1) Operations Support Systems ("OSS"), (2) UNEs, (3) Access to Numbering Resources, (4) An unbundled loop using Integrated Digital Loop Carrier ("IDLC") technology, (5) Priority guidelines for repair and maintenance and UNE provisioning?

Q. WHICH PARTS OF THE ABOVE ISSUE ARE YOU ADDRESSING?

A. My testimony addresses sub-part (b)(1). The definition of parity, the issue of rates, and sub-part (b)(2) is addressed in the testimony of BellSouth Witness, Mr. Alphonso Varner. Sub-parts (b)(3), (b)(4) and (b)(5) are addressed in the testimony of BellSouth witness, Mr. Keith Milner.

Issue 2, 2(a)(iv) and 2(b)(I): Sub-part (b)(1) Pursuant to this definition, should BellSouth be required to provide the following and if so, under what conditions and at what rate: (1) Operational Support Systems ("OSS")

Q WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should find that BellSouth is providing Competitive Local Exchange Carriers ("CLECs") with nondiscriminatory access to its OSS through existing electronic and manual interfaces.

Q. HOW IS BELLSOUTH PROVIDING NONDISCRIMINATORY ACCESS TO BELLSOUTH'S OSS?

A. BellSouth currently provides the following nondiscriminatory electronic interfaces to its OSS for CLECs: Local Exchange Navigation System ("LENS") for pre-ordering, ordering, and provisioning for simple resale services; Telecommunication Access Gateway ("TAG") for pre-ordering, ordering, and provisioning for simple resale services and seven

unbundled network elements; Electronic Data Interexchange ("EDI") for ordering and provisioning of simple resale services and seven unbundled network elements; Trouble Analysis and Facilitation Interface ("TAFI") for maintenance and repair; Electronic Communications Trouble Administration ("ECTA") for maintenance and repair; and Optional Daily Usage File ("ODUF"), Enhanced Optional Daily Usage File ("EODUF"), and Access Optional Daily Usage File ("ADUF") for billing. BellSouth also offers CLECs manual interfaces to its OSS. These interfaces allow CLECs to perform the functions of pre-ordering, ordering, provisioning, maintenance and repair, and billing for resale services in substantially the same time and manner as BellSouth does for itself; and, in the case of unbundled network elements, provide a reasonable competitor with a meaningful opportunity to compete.

By providing nondiscriminatory access to its OSS, BellSouth is in compliance with the Act. The Act does not require BellSouth to provide CLECs, including ITC^Deltacom, with any additional OSS. The South Carolina Public Service Commission ("Commission") reached this conclusion in the ITC^DeltaCom arbitration. On page 19 of its Order No. 1999-690, dated October 4, 1999, in Docket No. 1999-259-C, the South Carolina Commission "finds that BellSouth is providing nondiscriminatory access, as required by the 1996 ACT and the FCC's rules, to its Operations Support Systems (OSS) through a variety of electronic and manual interfaces which have been designed specifically for CLECs such as ITC^DeltaCom."

Q. IS THERE ANY DATA WHICH SUGGESTS THAT CLECS ARE MAKING USE OF BELLSOUTH'S ELECTRONIC INTERFACES?

A. Yes. Supporting data reflects the use of the electronic interfaces to BellSouth's OSS and their continued growth. As a point of reference, in August 1998, a total of 159,543 local service requests (LSRs) were processed by BellSouth. From that total, 118,257 (74.1%) were submitted manually and 41,286 (25.9%) were submitted electronically. As of September 1999, LSR total submissions have grown by 21% to 192,564. In conjunction with experiencing tremendous growth the LSR submissions have shifted to 45.1% (86,816 LSRs) submitted manually and 54.9% (105,748 LSRs) submitted electronically. Of particular note is the growth in submissions using the EDI electronic interface which is the primary interface of choice for ITC^DeltaCom. In August 1998, BellSouth processed 8,659 LSRs received via EDI. Between March 1999 and August 1999, CLECs submitted monthly on average 14,760 LSRs via EDI. This average represents a 70% increase. In addition, the combined flow through rate for the electronic interfaces was 92.1% for September 1999. The facts speak for themselves. The electronic interfaces to BellSouth's OSS work and the CLEC community as a whole have found their deployment to be effective.

Issue 2(a)(i)(2) - Should BellSouth be required to provide a download of the Regional Street Address Guide (RSAG)? If so, how?

Q WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should find that BellSouth currently provides nondiscriminatory access to the RSAG database by giving CLECs real time access to address validation through LENS and TAG. The Authority should also find that BellSouth is not obligated to provide a download of the RSAG as requested by ITC^DeltaCom.

Q. WHAT IS THE RSAG?

A. The RSAG is a database containing information that can be used to perform address validations. BellSouth provides to CLECs, including ITC^DeltaCom, access to the RSAG database on a real time basis through the LENS and the TAG pre-ordering interfaces. Because the RSAG database is updated nightly, the CLECs have real-time access via these interfaces to an up-to-date database.

Q WHAT IS BELLSOUTH'S UNDERSTANDING OF ITC^DELTACOM'S POSITION ON THE RSAG?

A. In the ITC^DeltaCom Position contained in Issue 2(a)(i) of its Petition, ITC^DeltaCom simply claims that "The ability to . . . download the RSAG will increase efficiency and accuracy".

Q. WHAT DOES ITC^DELTACOM PROPOSE ABOUT AN RSAG DOWNLOAD IN ITS DRAFT INTERCONNECTION AGREEMENT?

A. ITC^DeltaCom states in Attachment 6, Paragraph 4.8.3 of the draft interconnection agreement that BellSouth should be required to provide "[a] subset of the Regional Street Address Guide ("RSAG"), as determined by ITC^DeltaCom, transmitted electronically on a daily basis, which includes street addresses and the associated serving switches, enabling ITC^DeltaCom to map a customer address to a specific serving switch."

ITC^DeltaCom, in other words, apparently wants a download of RSAG in order to validate its end user customers' addresses.

Q. HOW DOES BELLSOUTH PERFORM ADDRESS VALIDATION FOR ITS RETAIL CUSTOMERS?

A. For residence customers, BellSouth validates addresses using the Regional Negotiation System ("RNS"). For business customers, BellSouth uses the address validation screens in the Service Order Negotiation System ("SONGS"). The BellSouth service representative

sends an inquiry to and receives a response from the RSAG via RNS and SONGS.

Q. HOW DO CLECS PERFORM ADDRESS VALIDATION?

A. CLECs can and do perform the address validation function by using LENS or TAG. Using either of these interfaces, the CLEC representative sends an inquiry to and receives a response from the same RSAG database that BellSouth accesses by using RNS and SONGS. The RSAG database returns address information without regard to whether the request originated from a CLEC or from BellSouth. ITC^DeltaCom, which uses LENS as a pre-ordering interface, can use LENS to access RSAG and validate addresses

Q. WHAT SEEMS TO BE THE PURPOSE OF ITC^DELTACOM'S DESIRE TO HAVE BELLSOUTH REQUIRED TO PROVIDE A DOWNLOAD OF THE DATABASE?

A. Throughout its Petition for Arbitration and the draft interconnection agreement, ITC^DeltaCom stresses the importance of an electronic interface for pre-ordering for real-time access to BellSouth's OSS. BellSouth offers such access via LENS and TAG. Yet, by requesting a download of RSAG, ITC^DeltaCom apparently wants a less efficient means of data access. Further, BellSouth suspects that ITC^DeltaCom wants this access for free. The language in ITC^DeltaCom's Petition

and draft agreement does not mention anything about payment for a daily download of this database.

Q. IS BELLSOUTH REQUIRED TO PROVIDE A DOWNLOAD OF THE RSAG DATABASE AS REQUESTED BY ITC^DELTACOM?

A. No. Under the Telecommunications Act of 1996, BellSouth is required to provide nondiscriminatory interfaces to its OSS through access to the required functions and information in substantially the same time and manner as BellSouth does for itself. As previously stated, BellSouth provides such required interfaces and is not obligated to provide a download of the RSAG. The South Carolina Commission reached this conclusion in resolving this issue in the ITC^DeltaCom arbitration in that state. The South Carolina Commission on pages 25-26 of its Order No. 1999-690 in Docket No. 1999-259-C "finds that BellSouth currently makes available nondiscriminatory access to the Regional Street Address Guide ("RSAG") database on a real-time basis, the Commission will not require any additional or alternative method to obtain the RSAG in the interconnection agreement. If ITC^DeltaCom desires to utilize an alternative method to obtain a download of the RSAG database, it must negotiate on its own (outside this arbitration) with BellSouth toward that end."

Q. EVEN THOUGH NOT REQUIRED TO DO SO, HAS BELLSOUTH OFFERED TO PROVIDE A DOWNLOAD OF THE RSAG DATABASE AS REQUESTED BY ITC^DELTACOM?

A. Yes. Even though BellSouth is not required to provide a download of the RSAG, BellSouth has made a proposal to ITC^DeltaCom to provide such at terms and conditions stated in the proposal. As expressed in Exhibit RMP-5, which is attached to my testimony, BellSouth stands ready to meet with ITC^DeltaCom to negotiate with respect to RSAG if ITC^DeltaCom is still interested in pursuing its request.

Q. *BELLSOUTH MADE THE TAG PRE-ORDERING INTERFACE AVAILABLE TO CLECS ON AUGUST 31, 1998. IF THE CLEC INTEGRATES THE TAG PRE-ORDERING INTERFACE WITH ITS TAG ORDERING OR EDI ORDERING INTERFACE, WILL THE INFORMATION OBTAINED FROM RSAG VIA TAG "FLOW" INTO THE ORDERING INTERFACE EFFICIENTLY AND ACCURATELY?*

A. *Yes, that is the purpose of integratable, machine-to-machine interfaces. CLEC's, such as ITC^DeltaCom, that make the business decision to use such interfaces, can integrate the TAG pre-ordering interface with the TAG ordering or the EDI ordering interface. CLECs can integrate these interfaces with their own internal OSS. Integration provides CLECs with the ability to manipulate the data obtained via the*

TAG pre-ordering interface. This includes the ability to check address validity in RSAG.

Q. WILL THE INTEGRATION OF THESE INTERFACES ELIMINATE THE NEED TO REKEY OR RETYPE DATA?

A. If the CLEC integrates the TAG pre-ordering interface with either the TAG or EDI ordering interfaces, the pre-ordering data can be manipulated to flow into the CLEC OSS and into the ordering interface without re-keying or retyping information. This is apparently what ITC^DeltaCom desires to do.

Q. IS BELLSOUTH REQUIRED TO PERFORM THE INTEGRATION OF INTERFACES FOR CLECS?

A. No. There is no requirement in the Act or in any order by the FCC that makes BellSouth responsible for performing the "integration" of pre-ordering (LENS and TAG), ordering (LENS, TAG and EDI) with the CLECs' OSS systems. BellSouth provides integratable, national standard, machine-to-machine interfaces for pre-ordering, and ordering that CLECs, including ITC^DeltaCom, may integrate with their internal OSS. Integration is the responsibility of the CLEC. This allows CLECs to tailor the interfaces and the information received via the interfaces in the best possible manner suited to their individual business needs.

Q. *IS ITC^DELTACOM USING THE TAG INTERFACE?*

A. *No. Representatives of ITC^DeltaCom attended a TAG orientation session in March 1998, at that time ITC^DeltaCom informed BellSouth that it is not interested in implementing the TAG pre-ordering interface. However, ITC^DeltaCom states in Attachment 6, paragraph 1.2, section (ii) of its draft agreement that for pre-ordering and ordering "(ii) BellSouth-designed machine-to-machine interfaces such as the Local Exchange Navigation System ("LENS"), and the Telecommunications Access Gateway ("TAG");" shall be made available upon request. Additionally, ITC^DeltaCom states in Attachment 6, paragraph 3.2 of the draft agreement that "the following interfaces shall be made available to ITC^DeltaCom for access to pre-order functions: LENS and TAG (as provided in Section 1.2 above) Each such interface shall be available in connection with both Resale services and UNEs". This language, contained in the draft agreement, reflecting ITC^DeltaCom's apparent desire to use TAG, is inconsistent with ITC^DeltaCom's action to date. However, it is my current understanding that ITC^DeltaCom has renewed its interest in TAG and is evaluating for implementation within a matter of months.*

Q. *WHAT DOES ITC^DELTACOM USE FOR PRE-ORDERING AND ORDERING?*

A. *ITC^DeltaCom has made the business decision to use the human-to-machine LENS interface for pre-ordering rather than the national standard based TAG interface. ITC^DeltaCom uses the machine-to-machine national standard EDI interface for ordering. If ITC^DeltaCom used the machine-to-machine, national standard based, TAG pre-ordering interface with the EDI ordering interface, ITC^DeltaCom would not have to rekey data from one interface to another. As I have previously stated, BellSouth is not responsible for the integration of these interfaces, the CLEC is.*

Issue 2(a)(ii) – Should BellSouth be required to provide changes to its business rules and guidelines regarding sale and UNEs at least 45 days in advance of such changes being implemented? If so, how?

Q WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should find that BellSouth's method of notification of changes and business rules and guidelines is reasonable and appropriate and further find that it is not necessary for the interconnection agreement to include any language pertaining to the method of notification.

Q. DOES BELLSOUTH PROVIDE ADVANCE NOTICE OF CHANGES AND REVISIONS TO ITS BUSINESS RULES AND GUIDELINES?

A. Yes. BellSouth provides advance notice of changes to its business rules and guidelines, but there is, and should be, no requirement that such notice be given a specified number of days in advance. As a matter of courtesy, BellSouth already posts changes to its business rules and guidelines regarding resale and Unbundled Network Elements ("UNEs") on an easily accessible web page. As a general policy, BellSouth makes a good faith effort to post all OSS-related notifications thirty (30) days prior to the implementation of the change or rule; however, there may be circumstances in which the 30-day timeframe is not met. BellSouth has no legal or mandated obligation to provide this notification 30 days in advance (or 45 days in advance). The current process is appropriate because it strikes a balance between BellSouth's need for flexibility to modify its processes and the CLEC's need to have advance notice of such modification. A forty-five day advance notice requirement would unnecessarily burden BellSouth's ability to change and improve its processes. This requirement would prevent any changes from being implemented on less that 45 day notice, even if it were practical and desirable to do so.

Issue 2(g) - Should "order flow-through" be defined in the interconnection agreement, and if so, what is the definition?

Q WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should adhere to the Federal Communication Commission's ("FCC") definition of flow through and further find that it is not necessary for the interconnection agreement to spell out that definition.

Q. HOW DOES ITC^DELTACOM DEFINE FLOW THROUGH IN ITS PETITION?

A. In its Petition, ITC^DeltaCom states that "[f]low through should be defined to include end-to-end preordering and ordering processes."

Q. HOW DOES ITC^DELTACOM DEFINE FLOW THROUGH IN ITS DRAFT OF THE INTERCONNECTION AGREEMENT?

A. ITC^DeltaCom's definition in its draft agreement is much more detailed than its position set forth in the Petition. In Attachment 6, Paragraph 4.7.1, ITC^DeltaCom states: "'Flow Through' is defined as an end-to-end pre-ordering and ordering process, (including legacy BellSouth applications) without manual intervention. Specifically, Flow Through, includes electronic reporting of order status, electronic reporting of errors and electronic notification of critical events such as 'jeopardy notification' and rescheduled due dates. BellSouth shall provide Flow

Through of electronic processes in a manner consistent with industry standards and, at a minimum, at a level of quality equivalent to itself or to any CLEC with comparable systems."

Q. DOES BELLSOUTH AGREE WITH ITC^DELTACOM'S DEFINITION IN ITS PETITION OR IN ITS DRAFT INTERCONNECTION AGREEMENT?

A. No. ITC^DeltaCom's uses the term "flow through" in a completely different and contradictory manner than it is commonly used by BellSouth and by the Federal Communications Commission ("FCC").

Q. HOW DOES THE FCC DEFINE "FLOW THROUGH"?

A. In paragraph 107 of its Second Louisiana Order in CC Docket No. 98-121 dated October 13 1998, the FCC states that "a competing carrier's orders 'flow through' if they are transmitted electronically through the gateway and accepted into BellSouth's back office order systems without manual intervention."

Q. HOW DOES BELLSOUTH DEFINE "FLOW THROUGH"?

A. Based upon the FCC's definition, BellSouth contends that a service request flows through an electronic order system only when a CLEC or BellSouth representative takes information directly from an end user

customer, inputs it directly into an electronic order interface without making any changes or manipulating the customer's information, and sends the complete and correct request downstream for mechanized order generation.

Flow through for a CLEC Local Service Request (LSR) "starts" when the complete and correct electronically-submitted LSR is sent via one of the CLEC ordering interfaces (EDI, TAG, or LENS), flows through the mechanical edit checking and local exchange service order generation ("LESOG") system, is mechanically transformed into a service order by LESOG, and is accepted by the Service Order Control System ("SOCS") without any human intervention. Pre-ordering is not part of this particular process, nor is electronic notification of order status and jeopardies.

Furthermore, the South Carolina Commission in its Order No. 1999-690 in Docket No. 1999-259-C, "adopts the definition of flow-through as proposed by BellSouth and which is contained in the FCC Second Louisiana Order, CC Docket 98-121 (8-13-98)."

Q. HOW DOES BELLSOUTH CALCULATE AND REPORT FLOW THROUGH?

A. The mathematical derivation of the flow through rate is reflected monthly in the Percent Flow Through Service Requests report which is already part of BellSouth's Service Quality Measurements ("SQM").

This report is published on BellSouth's Performance Measurements Web site. Exhibit RMP-1 is an excerpt of the report for the month of January 1999. The column labeled "CLEC Error Excluded Calculation" provides the flow through rate. Looking at the report one can see that the flow through rate for January 1999 was 89.89%.

The process for determining the "CLEC Error Excluded Calculation" flow through is depicted in the BellSouth chart entitled: "CLEC Ordering Process Flow," which is attached as page 2 of Exhibit RMP-1. In summary, the calculation for the "CLEC Error Excluded Calculation" flow through is:

$$\frac{\text{Issued Service Orders}}{\text{Total Mechanized LSRs} - (\text{Total Manual Fallout} + \text{Auto Clarifications} + \text{CLEC caused Errors})}$$

Using the January 1999 flow through report for the purpose of illustration, the calculation is as follows:

$$\frac{48{,}397}{74{,}640 - (8{,}743 + 5{,}485 + 6{,}574)} = 89.89\%$$

These same numbers from the January 1999 Flow Through Report are used on page 2 of Exhibit RMP-1 to illustrate the derivation of flow through.

This methodology for calculating flow through is in strict compliance with the concept as defined above by the FCC.

Q. HAVE YOU EVALUATED ITC^DELTACOM'S USE OF THE ELECTRONIC INTERFACES BASED ON THE DATA CONTAINED IN THE PERCENT FLOW THROUGH SERVICE REQUESTS REPORT?

A. Yes. To better understand ITC^DeltaCom's use of electronic interfaces, a comparative analysis of their individual data with the CLEC aggregate was conducted using the Percent Flow Through Service Report for the months of January 1999 through August 1999. The Percent Flow Through Service Requests is a monthly report provided to CLECs as part of the BellSouth SQMs. The report reflects the percentage of LSRs submitted via the CLEC mechanized ordering process that flow through to the BellSouth's OSS without manual intervention. As BellSouth's ordering and provisioning centers are regionally based, all data reflected in this report reflects the BellSouth nine-state region. BellSouth does not track any state specific data for LSR submissions.

Exhibit RMP- 2 marked confidential and proprietary shows the results of this analysis. The data and resulting analysis clearly shows that ITC

DeltaCom has a substantially higher rate than the CLEC aggregate for fatal rejects, manual fallout, and auto clarifications and CLEC caused fallout.

From this one can conclude that:

1) ITC^DeltaCom has difficulty submitting complete and accurate LSRs due to the high fatal reject rate and auto clarification and CLEC error rate and
2) ITC^DeltaCom's market plan drives a high manual fallout rate which is not representative of the CLEC community as a whole.

Q. WHAT SEEMS TO BE THE PURPOSE OF THIS ISSUE AND OF PARAGRAPHS 4.7.1 AND 4.7.2 OF THE DRAFT AGREEMENT?

A. BellSouth can only believe that ITC^DeltaCom is attempting to have this Authority require BellSouth to provide complete electronic pre-ordering, ordering, and provisioning of all UNEs and resale services. If indeed this is ITC^DeltaCom's position, it is inappropriate because even BellSouth does not have that capability for itself. BellSouth has met the requirements of the Telecommunications Act of 1996 by providing CLECs with access to the required functions and information through the electronic interfaces in substantially the same time and manner as BellSouth does for itself. This access provides efficient CLECs with meaningful opportunities to compete. What ITC^DeltaCom is seeking

far exceeds BellSouth's obligation. Clearly, the Authority should reject ITC^DeltaCom's positioned efforts with respect to this issue.

Q. PLEASE COMMENT ON ITC^DELTACOM'S PARAGRAPH 4.7.2 OF ATTACHMENT 6?

A. BellSouth does not understand what ITC^DeltaCom means when it states in Paragraph 4.7.2 that "BellSouth shall provide parity of application functionality and not simply 'access' to BellSouth's systems." The 1996 Telecommunications Act at Section 251(c)(3) only requires that BellSouth provide nondiscriminatory access to network elements, which BellSouth has done via the nondiscriminatory interfaces it has offered to CLECs. BellSouth provides access to the CLECs in substantially the same time and manner as it does for itself.

BellSouth also does not agree with the rest of Paragraph 4.7.2, which states that: "Capability shall be provided to process large orders, UNE orders, and complex orders in a manner at parity to that afforded by BellSouth to itself, its Affiliates, or any other Telecommunications Carrier." First, as described by Mr. Al Varner in his testimony in response to Issue 2, BellSouth does not use UNEs for itself. Second, large orders and orders for complex services are handled manually for CLECs in substantially the same time and manner as they are handled manually for BellSouth customers.

Q. PLEASE DESCRIBE HOW BELLSOUTH SERVICE REQUESTS ARE MANUALLY HANDLED FOR BELLSOUTH AND CLECS.

A. Before engaging in comparisons, it is important to note that non-discriminatory access does not require that all information and functions for CLECs must be electronic and involve no manual handling. Many of BellSouth's retail services, primarily complex services, involve substantial manual handling by BellSouth account teams for BellSouth's own retail customers. Thus, non-discriminatory access to certain functions for CLECs may also legitimately involve manual processes for these same functions.

The manual processes that BellSouth uses for complex resold services offered to the CLECs are accomplished in substantially the same time and manner as the processes used for BellSouth's complex retail services. These processes are in compliance with the Act and the FCC's rules. The specialized and complicated nature of complex services, together with their relatively low volume of orders as compared to basic exchange services, renders them less suitable for mechanization, whether for retail or resale applications. Complex, variable processes are difficult to mechanize, and BellSouth has concluded that mechanizing many lower-volume complex retail services would be imprudent for its own retail operations, in that the benefits of mechanization would not justify the cost. Since the same manual processes are in place for both CLEC and BellSouth retail orders, the

processes are competitively neutral, which is exactly what both the Act and the FCC require.

There are two types of complex services: "Non-designed" and "Designed." A "Non-designed" service is a class of service with a Universal Service Order Code ("USOC") that does not require special provisioning and is served by one central office or wire center. A "Designed" service involves special engineering and provisioning.

An example of a "Designed" complex service for which retail handling is not fully mechanized is Multiserv® service. This is a complex service available to both BellSouth's retail customers and to resellers. In both cases, the pre-ordering and ordering processes are largely manual. Nonetheless, these manual pre-ordering and ordering processes are substantially the same for both BellSouth retail and CLEC orders. Orders for retail services are handled primarily by the appropriate business unit for retail services -- BellSouth Business Systems ("BBS") account teams. Orders for CLEC services are handled by the appropriate business unit for CLEC services – CLEC account teams that are part of BellSouth's Interconnection Services ("ICS"). ICS's account team's handling of complex services for CLECs is substantially the same as BBS's account team's handling of complex services for BellSouth's retail customers; they both use substantially the same processes as described below.

Attached to my testimony is Exhibit RMP-3, which depicts the flow of the process for ordering MultiServ® service by CLECs and Exhibit RMP-4, which depicts the flow of the process for ordering MultiServ® service by BellSouth's retail unit. To perform the pre-ordering activity for complex services, which is known as a "service inquiry", a systems designer on the appropriate BBS or ICS account team completes an extensive paper form and then provides that form to the project manager for further manual activities. On approval of either the retail customer or the CLEC, as appropriate, the paper service inquiry is re-initiated as a firm order, which also is another extensive paper form with subsequent manual distribution. In both the retail and the resale cases, the Firm Order Package is manually handed off to the service center, where paper service order worksheets are created to assist in initiating service orders in the ordering system. At that point, orders are typed into the appropriate service order system based on the customer's location, either the Direct Order Entry ("DOE") system (in North Carolina, South Carolina, Georgia, and Florida) or the SONGS (in Alabama, Kentucky, Louisiana, Mississippi, and Tennessee). This order entry is the same for both the retail and the resale situations, and thus, does not result in a different customer "experience" in either case. The person who enters the complex order in BellSouth's systems never has any contact with the end-user customer, whether the customer belongs to a CLEC or BellSouth. After the service order is input, the account team and project managers are notified by e-mail of the service order numbers and due dates. The account team manually reviews the

service order for accuracy and follows up as necessary. These processes, with their substantial reliance on manual handling and paper forms, are common to both retail and CLEC orders. Thus, BellSouth provides CLECs the ability to order complex services in substantially the same time and manner as it provides to its retail customers.

Issue 3(m) - What type of repair information should BellSouth be required to provide to ITC^DeltaCom such that ITC^DeltaCom can keep the customer informed?

Q WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should find that BellSouth is providing CLECs with nondiscriminatory access to its maintenance and repair OSS through TAFI and ECTA and further find that no additional functionality is required.

Q. DOES BELLSOUTH PROVIDE NONDISCRIMINATORY ACCESS TO ITS MAINTENANCE AND REPAIR OSS?

A. Yes. BellSouth provides ITC^DeltaCom and the other CLECs with non-discriminatory access to its maintenance and repair OSS by providing TAFI and the ECTA Gateway. Among other things, the TAFI and ECTA interfaces allow ITC^DeltaCom and other CLECs to enter customer trouble tickets into the BellSouth system, retrieve and track current

status on all ITC^DeltaCom trouble and repair tickets, and receive an estimated time to repair on a real-time basis. BellSouth also offers manual interfaces to its maintenance and repair OSS. Once it has been determined that a trouble requires a dispatch, no distinction is made in priority between tickets related to CLEC customers versus tickets related to BellSouth retail customers.

Q. HOW DOES ITC^DELTACOM STATE ITS POSITION ON THIS ISSUE IN ITS PETITION?

A. The language in Attachment 6, Section 5.2 of the ITC^DeltaCom draft agreement states that: "BellSouth shall cooperate with ITC^DeltaCom through a joint implementation team to establish an Electronic Interface for gateway or automated access by ITC^DeltaCom to BellSouth's maintenance systems and databases in order to allow ITC^DeltaCom . . . (i) enter a new customer trouble ticket into the BellSouth maintenance system for an ITC^DeltaCom Customer, (2) retrieve and track current status on all ITC^DeltaCom Customer repair tickets, (iii) receive an estimated time to repair ("ETTR") on a real-time basis . . . ".

Q. PLEASE DESCRIBE THE TAFI INTERFACE.

A. CLEC TAFI is the same maintenance and trouble repair system used by BellSouth's own retail representatives for non-designed services,

except that CLEC TAFI combines functionality for both residential and business services, while BellSouth must use separate TAFI interfaces for its own residential and business retail units. TAFI is a user-friendly human-to-machine interface that often enables trouble reports to be cleared remotely by the repair attendant handling the initial customer contact, frequently with the customer still on the line. This is possible because TAFI correctly screens 80% of the reports for non-designed services while the customer is on the line. BellSouth and CLECs can use TAFI to check the status of repair tickets and to view end user customer's maintenance histories.

Although TAFI is not a national standard interface, BellSouth made TAFI available to CLECs. TAFI offers more functionality than the industry standard for repair and maintenance interface (ECTA) and is, therefore, a superior system. ECTA addresses only functions such as electronically opening a trouble ticket or obtaining status information.

Q. DOES ITC^DELTACOM USE TAFI?

A. Yes.

Q. DOES BELLSOUTH ALSO OFFER A NATIONAL STANDARD ELECTRONIC INTERFACE FOR MAINTENANCE AND REPAIR?

A. Yes. BellSouth has provided CLECs with ECTA. ECTA uses the T1/M1 national standard for local exchange trouble reporting and notification. This machine-to-machine interface provides access to the BellSouth's maintenance OSS supporting both telephone-number and circuit-identified services - i.e., designed and non-designed services. It supports both resold services and UNEs. Because it follows the national standard for local exchange trouble reporting and notification, the following functions are available to users of ECTA: the ability to enter a report; the ability to modify a report; the ability to obtain status information during the life of the report; and the ability to cancel a report.

Q. SHOULD BELLSOUTH BE REQUIRED TO PROVIDE ANY ADDITIONAL FUNCTIONALITY NOT CURRENTLY AVAILABLE IN TAFI OR ECTA?

A. No. BellSouth is under no obligation to provide ITC^DeltaCom with any functionality that is not currently available in TAFI or ECTA. The South Carolina Commission reached this conclusion in the ITC^DeltaCom arbitration. The South Carolina Commission on pages 70-71 of its Order No. 1999-690 in Docket No. 1999-259-C states "As BellSouth is providing access to the same (maintenance and repair OSS) systems which it uses itself, BellSouth is not obligated to provide ITC^DeltaCom any functionality that are not currently available in TAFI and /or ECTA."

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

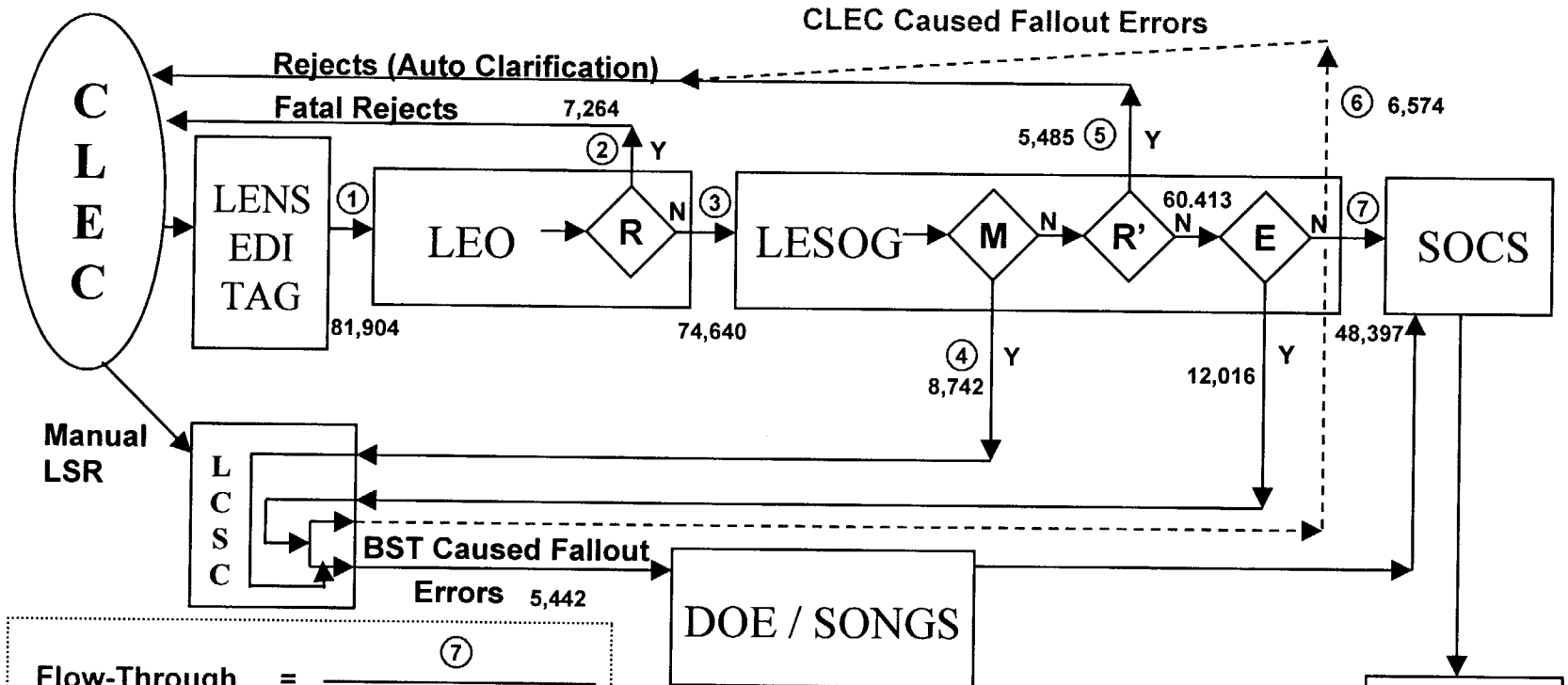
REPORT: PERCENT FLOW THROUGH SERVICE REQUESTS (DETAIL)

REPORT PERIOD: 01/1/1999 - 01/31/1999

1. AGGREGATE ORDER TYPES

Company Info		LSR SUBMISSION					LSR PROCESSING							FLOWTHROUGH *	
		LEO					LESOG								
			Mechanized Interface Used				Manual	Rejects	Validated	Errors *					
Name	RESH / OCN	FATAL REJECTS	LENS	EDI	TAG	Total Mech LSR's	Total Manual Fallout	Auto Clarification	LSR's	Total System Fallout	BST Caused Fallout	CLEC Caused Fallout	Issued SO's	Base Calculation	CLEC Error Excluded Calculation
# 1		0	21	0	0	21	1	1	19	1	1	0	18	94.74%	94.74%
# 2		0	36	0	0	36	5	2	29	15	14	1	14	48.28%	50.00%
# 3		0	114	0	0	114	6	8	100	14	11	3	86	86.00%	88.66%
# 4		0	175	0	0	175	25	16	134	20	20	0	114	85.07%	85.07%
# 5		0	179	0	0	179	17	19	143	10	10	0	133	93.01%	93.01%
# 6		0	454	0	0	454	39	67	348	82	76	6	266	76.44%	77.78%
# 7		9	2098	0	0	2098	530	102	1466	109	94	15	1357	92.56%	93.52%
# 8a		0	267	0	0	267	6	32	229	77	63	14	152	66.38%	70.70%
# 8b		0	0	15	0	15	0	13	2	2	1	1	0	0.00%	0.00%
# 9		5	1143	0	0	1143	70	113	960	74	61	13	886	92.29%	93.56%
# 10		0	15	0	0	15	4	5	6	6	6	0	0	0.00%	0.00%
# 124		0	108	0	0	108	14	9	85	7	6	1	78	91.76%	92.86%
# 125		0	81	0	0	81	27	7	47	15	15	0	32	68.09%	68.09%
# 126		0	15	0	0	15	3	0	12	4	4	0	8	66.67%	66.67%
# 127		0	2	0	0	2	0	1	1	0	0	0	1	100.00%	100.00%
# 128		0	134	0	0	134	11	68	55	31	30	1	24	43.64%	44.44%
# 129		0	9	0	0	9	3	0	6	0	0	0	6	100.00%	100.00%
# 130		0	290	0	0	290	10	24	256	34	32	2	222	86.72%	87.40%
# 131		0	25	0	0	25	2	1	22	1	1	0	21	95.45%	95.45%
# 132		0	642	0	0	642	7	71	564	46	44	2	518	91.84%	92.17%
# 133		0	8	0	0	8	6	1	1	1	1	0	0	0.00%	0.00%
LENS Subtotal		43	53779	0	0	53779	5720	3246	44813	5186	4783	403	39627	88.43%	89.23%
EDI Subtotal		7221	0	20861	0	20861	3022	2239	15600	6830	659	6171	8770	56.22%	93.01%
TOTAL INTERFACES		**7264**	**53779**	**20861**	**0**	**74640**	**8742**	**5485**	**60413**	**12016**	**5442**	**6574**	**48397**	**80.11%**	**89.89%**

CLEC Ordering Process Flow



Flow-Through (CLEC Error Excluded Calculation) = ⑦ / (③ - (④ + ⑤ + ⑥))

① Method of Receipt (LENS, EDI or TAG)
② Fatal Rejects
③ Total Mechanized LSRs
④ Manual Fallout (Fall out to LCSC)
⑤ Auto Clarification
⑥ CLEC caused Fallout
⑦ Issued Svc. Orders (LESOG Flow Through)

R - Fatal Reject - Returned to CLEC
M - Manual - Fall out to LCSC for manual processing
R' - Auto Clarification - Returned to CLEC
E - Error - Clarification by LCSC (either CLEC error or BST error)

$$\text{Flow-Through}_{\text{CLEC Error Excluded Calculation}} = \frac{48{,}397}{74{,}640 - (8{,}742 + 5{,}485 + 6{,}574)} = 89.89\%$$

CONFIDENTIAL AND PROPRIETARY

ANALYSIS OF ITC DELTACOM'S ELECTRONIC LSR SUBMISSION TO THE CLEC AGGREGATE

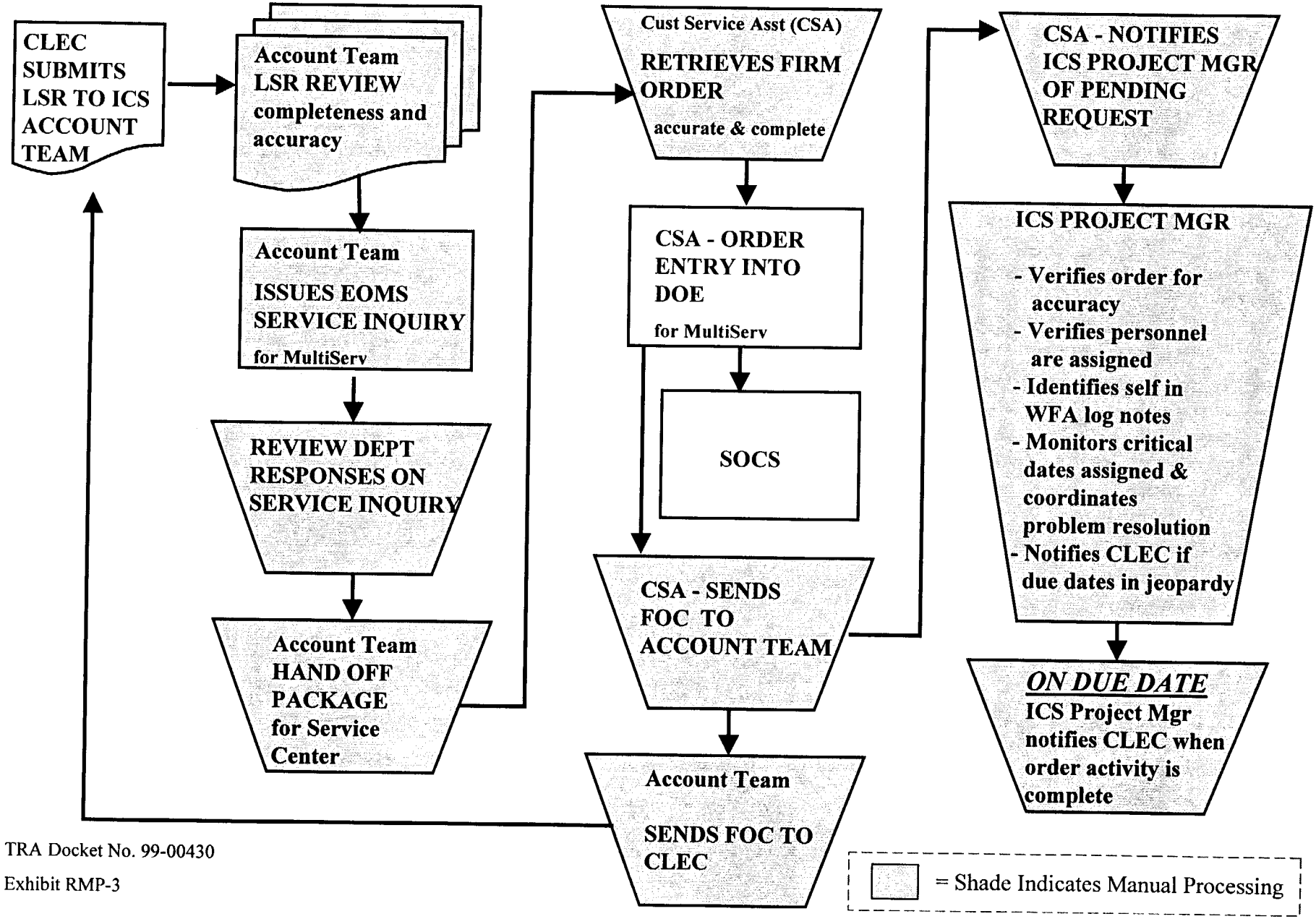
CATEGORY	ITC^D FACSIMILE	ITC^D LENS	ITC^D EDI	ITC^D TOTAL
No. LSRs Submitted (Jan – Aug 1999)				
% of Total				
No. LSRs Submitted (Aug 1999)				
% of Total				

	AUGUST 1999			JANUARY – AUGUST 1999	
CATEGORY	ITC DELTACOM	CLEC AGGREGRATE		ITC DELTACOM	CLEC AGGREGRATE
Total Mech LSRs		98,331			732,934
Fatal Rejects		893			16,363
Total Manual Fallout		7,869			67,747
Auto Clarifications		6,996			64,816
CLEC Caused Fallout		2,886			29,824

	AUGUST 1999			JANUARY – AUGUST 1999	
CATEGORY	ITC DELTACOM	CLEC AGGREGRATE		ITC DELTACOM	CLEC AGGREGRATE
Fatal Reject Rate		0.9%			2.2%
Manual Fallout Rate		8.0%			9.2%
Auto Clarification & CLEC Caused Fallout Rate		10.9%			14.2%

Notes:
(1) All data represents regional results as BellSouth does not track LSRs at the state level.
(2) Except for the Facsimile LSR submissions, all data is from the Percent Flow Through Service Requests which is one of the BellSouth Service Quality Measurements provided monthly to CLECs.

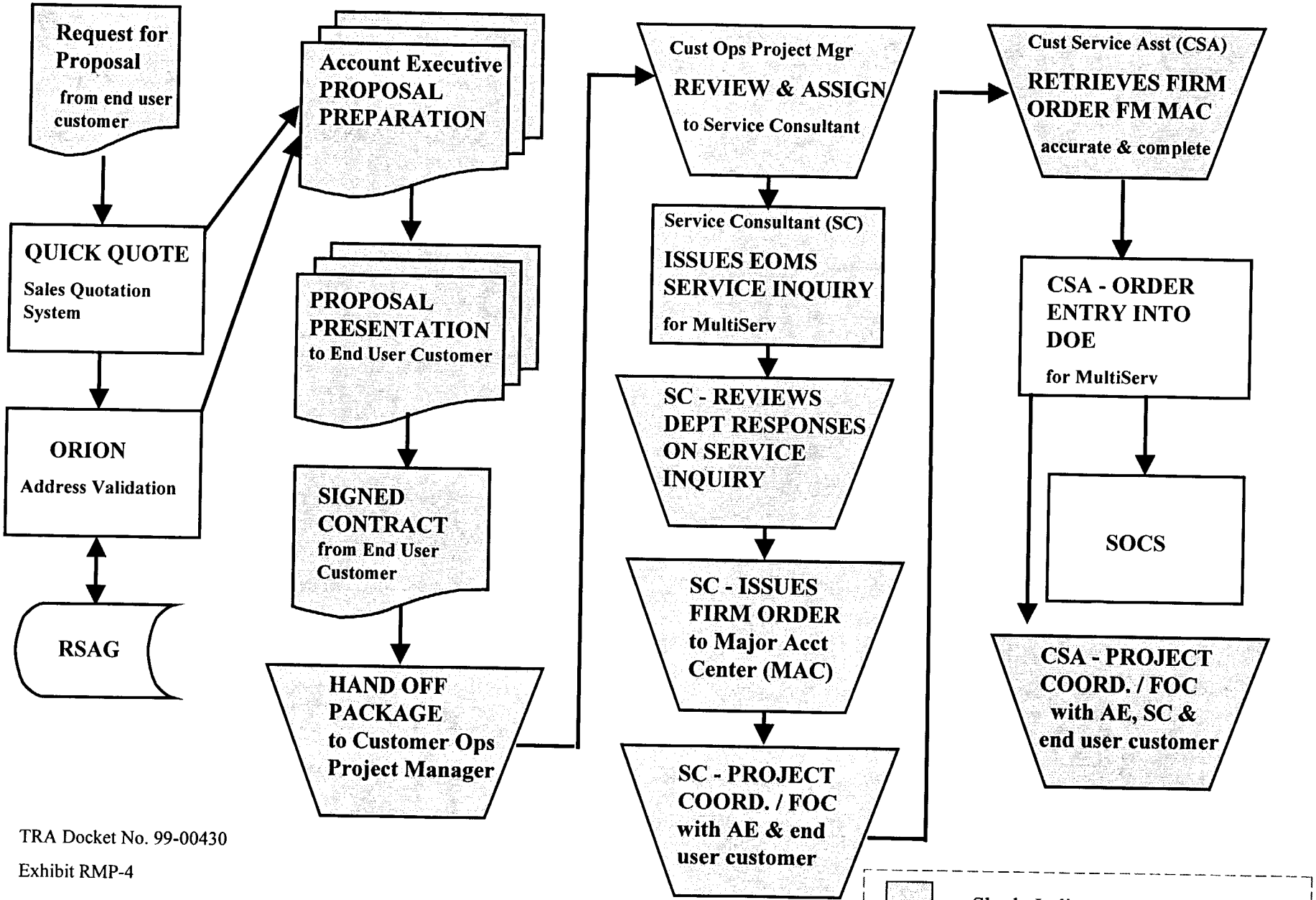
CLEC: Complex Services - MultiServ



TRA Docket No. 99-00430

Exhibit RMP-3

BST RETAIL: Complex Services - MultiServ



TRA Docket No. 99-00430

Exhibit RMP-4

Parkey D. Jordan
General Attorney

BellSouth Telecommunications, Inc.
Legal Department - Suite 4300
675 West Peachtree Street
Atlanta, Georgia 30375-0001
Telephone: 404-335-0794
Facsimile: 404-658-9022

September 23, 1999

Nanette Edwards
ITC^DeltaCom
700 Boulevard South
Suite 101
Huntsville, Alabama 35802

Re: RSAG Proposal

Dear Nanette:

During our negotiations meeting on August 13, 1999, BellSouth proposed to settle Issue 2(a)(i) of the ITC^DeltaCom Arbitration Petition by agreeing to provide to ITC^DeltaCom a download of the RSAG database and monthly updates (via subsequent downloads of the database). We proposed that the database would be provided pursuant to a license agreement and that the cost estimate, without knowing any specifics of ITC^DeltaCom's needs, would be approximately $87,500 for the initial download and $500 to $1000 for each subsequent download.

On August 18, 1999, I forwarded to you via e-mail proposed language for Attachment 6 of the interconnection agreement. The language BellSouth offered reads as follows:

> 4.6.3.3 Upon the request of ITC^DeltaCom, BellSouth shall provide to ITC^DeltaCom a download of certain non-proprietary subsets of the Regional Street Address Guide ("RSAG") database upon the terms and conditions and at the rates set forth in a License Agreement to be negotiated by the Parties. Such download shall be updated via a new download of RSAG on a monthly basis. ITC^DeltaCom shall be solely responsible, at its own cost and expense, for implementing and maintaining systems sufficient to accept the RSAG downloads.

On September 1, 1999, I forwarded to you a draft of a license agreement for your review and the name and telephone number of the BellSouth subject matter expert who could talk to ITC^DeltaCom regarding file size and other technical matters, including pricing. I understand that the technical experts have discussed RSAG, but they did not discuss pricing.

The ultimate price for the RSAG downloads will depend on several factors, including but not limited to the fields ITC^DeltaCom wants to receive and the size of the files to be delivered. An exact price cannot be determined until we move to the testing phase and actually provide a download, which obviously necessitates a commitment on the part of ITC^DeltaCom to execute the license agreement. In speaking with BellSouth's expert, I understand that the price quoted to you in August for the initial download ($87,500) is accurate, plus or minus fifteen percent (15%). The subsequent download price estimate of $500 to $1000 is also accurate. We can insert these prices, with a 15% contingency for the initial download, in the license agreement.

I have never heard from ITC^DeltaCom as to whether, based on the estimated price, ITC^DeltaCom is interested in pursuing the RSAG download, whether the proposed contract language is satisfactory, or whether ITC^DeltaCom has any comments regarding the license agreement. I also need to know what fields of RSAG ITC^DeltaCom needs, as this will be part of the license agreement. We stand ready to meet with you to negotiate with respect to RSAG if ITC^DeltaCom is still interested in pursuing the same.

Sincerely,

Parkey D. Jordan

cc: Pat Finlen

AFFIDAVIT

STATE OF: Georgia
COUNTY OF: Fulton

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Ronald M. Pate-Director-Interconnection Services, BellSouth Telecommunications, Inc., who, being by me first duly sworn deposed and said that:

He is appearing as a witness before the Tennessee Regulatory Authority in Docket No. 99-00430 on behalf of BellSouth Telecommunications, Inc., and if present before the Authority and duly sworn, his testimony would be set forth in the annexed testimony consisting of 29 pages and 5 exhibit(s).

Ronald M. Pate

Sworn to and subscribed
before me this 15th
day of October, 1999

NOTARY PUBLIC

MICHEALE F. HOLCOMB
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2001

BELLSOUTH TELECOMMUNICATIONS, INC.

TESTIMONY OF DAVID P. SCOLLARD

BEFORE THE TENNESSEE REGULATORY AUTHORITY

DOCKET NO. 99-00430

OCTOBER 15, 1999

Q. PLEASE STATE YOUR NAME, ADDRESS, AND POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC.

A. I am David P. Scollard, Room 26D3, 600 N. 19th St., Birmingham, AL 35203. My current position is Manager, Wholesale Billing at BellSouth Billing, Inc., a wholly owned subsidiary of BellSouth Telecommunications, Inc. In that role, I am responsible for overseeing the implementation of various changes to BellSouth's Customer Records Information System ("CRIS") and Carrier Access Billing System ("CABS").

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

A. I graduated from Auburn University with a Bachelor of Science Degree in Mathematics in 1983. I began my career at BellSouth as a Systems Analyst within the Information Technology Department with responsibility for developing applications supporting the Finance organization. I have served in a number of billing system design and

billing operations roles within the billing organization. Since I assumed my present responsibilities, I have overseen the progress of a number of billing system revision projects such as the implementation of the 1997 Federal Communications Commission ("FCC") access reform provisions, billing of unbundled network elements ("UNE's"), as well as the development of billing solutions in support of new products offered to end user customers. I am familiar with the billing services provided by BellSouth Telecommunications to local competitors, interexchange carriers and retail end user customers.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY BEING FILED TODAY?

A. The purpose of my testimony is to address issue 7(b)(II) raised by ITC^DeltaCom Communications, Inc. (ITC^DeltaCom) in this proceeding.

Issue 7(b)(ii) – What tariff procedures should ITC^DeltaCom and BellSouth adopt for meet-point billing?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should direct ITC^DeltaCom to provide all necessary meet point billing information in the appropriate National Exchange

Carrier Association (NECA) tariff developed and maintained by the industry.

Q. WHAT IS BELLSOUTH'S UNDERSTANDING OF THIS ISSUE?

A. Procedures governing Meet Point Billing (MPB) are generally covered by the industry guidelines found in the Multiple Exchange Carrier Access Billing ("MECAB") or Multiple Exchange Carrier Ordering Document ("MECOD") documents developed at the Ordering and Billing Forum ("OBF"). The issues raised by ITC^DeltaCom are the result of new conditions which exist due to the introduction of local competition where industry standards are still under development. In these situations, BellSouth understands it may be necessary for the parties to reach mutually agreeable interim arrangements on certain issues until changes to industry guidelines are completed. The only remaining billing issue that BellSouth and ITC^DeltaCom have not been able to resolve involves the responsibilities of the parties to notify other interconnecting companies of the meet point billing arrangements made between BellSouth and ITC^DeltaCom.

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. Meet Point Billing arrangements impact the rate elements charged by both BellSouth and ITC^DeltaCom to other interconnecting companies and, therefore, these companies must be provided information

pertaining to the arrangements. Over the years, the industry has used the infrastructure surrounding the National Exchange Carrier Association ("NECA") FCC Tariff No. 4 to provide the needed information. As such, the MECAB and MECOD methods are based on the capabilities of this infrastructure. BellSouth's position is that these time tested methods efficiently handle the information needs of all impacted companies. ITC^DeltaCom, however, in Paragraphs 9.9 and 9.10 of Attachment 3 of the proposed agreement proposes that the parties will notify other entities of MPB arrangements by the use of other tariff methods since it is not willing to become a member of NECA. BellSouth's position is that this would result in an administrative nightmare for all to develop and administer parallel infrastructures to communicate MPB data.

Q. DO THE BELLSOUTH ACCESS TARIFFS APPROVED BY THE TENNESSEE REGULATORY AUTHORITY ADDRESS MEET-POINT BILLING?

A. Yes. Section 2.4.8 of BellSouth's intra-state Access Services Tariff approved in Tennessee address the various meet-point billing methods to be used for services being jointly provided by more than one company to an interexchange carrier. The tariff specifies that the NECA Tariff No. 4 will be the repository for the billing data used to calculate the bills and needed by BellSouth's customers to verify the billed charges.

Q. WHEN ITC^DELTACOM AND BELLSOUTH JOINTLY PROVIDE AN ACCESS SERVICE TO A CUSTOMER, CAN BELLSOUTH UNILATERALLY FILE THE BILLING DATA AT NECA WITHOUT THE CONCURRANCE OF ITC^DELTACOM?

A. No. The processes that the industry participants set up at NECA contain controls and safeguards to insure that each of the companies involved in providing the service to the customer are in agreement prior to the NECA tariff being updated. ITC^DeltaCom's refusal to participate in the process makes it impossible for BellSouth to provide the billing information required by the tariffs set by the authority and expected by our customers.

Q. HAS BELLSOUTH MADE ANY PROPOSALS TO ITC^DELTACOM FOR A PROCESS TO BE USED AS AN INTERIM MEET-POINT BILLING METHOD?

A. Yes. BellSouth has proposed that default MPB parameters be used in lieu of the NECA processes. Under this proposal all meet point arrangements will be billed based on a multi-tariff, multi-bill method with the border interconnection percentage ("BIP") fixed at 95% BellSouth and 5% ITC^DeltaCom. In this way, all impacted companies will have a reasonable opportunity to have the information necessary to validate the bills received from both BellSouth and ITC^DeltaCom. This interim

method would be discontinued once ITC^DeltaCom begins to use the NECA infrastructure or when the industry develops an alternative solution.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

AFFIDAVIT

STATE OF: Alabama
COUNTY OF: Jefferson

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared David P. Scollard-Manager-Wholesale Billing, BellSouth Billing, Inc., who, being by me first duly sworn deposed and said that:

He is appearing as a witness before the Tennessee Regulatory Authority in Docket No. 99-00430 on behalf of BellSouth Telecommunications, Inc., and if present before the Authority and duly sworn, his testimony would be set forth in the annexed testimony consisting of 6 pages and 0 exhibit(s).

David P. Scollard

David P. Scollard

Sworn to and subscribed
before me this 15th
day of October, 1999

NOTARY PUBLIC

MICHEALE F. HOLCOMB
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2001

BEFORE THE
TENNESSEE REGULATORY AUTHORITY

IN RE:	)	
PETITION FOR ARBITRATION OF ITC^DELTACOM	)	
COMMUNICATIONS, INC. WITH BELLSOUTH	)	DOCKET NO. 99-00430
TELECOMMUNICATIONS, INC. PURSUANT TO	)	
THE TELECOMMUNICATIONS ACT OF 1996	)	

DIRECT TESTIMONY

OF

WILLIAM E. TAYLOR, Ph.D.

ON BEHALF OF

BELLSOUTH TELECOMMUNICATIONS, INC.

OCTOBER 15, 1999

n/e/r/a
Consulting Economists

DIRECT TESTIMONY OF WILLIAM E. TAYLOR, Ph.D.

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III. CHARGES FOR OPERATIONS SUPPORT SYSTEMS 25

ON BEHALF OF BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF WILLIAM E. TAYLOR, Ph.D.

BEFORE THE TENNESSEE REGULATORY AUTHORITY

DOCKET NO. 99-00430

OCTOBER 15, 1999

I. INTRODUCTION AND SUMMARY

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

A. My name is William E. Taylor. I am Senior Vice President of National Economic Research Associates, Inc. ("NERA"), head of its Communications Practice, and head of its Cambridge office located at One Main Street, Cambridge, Massachusetts 02142.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL, PROFESSIONAL, AND BUSINESS EXPERIENCE.

A. I have been an economist for twenty-five years. I graduated from Oak Ridge High School in 1964, earned a Bachelor of Arts degree from Harvard College in 1968, a Master of Arts degree in Statistics from the University of California at Berkeley in 1970, and a Ph.D. from Berkeley in 1974, specializing in Industrial Organization and Econometrics. For the past twenty-five years, I have taught and published research in the areas of microeconomics, theoretical and applied econometrics, which is the study of statistical methods applied to economic data, and telecommunications policy at academic and research institutions. Specifically, I have taught at the Economics Departments of Cornell University, the Catholic University of Louvain in Belgium, and the Massachusetts Institute of Technology. I have also conducted research at Bell Laboratories and Bell Communications Research, Inc.

I have participated in telecommunications regulatory proceedings before many state public service commissions, including the erstwhile Tennessee Public Service Commission and the Tennessee Regulatory Authority ("Authority"). Before the Tennessee Public

Service Commission, I testified in Docket No. 91-01173 (a theoretical analysis and appraisal of the proposed Tennessee Regulatory Reform Plan) on behalf of South Central Bell Telephone Company, and in Docket No. 95-02499 (on the definition and measurement of the cost of supplying universal service and economic principles for creating a competitively-neutral universal service fund) on behalf of BellSouth Telecommunications, Inc. More recently, before the Authority, I have testified in Docket No. 97-00309 (on the probable economic benefits from BellSouth's entry into interLATA market), on behalf of BellSouth Long Distance, Inc., and in Docket Nos. 96-00067 and 96-01331(on economic costing and pricing principles for resold and unbundled services), 97-01262 (on costing principles for pricing interconnection and unbundled network elements), and 97-00888 (on economic principles for sizing the state universal service fund), on behalf of BellSouth Telecommunications, Inc.

In addition, I have filed testimony before the Federal Communications Commission ("FCC") and the Canadian Radio-television Telecommunications Commission on matters concerning incentive regulation, price cap regulation, productivity, access charges, local competition, interLATA competition, interconnection and pricing for economic efficiency. Recently, I was chosen by the Mexican Federal Telecommunications Commission and Telefonos de Mexico ("Telmex") to arbitrate the renewal of the Telmex price cap plan in Mexico.

I have also testified on market power and antitrust issues in federal court. In recent work years, I have studied—and testified on—the competitive effects of mergers among major telecommunications firms and of vertical integration and interconnection of telecommunications networks.

Finally, I have appeared as a telecommunications commentator on PBS Radio and on The News Hour with Jim Lehrer. My curriculum vita is attached as Exhibit WET-1.

Q. PLEASE DESCRIBE NERA, YOUR PLACE OF EMPLOYMENT.

A. Founded in 1961, National Economic Research Associates, Inc. ("NERA") is an internationally known economic consulting firm. It specializes in devising economic solutions to problems involving competition, regulation, finance, and public policy. Currently, NERA has more than 275 professionals (mostly highly experienced and

credentialed economists) with 10 offices in the U.S. and overseas offices in Europe (London and Madrid) and Sydney, Australia. In addition, NERA has on staff several internationally renowned academic economists as Special Consultants who provide their professional expertise and testimony when called upon.

The Communications Practice, of which I am the head, is a major part of NERA. For over 30 years, it has advised a large number of communications firms both within and outside the U.S. Those include several of the regional Bell companies and their subsidiaries, independent telephone companies, cable companies, and telephone operations abroad (e.g., Canada, Mexico, Europe, Japan and East Asia, Australia, and South America). In addition, this practice has supported a large number of legal firms and the clients they represent, and routinely provided testimony or other input to governmental entities like the Federal Communications Commission ("FCC"), the Department of Justice, the U.S. Congress, several state regulatory commissions, foreign regulatory commissions, and courts of law. Other clients include industry forums like the Unites States Telephone Association.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I have been asked by BellSouth Telecommunications, Inc. ("BellSouth")—an incumbent local exchange carrier ("ILEC")—to provide an economist's perspective on various issues awaiting resolution in this proceeding for the arbitration of an interconnection agreement between BellSouth and ITC^DeltaCom Communications, Inc. ("ITC^DeltaCom")—a competitive local exchange carrier ("CLEC"). The salient issues I address in my testimony include: (1) reciprocal compensation for traffic sent to Internet service providers ("ISPs") and (2) non-recurring charges ("NRCs") for BellSouth's operations support systems ("OSS").

Q. PLEASE SUMMARIZE YOUR POSITIONS ON THOSE ISSUES.

A. My positions on the issues are summarized as follows:

I. Inter-Carrier Compensation for ISP-Bound Calls

1. The FCC has ruled that ISP-bound calls are jurisdictionally interstate, not local. Therefore, the proper model of interconnection that applies to ISP-bound calls is not that between an originating ILEC and a terminating CLEC, but that between an originating ILEC and an inter-exchange carrier ("IXC").

2. Regardless of whether ISP-bound calls are jurisdictionally local or interstate, the correct economic perspective on inter-carrier compensation rests on the principle of cost causation. On the basis of that principle alone, reciprocal compensation should not be paid by the originating ILEC for ISP-bound calls. Instead, the ISP should compensate that carrier (and any other carrier that switches the ISP-bound call) for the end-to-end cost caused by the ISP customer, and recover that cost directly from the ISP customer.

3. The ISP is not an end-user (of a serving CLEC) but rather a carrier. Therefore, like the IXC that pays carrier access charges to partially defray the cost of a long distance call, the ISP should pay analogous usage-based charges to defray costs incurred by other carriers on its behalf to switch an ISP-bound call.

4. Persisting with reciprocal compensation (from the ISP customer's originating ILEC to the CLEC that ultimately switches the call to the ISP) would generate an inefficient subsidy for Internet use, distort the local exchange market, and generate unintended arbitrage opportunities for CLECs. These would be opportunities for CLECs to specialize in serving ISPs with the sole aim of accumulating reciprocal compensation revenues.

5. Based on the FCC ruling that ISP-bound calls are primarily interstate, three states (Massachusetts, New Jersey, and South Carolina) have recently declared that the payment of reciprocal compensation by ILECs originating ISP-bound calls be stopped. Massachusetts regulators, in particular, have noted that by encouraging arbitrage opportunities, the reciprocal compensation regime of inter-carrier compensation for ISP-bound calls subverts real local exchange competition.

II. Charges for Operations Support Systems

1. CLECs seeking access to the ILEC's OSS must use electronic interfaces and related systems created specifically for that purpose. The economic principle of cost causation requires that (1) OSS-requesting carriers pay for the costs they cause and (2) the prices charged for that purpose reflect the forward-looking costs to provide access to OSS.

2. Access to OSS generates both recurring and non-recurring costs. The non-recurring costs themselves arise from development (of interfaces and the like) and use (associated with every service order). Development costs vary primarily with the amount of capital (degree of automation) built into the interfaces, while use costs vary primarily with the extent of labor required. There is generally a trade-off between these two types of cost: the higher one is, the lower the other will be.

3. OSS-requesting carriers must be required to pay for both development and use costs. If development costs are not recovered from those carriers, there would be a strong

incentive for those carriers to demand interfaces and related systems excessively, in terms of both quantity and quality.

4. The Authority has already permitted (in Docket No. 97-01262) the full recovery of both types of cost, and BellSouth has filed appropriate rates accordingly.

II. INTER-CARRIER COMPENSATION FOR ISP-BOUND CALLS

Issue 3(1): Should BellSouth be required to pay reciprocal compensation to ITC^DeltaCom for all calls that are properly routed over local trunks, including calls to Information Service Providers ("ISPs")?

Q. SHOULD RECIPROCAL COMPENSATION BE PAID FOR ISP-BOUND CALLS?

A. No, for two reasons. First, as the FCC has already correctly determined, calls made to Internet destinations are much more likely to be jurisdictionally interstate than local.[1] Second, and more importantly, the economic principle of cost causation implies that the relationship between the end-user and the ISP is analogous to that between the end-user and an inter-exchange carrier ("IXC"). In fact, regardless of the exact jurisdictional status of Internet calls, there are sound *economic* reasons to (1) reject reciprocal compensation for such calls and (2) require that the ISP pay usage-based charges to the ILEC and/or CLEC akin to the access charges currently paid by IXCs to the ILEC for all long distance calls carried.

Q. PLEASE EXPLAIN THE FCC'S FINDING THAT ISP-BOUND CALLS ARE JURISDICTIONALLY MORE LIKELY TO BE INTERSTATE.

A. The FCC recently stated that it:

> traditionally has determined the jurisdictional nature of communications by the *end points* of the communication and consistently has rejected attempts to divide communications at any intermediate points of switching or exchanges between carriers.[2]

[1] FCC, *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996* and *Inter-Carrier Compensation for ISP-Bound Traffic*, CC Docket Nos. 96-98 and 99-68, Declaratory Ruling in CC Docket No. 96-98 and Notice of Proposed Rulemaking in CC Docket No. 99-68 ("Internet Traffic Order"), released February 26, 1999.

[2] Internet Traffic Order, ¶10. Emphasis added.

Based on this premise, the FCC explained that calls made to the Internet:

> do not terminate at the ISP's local server ... but continue to the ultimate destination or destinations, specifically at an Internet website that is often located in another state. The fact that the facilities and apparatus used to deliver traffic to the ISP's local servers may be located within a single state does not affect [the FCC's] jurisdiction. ... Indeed, in the vast majority of cases, the facilities that incumbent LECs use to provide interstate access are located entirely within one state.[3]

The FCC's reasoning is absolutely correct. A call is said to be terminated when it is *delivered to the called party's premises*.[4] In this sense, an ISP-bound call may transit the switch of the carrier serving the ISP, but the call is then delivered to the Internet web site which, as the FCC noted, may be located outside the state in which the call originated. The FCC made it perfectly plain that what matters for determining jurisdiction is the end-to-end transmission itself, not how many different carriers or facilities handle the Internet call on its way.

The FCC also noted that while jurisdiction is determined unambiguously when a call originates and terminates entirely within the circuit-switched network, it is a very different matter when the call crosses over from the circuit-switched network into the packet-switched network (that comprises the Internet's backbone network and Internet web sites) along the way to its destination.[5] This is particularly important because the packet-switched network is a "connectionless" network in which termination, in the sense understood within the circuit-switched network, technically does not happen. For example, before it is over, the same Internet call may reach several destination points on the Internet. Also, calls are switched or, more accurately, "routed" over the packet-switched network in a dynamic manner. This means that the Internet call, rearranged in the form of data packets of given length, are sent in a scrambled manner along different available paths within the backbone network, and the "call" is then reconstituted when all of the packets reach the

[3] *Id.*, ¶12. Footnotes omitted.

[4] FCC, *In the Matter of Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, First Report and Order ("Local Competition Order"), released August 19, 1996, ¶1040.

[5] Internet Traffic Order, ¶18.

intended Internet destination. This method of transport and routing is nothing like the termination that occurs within the circuit-switched network where, for every call originated and terminated, a dedicated call path is established for the duration of the call. These crucial differences make it all the more likely that an Internet call will cross several state boundaries—and in a random manner—before it reaches its destination. At best, such a call would be "jurisdictionally mixed," as the FCC has already correctly determined.

Q. PLEASE EXPLAIN THE PRINCIPLE OF COST CAUSATION AND ITS RELEVANCE TO COST RECOVERY?

A. Cost causation is the fundamental economic principle on which all pricing and cost recovery efforts should be based. This principle asks two questions: (1) who or what has caused the cost in question (cost source)? and (2) how much is the cost in question (level of cost recovery)? Once the person or activity that gives rise to a cost has been identified, the amount of cost in question is recovered entirely from that source. This linkage between cost recovery and the cost source stands on its own, and makes no reference whatsoever to the distribution of benefits. That is, even if an activity provides benefits to others besides the cost-causer, cost should be recovered fully from its source and not from incidental beneficiaries. For example, if my decision to travel to Nashville causes me to employ resources (airline, rental car, lodging, etc.) that cost $2,000 between them, then that entire cost should be recoverable from me, the cost-causer. Whether someone or something else benefits in any material or other way from my travel to Nashville is irrelevant for determining what the cost of that travel is or who should pay the price to recover that cost.[6] In general, the prices that consumers pay should reflect the costs caused by their consumption of specific goods or services.

It is well known that consumers decide what to buy and how much to buy on the basis of prices they pay. Their act of buying also causes cost. To ensure that society's scarce

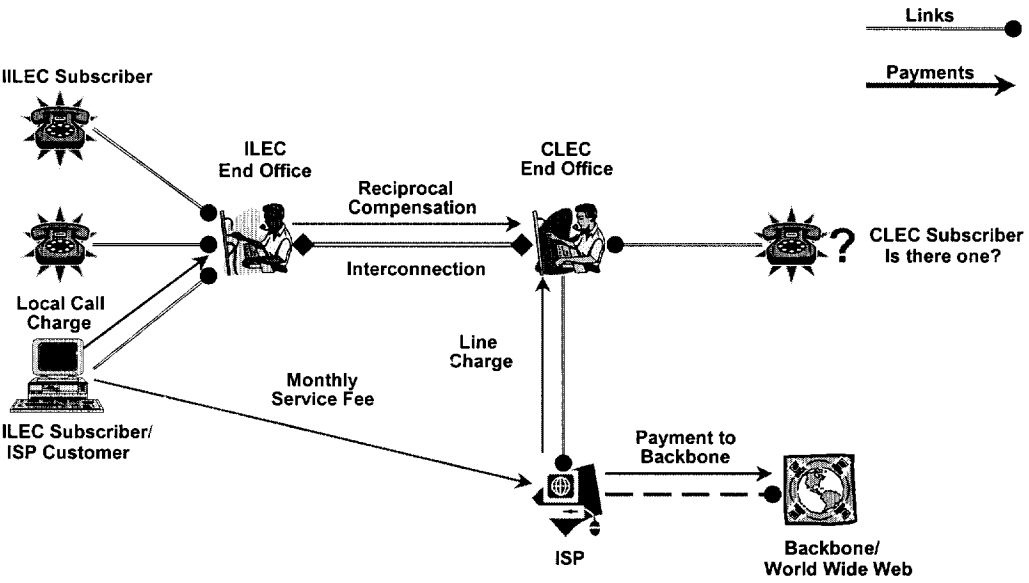
[6] The airline or the hotel may "benefit" from my using them in the course of my travel to—and within—Nashville. So would every hot dog stand, souvenir shop, or amusement park that I visit while I am there. However, none of these would be sources of the cost of my travel and should, therefore, not be required to share in the recovery of the cost caused by my travel. I alone should be held responsible for all costs linked to my travel.

resources are put to their best use, and that only the goods and services of highest value to society are produced and consumed, consumers (cost-causers) must be made to pay prices that fully reflect the costs they cause. Application of the cost causation principle thus leads to prices that fully recover costs and, at the same time, ensure that consumption occurs—and resources are used—efficiently.

Q. PLEASE EXPLAIN HOW COST CAUSATION DETERMINES THAT ISPs ARE ANALOGOUS TO IXCs AND SHOULD THUS PAY CHARGES SIMILAR TO ACCESS CHARGES.

A. To understand this point, it is first necessary to recapitulate the *erroneous* view of the 0network that underlies ITC^DeltaCom's belief that an Internet call is jurisdictionally

Figure 1. Charges and Inter-Carrier Compensation (The ITC^DeltaCom View): Originating ILEC Pays Reciprocal Compensation to Terminating CLEC



local. This view of the network, depicted by Figure 1, rests on two crucial assumptions:

1. The ILEC subscriber that calls the Internet is acting as a customer of the originating

ILEC,[7] even when the call goes through the ISP to which it pays monthly access fees.[8]

2. The ISP itself is an end-user (not a carrier) of the CLEC and the Internet call terminates at the ISP.

Under these assumptions, the ILEC subscriber that makes the Internet call is an end-user of the originating ILEC (paying local residential rates for line charges) and the ISP is an end-user of the terminating CLEC (paying local business rates for line charges). The monthly Internet access charges paid by the ILEC subscriber to the ISP and the leased high-speed line charges paid by the ISP to Internet backbone networks are only incidental to this model and have no further role in determining jurisdiction. In this view of the network, therefore, the portion of the Internet call that lies entirely within the circuit-switched network, i.e., up to the ISP, *resembles* a local call under an interconnection arrangement between two local carriers. From this it would appear that the CLEC that terminates the ISP-bound call is entitled to reciprocal compensation under the FCC's rules.

This conclusion is fundamentally incorrect because it ignores cost causation, specifically, that the ILEC subscriber that makes the Internet call does so *while acting as a customer of the ISP* to which it pays monthly fees for Internet access and which, in return, markets directly to the customer and provides a point of presence in the customer's local calling area in order to provide easy access. Thus, the same subscriber that acts in the capacity of a customer of the originating ILEC when making a local voice call can act in the capacity of a customer of the ISP when making an Internet call. This situation is not an unfamiliar one; in fact, it is exactly analogous to the subscriber acting in the capacity of a customer of an IXC when making a long distance call. This analogy—and the proper cost

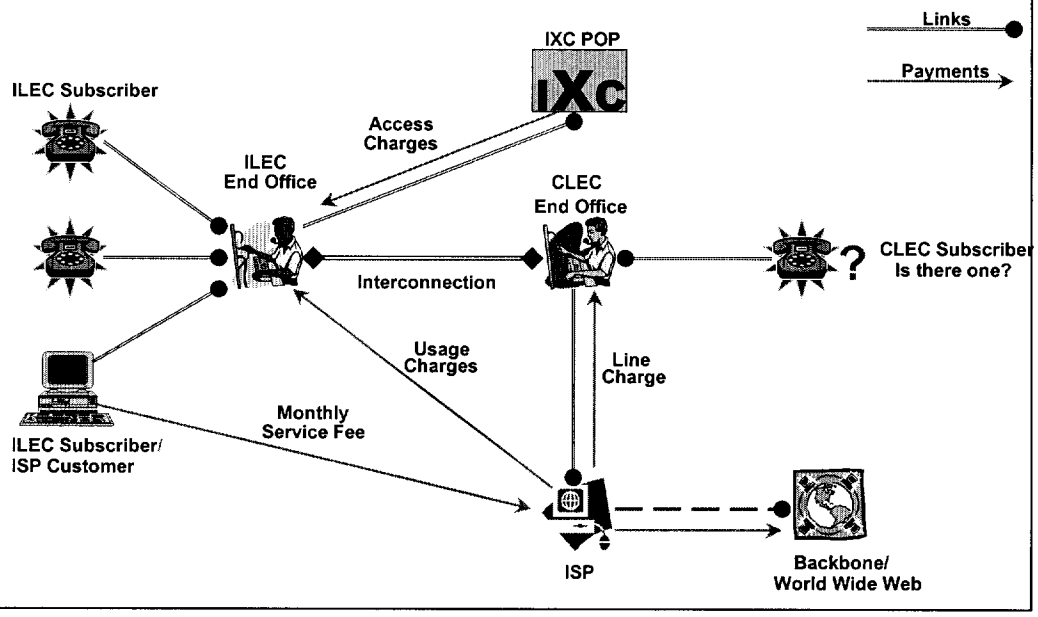
[7] I distinguish here between a "subscriber" and a "customer" in order to show cost causation. I subscribe to my local carrier in order to have *access* to the public switched network, but I act as a customer of that local carrier in order to *use* Call Waiting service or of a long distance carrier in order to *use* interstate long distance service. When I am a customer of the local carrier, I cause usage-based cost for that carrier. Similarly, I cause cost for the long distance carrier when I use *its* long distance service.

[8] An implicit assumption here is that the ISP has a point of presence in the local calling area of the Internet caller.

causation view of Internet calling—is explained in Figure 2.

Figure 2. Charges and Inter-Carrier Compensation (The BellSouth View):

ISP Pays Compensation to Originating and Terminating LECs



This view of the network, depicted by Figure 2, rests on two different assumptions:

1. The ILEC subscriber that calls the Internet is acting as a customer of the ISP to which it pays monthly access fees, even though the call is facilitated by the originating ILEC and the CLEC serving the ISP.
2. The ISP is viewed as a *carrier*—akin to an enhanced service provider ("ESP")—that routes the Internet call through the backbone network to its final destination. The ISP performs standard carrier functions such as transport and routing, as well as maintains leased facilities within the backbone network. It is, therefore, *not* an end-user of the CLEC.

These assumptions appropriately depict the Internet-bound (or, ISP-bound) call as being much closer in character to an interstate long distance call than to a local call that is contained entirely within the local calling area. They also dispel the notion that an Internet-bound call is really two calls: the first call ending at the CLEC serving the ISP, and the second call routed by the ISP through the backbone network to its Internet

destination.

Validity for this set of assumptions comes from the principle of cost causation. This principle suggests that, *for the purposes of an Internet call*, the subscriber is properly viewed as a customer of the ISP, not of the originating ILEC (or even of the CLEC serving the ISP). The ILEC and the CLEC simply provide access-like functions to help the Internet call on its way, just as they might provide originating or terminating carrier access to help an IXC carry an interstate long distance call. Therefore, with the proper network model being analogous to ILEC-IXC interconnection (access), rather than to ILEC-CLEC interconnection, the proper form of inter-carrier compensation should be usage-based charges analogous to carrier access charges for long distance calls, rather than reciprocal compensation.

Q. PLEASE EXPLAIN THE CONTRAST BETWEEN THESE TWO "MODELS" OF INTERCONNECTION IN MORE DETAIL.

A. ***ILEC-CLEC Interconnection Model.*** When a BellSouth subscriber places a local call that terminates to a CLEC subscriber, what functions does BellSouth perform? Obviously, it originates the call by providing dialtone, local switching, and transport to the CLEC's point of interconnection. In addition, BellSouth has marketed the service to its subscriber (and customer of local calls), determining the price and price structure and other terms and conditions under which the customer decides to place the call. BellSouth will determine if the call has been completed, bill the customer for the call (if measured service applies) or for flat-rate service, answer questions regarding the bill or the service and collect money from the customer or lose the revenue if it is unable to collect from the customer. The story is precisely symmetric if the originating party is a CLEC customer and BellSouth or another CLEC terminates the call.

Thus, under ILEC-CLEC interconnection (see Figure 1), the originating subscriber is the cost-causing party and is the customer of the originating ILEC. That originating ILEC charges its cost-causing customer for the entire end-to-end call and compensates the CLEC that terminates the call. The originating ILEC's network costs plus the compensation it pays is—in theory—recovered from the local call charge it levies on its (originating)

customer. The terminating CLEC's costs are recovered from the compensation payment it receives from the originating ILEC. In this arrangement, both parties recover their costs, and the cost-causer is (again, in principle) billed for the entire cost he or she causes both carriers to incur. Thus, this arrangement is not an arbitrary regulatory or legal construction: for local interconnection between an ILEC and a CLEC, it makes economic sense. It could arise spontaneously in unregulated competitive markets where the ILEC serving the originating subscriber acts effectively as its agent in making necessary network and financial arrangements with a CLEC to terminate the call, just as General Motors may purchase goods or services from Ford or Bendix to include in an automobile purchased by a General Motors customer.

ILEC-IXC Interconnection Model. In contrast, when a BellSouth subscriber places a long distance call using, e.g., AT&T, BellSouth's function is limited to recognizing the carrier code (or implementing presubscription in its switch) and switching and transporting the call to AT&T's point of presence. While at some level, the functions its network performs are similar to those used to deliver local traffic to a CLEC[9], the economic functions are very different. It is AT&T that has marketed the service to its customer and determined the price, price structure, and other terms and conditions of the call. AT&T will send, explain, and collect the bill from the customer or lose the revenue if it cannot. Thus, under ILEC-IXC interconnection, the originating subscriber is, from an economic perspective, the customer of the IXC, not the originating ILEC.

When an ILEC (or CLEC) subscriber places long distance calls, he acts as a cost-causing customer of the IXC. Figure 2 shows that the ILEC subscriber, acting as an IXC customer, causes costs at various points in the networks involved: for the ILECs/CLECs that originate and terminate the long distance call, as well as for the IXC that transports it between local exchanges. The IXC receives revenue from the customer which it uses, in turn, to pay originating and terminating access charges to the ILECs/CLECs involved and

[9] BellSouth supplies the customer's loop and provides dialtone, local switching, and transport to AT&T's point of presence.

to cover its own network and administration costs. In effect, the IXC acts as its customer's agent in assembling the necessary local exchange components of the call. The ILECs/CLECs involved recover their costs from access charges. If more than one such carrier is involved in delivering the call from the end user to the IXC, they typically divide the access charges paid by the IXC in proportion to the costs incurred to provision the access portion of the call. Thus, in principle, the cost-causing customer faces a price that reflects all of the costs the call engenders, and all parties that incur costs to provision the call have a claim on the cost-causer's payment.

Thus, from an economic perspective, ILEC-IXC interconnection and ILEC-CLEC interconnection have some important similarities as well as some important differences. In both cases, the originating ILEC subscriber is the cost-causer, and that subscriber pays the supplier (the party with whom the subscriber has contracted for service) for the end-to-end service he receives. The major difference is that in the ILEC-CLEC local interconnection regime, the cost-causing ILEC subscriber is also a customer of the originating ILEC for local service, while in the ILEC-IXC regime, that cost-causing subscriber acts as a customer of the IXC for long distance service.

Q. WHY DOES ILEC-CLEC-ISP INTERCONNECTION RESEMBLE THAT BETWEEN THE ILEC AND THE IXC BUT NOT THAT BETWEEN THE ILEC AND THE CLEC?

A. The question at issue is: when multiple ILECs/CLECs combine to deliver traffic to an ISP, are they interconnecting in an ILEC-CLEC local interconnection regime or an ILEC-IXC interstate access regime? The FCC has characterized the link from an end-user to an ISP as an *interstate* access service and, absent other considerations, ISPs would be subject to charges analogous to interstate access charges. As far back as 1983, the FCC concluded that ESPs (which, today, would include ISPs) are "among a variety of users of access service" in that they "obtain local exchange services or facilities which are used, in part or

in whole, for the purpose of completing interstate calls."[10]

The service provided by an ISP exists to enable that ISP's customers to access information and information-related services stored on special computers or web servers at various locations around the world. The ISP typically facilitates such access by selling a flat-rated monthly or yearly Internet access service that, in most cases, calls for that ISP customer to make only a local call in order to reach the ISP's modems. Besides price, ISPs compete on the extent of geographic coverage, specifically, the number of local calling areas they can offer to ISP customers as possible points of connection ("POCs"), as well as on various components of service quality including provision of specialized information services.[11] The ISP markets directly to the originating ILEC's subscriber, attempting to maximize its number of customers and the amount of traffic *incoming* to it by publishing and advertising as many local calling numbers (at its POCs) as possible, and doing everything within its power to help the potential customer avoid having to incur per-minute or toll charges to have Internet access. If necessary, ISPs may use foreign exchange ("FX") lines to haul Internet traffic from considerable distances while still offering service to the ISP customer for the price of a local call.[12] Some ISPs offer 800 service for their customers to access their network when flat-rate local calling is unavailable, although there are some which impose a per-minute charge on the subscriber for such access. Some ISPs maintain Internet gateways for their customers and earn revenue from advertisers that depend more or less directly on the number of customers and the number of times its customers access

[10] FCC, *In Re: MTS and WATS Market Structure*, CC Docket No. 78-72, Memorandum Opinion and Order ("MTS/WATS Order"), 1983.

[11] The POCs are points at which the carrier serving the ISP (which may be a CLEC) terminates the ISP-directed call and routes it to the ISP.

[12] In that respect, the implicit contract is analogous to that which exists between a party with a toll-free "800" telephone number and other parties that are invited to call that number. The holder of the 800 number causes cost by signaling others to call him or her and accepts that cost by being willing to pay for it. Moreover, the holder of the 800 number may control the number of potential callers by choosing the method for disclosing the number (e.g., directory information, word of mouth, special invitation, etc.). Similarly, ISPs that use FX lines to provide local connectivity to distant customers signal a willingness to accept—and pay for—the generally higher cost of providing Internet access to those customers. They too can control the number of potential ISP customers by choosing both how many points of connection to offer for providing local connectivity and pricing options for its Internet access service.

advertised sites. The ISP bills its customers for their access and usage, and it is the ISP that loses money if it cannot collect from them. From an economic perspective, then, the party that causes the cost associated with ISP-bound traffic is the originating ILEC's subscriber who acts in the capacity of an ISP customer. In this sense, ISP-bound traffic has the same characteristics as IXC-bound traffic in the ILEC-IXC regime and has characteristics opposite to CLEC-bound traffic in the ILEC-CLEC local interconnection regime.

Q. ARE THERE DIFFERENCES BETWEEN AN IXC-BOUND CALL AND AN ISP-BOUND CALL?

A. A theoretical difference is that an ILEC subscriber that places a long distance call does not incur a local usage charge on the originating end, while an ISP customer, in principle, does. As a practical matter, however, this difference is irrelevant. Flat and measured basic local exchange rates have *not* been set to reflect the added cost of serving ISP-bound traffic, and a longstanding public policy concern with the level of basic exchange rates limits the ability of the regulator to recover these costs from all local exchange customers.[13] In addition, ISPs compete, in part, by providing local exchange numbers so that their customers can reach them without incurring per-minute charges from the serving ILEC or CLEC. Because ISP-bound traffic is caused by the ISP's customer, the ISP would generally bear the cost of the local connection, just as the IXC does for long distance traffic. And, in fact, competitive forces in the ISP market have encouraged ISPs to incur costs and lease facilities so that their customers do not pay additional local exchange costs. For both of these reasons, it would be naïve to think that the originating ILEC's subscriber fully compensates that ILEC for the end-to-end cost of the ISP-bound call.[14]

[13] Indeed, if the longer holding times of ISP-bound traffic impose costs different from those for ordinary voice traffic, raising prices for all local exchange customers to recover costs imposed by the ISP's customers would constitute a subsidy to ISP access. ILECs that originate ISP-bound traffic would effectively charge ISP customers less than incremental cost and ordinary voice customers more than otherwise for local exchange usage.

[14] This problem is likely to be even more acute when the ILEC's subscriber pays flat-rated local charges rather than per-call rates for local service.

All of these are reasons why instead of the ILEC paying reciprocal compensation (or, a terminating charge) to CLECs as in the ILEC-CLEC local interconnection regime, for Internet calls by the ILEC subscriber, ISPs should pay the ILEC (and the CLEC that also serves it) usage charges analogous to carrier access charges paid by IXCs. Only such a payment will close the gap between the full cost of the call up to the ISP and the local call charge that is assessed to the end-user by the originating ILEC. In this economically correct view of inter-carrier compensation, the CLEC that switches Internet calls for the ISP is compensated not from reciprocal compensation paid by the originating ILEC but from usage-based charges paid to it by the ISP. Moreover, this economically correct perspective does *not* depend on the exact jurisdictional status of the ISP-directed call.

Q. DO ISPs PAY USAGE-BASED CHARGES (ANALOGOUS TO CARRIER ACCESS CHARGES) TODAY?

A. No. Even though the FCC has recently declared that ISP-bound traffic is, at best, jurisdictionally mixed and is, in most instances, interstate, no rulemaking has yet occurred to establish such charges for ISPs. Thus, it remains uncertain as to exactly when rules to this effect will be established. Also, ISPs are currently beneficiaries of an exemption from paying interstate carrier access charges that has been granted to ESPs since 1983.[15] I understand, however, that the exemption itself only applies to payment of access charges to ILECs. Thus, CLECs could, if they so chose, still assess access-like charges on ISPs that use their network.

Q. IN THE ABSENCE OF FCC ACTION TO ESTABLISH INTER-CARRIER COMPENSATION RULES, HOW HAVE THE INDIVIDUAL STATES ACTED?

A. For a period of time until the FCC's Internet Traffic Order was issued in early 1999, a

[15] The FCC has traditionally explained that exemption thus:

> to protect certain users of access services, such as ESPs, that had been paying the generally much lower business service rates from the rate shock that would result from immediate imposition of carrier access charges.

Internet Traffic Order, ¶5, and MTS/WATS Order, ¶715.

number of states pursued their own rulemaking on the issue. Those states chose to adopt the ILEC-CLEC local interconnection view of the world and required that the originating ILEC pay reciprocal compensation to terminating CLECs for ISP-bound calls just as they would for local voice calls. After the FCC's Internet Traffic Order was issued, regulators in Massachusetts, who had previously also adopted the local interconnection view, reversed themselves and declared the unqualified payment of reciprocal compensation for ISP-bound traffic to be antithetical to real competition in telecommunications.[16] Subsequently, regulators in New Jersey, in reversing an arbitrator's recommendation in October 1998, also ordered that reciprocal compensation not be paid for ISP-bound traffic.[17] More recently, in ruling on a BellSouth-ITC^DeltaCom interconnection arbitration, regulators in South Carolina directed that reciprocal compensation *not* be paid for ISP-bound traffic sent by BellSouth to ITC^DeltaCom.[18]

Q. WHAT REASONS DID MASSACHUSETTS REGULATORS GIVE FOR THIS REVERSAL?

A. The Massachusetts Department of Telecommunications and Energy explained its reasons for the reversal thus:

> The unqualified payment of reciprocal compensation for ISP-bound traffic, implicit in our October Order's construing of the 1996 Act, does not promote real competition in telecommunications. Rather, it enriches competitive local exchange carriers, Internet service providers, and Internet users at the expense of telephone customers or shareholders. This is done under the guise of what

[16] Massachusetts Department of Telecommunications and Energy ("DTE"), *Complaint of MCI WorldCom, Inc., Against New England Telephone and Telegraph Company d/b/a Bell Atlantic-Massachusetts for Breach of Interconnection Terms Entered Into Under Sections 251 and 252 of the Telecommunications Act of 1996*, Docket No. 97-116-C, Order ("Massachusetts ISP Compensation Order"), May 1999. The DTE ordered that all future reciprocal compensation payments by Bell Atlantic be placed in an escrow fund until final disposition on the matter of inter-carrier compensation. The CLECs serving ISPs in Massachusetts currently do not themselves receive any compensation for ISP-bound traffic.

[17] New Jersey Board of Public Utilities, *In the Matter of the Petition of Global Naps, Inc. for Arbitration of Interconnection Rates, Terms, Conditions and Related Arrangements with Bell Atlantic-New Jersey Pursuant to Section 252(b) of the Telecommunications Act of 1996*, Docket No. T098070426, Order, July 7, 1999.

[18] Public Service Commission of South Carolina, *Petition of ITC^DeltaCom Communications, Inc. for Arbitration with BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996*, Docket No. 1999-259-C, Order No. 1999-690, Order on Arbitration, October 4, 1999.

> purports to be competition, but is really just an unintended arbitrage opportunity derived from regulations that were designed to promote real competition. A loophole, in a word. ... But regulatory policy ... ought not to create such loopholes or, once having recognized their effects, ought not leave them open.
>
> Real competition is more than just shifting dollars from one person's pocket to another's. And it is even more than the mere act of some customers' choosing between contending carriers. Real competition is not an outcome in itself—it is a means to an end. The "end" in this case is *economic efficiency* ... Failure by an economic regulatory agency to insist on true competition and economic efficiency in the use of society's resources is tantamount to countenancing and, to some degree, encouraging waste of those resources. Clearly, continuing to *require* payment of reciprocal compensation ... is not an opportunity to promote the general welfare. It is an opportunity only to promote the welfare of certain CLECs, ISPs, and their customers, at the expense of Bell Atlantic's telephone customers and shareholders.[19]

Q. WHY WOULD THE ILEC-CLEC LOCAL INTERCONNECTION REGIME WITH PAYMENT OF RECIPROCAL COMPENSATION FOR ISP-BOUND TRAFFIC HARM ECONOMIC EFFICIENCY AND FAIL TO PROMOTE TRUE COMPETITION?

A. The harm to economic efficiency in an ILEC-CLEC local interconnection regime with payment of reciprocal compensation for ISP-bound traffic occurs for three reasons:

1. Inefficient subsidization of Internet users by non-users.
2. Distortion of the local exchange market.
3. Creation of perverse incentives to arbitrage the system at the expense of basic exchange ratepayers.

Q. PLEASE EXPLAIN HOW THE ILEC-CLEC INTERCONNECTION REGIME FOR ISP-BOUND TRAFFIC COULD CAUSE INEFFICIENT SUBSIDIZATION OF INTERNET USERS BY NON-USERS.

A. The principle of cost causation requires that the *ISP customer* pay at least the cost its call imposes on the circuit-switched network.[20] Suppose inter-carrier compensation for ISP-

[19] *Id.* Emphasis added (in part) and in original (in part).

[20] It is assumed that the cost imposed by that customer for the packet-switched network portion of the Internet call

(continued...)

bound traffic is treated as in the ILEC-CLEC interconnection regime (Figure 1). This regime assumes at the outset that the customer initiating the call has paid the originating ILEC for the end-to-end carriage of the call, typically, the per-call equivalent of the local call charge. Out of what it receives, the ILEC would then pay reciprocal compensation to the CLEC that terminates to the ISP. This compensation is a per-minute call termination charge which, ideally, should reflect the incremental cost that the ILEC *avoids* by not having to terminate the call itself. In this scenario, problems can emerge from two sources.

First, if the local call charge is itself inefficient, e.g., it is below the incremental cost of carrying an end-to-end local voice call, then it cannot be sufficient to allow recovery of both the ILEC's incremental cost to originate the call and the CLEC's incremental cost to terminate the call. In other words, once reciprocal compensation has been paid, the ILEC would fail to recover its cost of carrying the ISP-bound call when the local call charge itself is inefficient. If the ILEC breaks even for *all* of its services in these circumstances, that would mean that Internet use (for which the cost exceeds revenue) is being subsidized by non-Internet and, most likely, non-local exchange services. This scenario is likely to play out whenever, in order to promote universal service, the local residential call charge in a state is set below the incremental cost of that call.

Second, if the cost to terminate an ISP-bound call is *less* than the cost to terminate the average voice call (on which most reciprocal compensation arrangements are based), then the CLEC would recover in excess of its cost. Even if the local per-call charge were compensatory, the ILEC could still end up with a higher cost liability than necessary (the sum of its own originating cost and the CLEC's inflated termination charge) and a net revenue deficit from carrying the ISP-bound call. Again, the Internet user would not be paying the cost he imposes on the originating ILEC (equivalent to receiving a subsidy).

This form of subsidization of Internet use within the circuit-switched network can inefficiently stimulate demand for Internet services and further aggravate the ILEC's

(...continued)

is recovered through monthly access charges by the ISP serving that customer.

tenuous position under the ILEC-CLEC interconnection regime. Additional negative consequences could be (1) greater congestion at local switches engineered for voice traffic generally and, as a result, poorer quality of voice traffic, and (2) opportunistic specialization by CLECs in the termination only of ISP-bound traffic. I discuss the resulting distortion of the local exchange market below.

Q. WHAT IS THE DILEMMA THAT THE ORIGINATING ILEC WOULD THEN FACE WITH RESPECT TO ITS OWN CUSTOMERS?

A. The originating ILEC's dilemma would then be to find a solution to the subsidization problem that is both economically correct and politically feasible. The subsidy to Internet use can be eliminated by charging differently for such use than for voice calls. Specifically, this would mean that Internet use is charged a higher rate than other local calls. While this solution would, in principle, appear economically feasible, it would require that ILECs be able to distinguish calls headed for Internet destinations from those headed for non-Internet destinations within the local calling area, and to charge for *each call* accordingly. Assuming that ILECs are able to make that distinction, such a solution would, nevertheless, mark a significant departure from the current practice of charging all customers within the same calling area the same averaged residential local rate on a flat-rated basis (i.e., not per call). A movement in this direction is far from certain at this time.

Q. HOW WOULD THE ILEC-IXC INTERCONNECTION REGIME WITH THE PAYMENT OF ACCESS-LIKE USAGE-BASED CHARGES SOLVE THIS PROBLEM?

A. In the ILEC-IXC regime (Figure 2), the ISP customer that initiates the call causes all of the costs that are incurred, and, except for the explicit subsidy to ISP access represented by the exemption from charges analogous to interstate access charges, remains responsible for paying costs of originating, transporting, and switching its traffic to the ISP. Because of the access charge exemption, ILECs and CLECs that jointly supply access services to ISPs are not compensated for those services but, in the ILEC-IXC regime, the ILECs and CLECs that jointly provision ISP-bound calls each contribute to the ISP access subsidy no more

than their proportion of costs. This arrangement is competitively neutral because all ILECs and CLECs involved contribute to the subsidy rather than just the ILECs that originate ISP-bound traffic. In this regime, an ISP has no particular incentive to become a CLEC itself, nor is the competition among ILECs and CLECs to serve ISPs distorted by incentives to seek compensation for terminating calls.

Q. PLEASE EXPLAIN HOW THE ILEC-CLEC INTERCONNECTION REGIME FOR ISP-BOUND TRAFFIC COULD CAUSE THE LOCAL EXCHANGE MARKET TO BE DISTORTED.

A. Under the ILEC-CLEC interconnection regime, the compensation paid to CLECs evidently exceeds the cost they incur in terminating the traffic and also exceeds whatever costs BellSouth might save when CLECs terminate the traffic. That the prices do not reflect costs should not be surprising. In Tennessee, interconnection prices are based on BellSouth's forward-looking TELRIC costs of terminating traffic averaged over a wide range of end-users.[21] In fact, the cost of terminating traffic to particular end-users varies a great deal, depending upon their location and the characteristics of the traffic. When traffic is balanced[22] between the ILEC and the CLEC, the accuracy of the TELRIC study is less material; an ILEC that overpays to terminate traffic on the CLEC's network is compensated when the CLEC overpays to terminate traffic on the ILEC's network. Thus, when traffic is balanced, no individual ILEC or CLEC is helped or handicapped in competing for retail customers in the local exchange market by the requirement that interconnection prices be based on TELRICs averaged over all customers.

However, when traffic between the ILEC and the CLEC is grossly unbalanced, e.g., when the CLEC originates little or no traffic, the accuracy of the TELRIC study for the traffic served by that CLEC is critical. If the cost to BellSouth to deliver ISP-bound traffic

[21] Average holding times are significantly longer for ISP-bound traffic: roughly 20 minutes compared with 3 minutes for ordinary voice traffic. Thus, the cost of call setup on a per minute basis is roughly only one-seventh of the per minute cost of call setup for ordinary voice traffic.

[22] Traffic is said to be "balanced" when originating and terminating volumes are similar.

to the ISP is the same as to a specialized CLEC collocated with the ISP, then paying reciprocal compensation at an averaged rate would cause BellSouth's total cost of local service to increase. This cost increase would not be offset by a similar increase in revenue from terminating the CLEC's traffic (because the CLEC does not originate any traffic). Thus, local exchange competition would be distorted by the inapplicability of the averaged TELRIC to ISP traffic; CLECs that primarily serve ISPs (and originate little or no traffic) would receive revenues in excess of cost while ILECs (or even other CLECs) that serve all types of customers would experience an increase in costs without a commensurate increase in revenues.

Q. DOES THAT MEAN THAT RECIPROCAL COMPENSATION IS ILL-ADVISED BECAUSE TRAFFIC BETWEEN THE ORIGINATING ILEC AND THE CLEC THAT TERMINATES ISP TRAFFIC IS UNBALANCED?

A. Yes, but the problem here is not simply that traffic is unbalanced. First of all, ISP-bound traffic is *not* local and, therefore, not eligible for reciprocal compensation, a form of inter-carrier compensation reserved for local interconnection only. However, even on the matter of traffic balance, it is worth noting that reciprocal compensation was never envisioned as appropriate inter-carrier compensation when all traffic is essentially one-way. This would be particularly true when the true cost to terminate for the carrier that only *receives* traffic is actually lower than the termination cost (experienced by the carrier that *sends* traffic) on which a symmetrical compensation arrangement is based. But, even with balanced traffic, requiring reciprocal compensation payments for ISP-bound calls would violate the economic principle of recovering cost in accordance with cost causation.

Q. PLEASE EXPLAIN HOW THE ILEC-CLEC INTERCONNECTION REGIME FOR ISP-BOUND TRAFFIC COULD CREATE PERVERSE INCENTIVES TO ARBITRAGE THE SYSTEM AT THE EXPENSE OF BASIC EXCHANGE RATEPAYERS.

A. Arbitrage is frequently a response to a market distortion. As the DTE in Massachusetts clearly recognized, unintended arbitrage opportunities can easily emerge when competition

in the local exchange market is distorted by basing inter-carrier compensation for ISP-bound traffic on the ILEC-CLEC local interconnection regime. When the compensation available to the CLEC for terminating ISP-bound traffic exceeds its actual cost of terminating that traffic, the CLEC will have a strong incentive to terminate as much ISP traffic as possible. The desire to maximize profits can bring forth some very inventive schemes that take advantage of this discrepancy but which distort market outcomes and reduce the efficiency of the telecommunications network. For example, the CLEC's profits would increase whenever a BellSouth subscriber—or its computer—could be induced to call the ISP and remain on the line 24 hours a day.[23] Sensing this pure arbitrage profit opportunity, CLECs would also have a strong incentive—indeed, have as their *raison d'être*—to specialize only in terminating ISP-bound traffic, to the exclusion of offering any other type of local exchange service. These "ISP-specializing" CLECs can—and do—easily form a three-way axis with the sole purpose of generating revenues from reciprocal compensation: the CLECs themselves, ISPs that have their traffic terminated by those ISPs but may also receive a share of the reciprocal compensation revenues—the spoils of this arrangement—to ensure their loyalty and cooperation, and ISP customers on the originating ILEC's network that generate the ISP-bound traffic. Also, the ISPs themselves are better off if their customers obtain their non-Internet local telephone service not from the CLECs that terminate ISP-only traffic but from the ILEC or other CLECs that do not serve ISPs. This is likely to create a further distortion in the local exchange market, contrary to the vision of competition embodied in the Telecommunications Act of 1996 ("1996 Act").

This issue can be put in perspective as follows. Assume, for purposes of illustration, that (1) the ILEC serves 95 percent of end-users and the CLEC serves the other 5 percent and (2) end-users are generally similar in their use of (calls to) the Internet. If the ISP then contracts with the ILEC—rather than the CLEC—for delivery of Internet calls, then 95

[23] Dedicated (private line) connections that bypass the public switched network are most efficient for customers desiring "always-on" or 24 hour connectivity. Despite this fact, such connectivity is sometimes offered in a manner that involves traffic origination through an ILEC's switch and termination through an ISP-serving CLEC's switch. This arrangement is clearly less interested in efficiency or the best use of valuable network resources than it is in generating the maximum possible revenue from reciprocal compensation.

percent of such calls would originate *and* terminate within the ILEC's network and, as a result, generate no reciprocal compensation payments. However, if that ISP were to contract with the CLEC for the delivery of Internet traffic, the same 95 percent of Internet calls originating within the ILEC's network would traverse the CLEC's switch(es) on its way to the ISP. This arrangement would, therefore, generate reciprocal compensation payments on 95 percent of Internet calls handled by the two networks. Clearly, a strong incentive would then exist for both the CLEC and the ISP to opt for the latter arrangement.

It is not surprising, therefore, that the DTE in Massachusetts felt compelled to opine:

> We note also that *termination* of the obligation for reciprocal compensation payments for ISP-bound traffic (because that traffic is no longer deemed local) removes the incentive for CLECs to use their regulatory status "solely (or predominately)" to funnel traffic to ISPs.[24]

Q. HAVE REGULATORS TAKEN EXPLICIT NOTE OF THE FACT THAT THESE ARBITRAGE OPPORTUNITIES ARISE BECAUSE PRICES (OR, COMPENSATION RATES) ARE OUT OF LINE WITH TERMINATION COSTS?

A. Yes. Where the cost of terminating traffic to a particular type of customer differs greatly from the average, the FCC has recognized the possibility of arbitrage and has declined to use the ILEC's TELRIC termination costs as a proxy for those of the CLEC:

> Using incumbent LEC's costs for termination of traffic as a proxy for paging providers' costs, when the LECs' costs are likely higher than paging providers' costs, might create uneconomic incentives for paging providers to generate traffic simply in order to receive termination compensation.[25]

Instead, the FCC has required separate cost studies to justify a cost-based termination rate which the FCC explicitly expects would be lower than the wireline ILECs' TELRIC-based rate. Note that the paging case also involves one-way calling; like ISPs, paging companies do not originate traffic.

More recently, the FCC has acknowledged that:

efficient rates for inter-carrier compensation for ISP-bound traffic are not likely

[24] Massachusetts ISP Compensation Order.

[25] Local Competition Order, ¶1093.

> to be based entirely on minute-of-use pricing structures. In particular, pure minute-of-use pricing structures are not likely to reflect accurately how costs are incurred for delivering ISP-bound traffic.[26]

This is clear recognition of the fact that TELRIC-based rates are fundamentally unsound for inter-carrier compensation for ISP-bound traffic. Echoing this sentiment, the Massachusetts DTE has stated flatly that

> The revenues generated by reciprocal compensation for ... incoming traffic are most likely in excess of the cost of sending such traffic to ISPs. ... Not surprisingly, ISPs view themselves as beneficiaries of this "competition" and argue fervently in favor of maintaining reciprocal compensation for ISP-bound traffic. However, the benefits gained, through this regulatory distortion, by CLECs, ISPs, and their customers do not make society as a whole better off, because they come artificially at the expense of others.[27]

Q. WHAT DO YOU CONCLUDE IN LIGHT OF THESE ACKNOWLEDGEMENTS?

A. In light of these acknowledgements, it is reasonable to expect that a fairer system of inter-carrier compensation may yet be more widely adopted for all forms of one-way traffic. The ILEC-IXC interconnection regime offers one such alternative. More importantly, under that alternative:

1. perverse incentives and unintended arbitrage opportunities are removed,
2. cost causation guides cost recovery (including the payment of access-like usage-based charges by ISPs to ILECs and CLECs that handle their traffic),
3. more efficient use is made of network resources,
4. inefficient entry for the sake of earning opportunistic arbitrage profits is prevented, and
5. true competition (undistorted by the gain from specializing in terminating one-way traffic) can be realized in the local exchange market.

III. CHARGES FOR OPERATIONS SUPPORT SYSTEMS

Issue 2; 2(a)(iv); 2(b)(I) and 6(a) combined as follows:

(a) What is the definition of parity?

[26] Internet Traffic Order, ¶29.

[27] Massachusetts ISP Compensation Order. Emphasis added.

(b) Pursuant to this definition, should BellSouth be required to provide the following and if so, under what conditions and at what rates:

(1) Operational Support Systems ("OSS")

(2) UNEs

(3) Access to Numbering resources

(4) An unbundled loop using Integrated Digital Loop Carrier ("IDLC") technology; and

(5) Priority guidelines for repair and maintenance and UNE provisioning?

Q. WHAT ARE OSS?

A. OSS include electronic interfaces, databases, and other systems required for various functions, e.g., pre-ordering, ordering, provisioning, maintenance and repair, billing, etc. An ILEC like BellSouth routinely uses its OSS to serve its customers. In its implementation of various competition-related provisions of the 1996 Act, the FCC found that OSS functions are "essential to the ability of competitors to provide services in a fully competitive local service market."[28] The FCC further concluded that "[OSS] and the information they contain fall squarely within the definition of 'network element' and must be unbundled upon request under Section 251(c)(3) [of the 1996 Act]...."[29]

Q. WHAT ARE THE *NON-RECURRING* COSTS ASSOCIATED WITH OSS?

A. There are two economically distinct types of non-recurring OSS-related costs: (1) one-time costs to modify existing and/or build new interfaces that give CLECs access to BellSouth's OSS databases and systems, and (2) non-recurring transactional costs associated with the provisioning of services, i.e., costs to use the necessary interfaces to process a service

[28] Local Competition Order, ¶522.

[29] *Id.*, ¶516.

order.[30] The first type of OSS-related cost may be characterized as an "OSS development cost," and the second type as an "OSS use cost." There is general agreement that the standard for costing in both instances should be forward-looking economic costs.

Q. WHAT IS THE ESSENTIAL DIFFERENCE BETWEEN OSS DEVELOPMENT AND OSS USE COSTS?

A. The difference between the two types of cost is analogous to the difference between fixed and variable costs. OSS development cost is similar to fixed cost: it arises at the point a new OSS is installed or an existing OSS is modified, but the level of that cost does not vary with the number of unbundled network elements ("UNEs") ordered or actual use of the OSS. The OSS may never actually be used by a CLEC, but the OSS development cost would have been incurred anyway. OSS use cost, on the other hand, is more akin to variable cost, namely, a cost that only arises in connection with use of a resource. Thus, OSS use cost varies with the level of use (with a minimum of zero when no use occurs). Despite this essential difference, like fixed and variable costs generally, both OSS development and OSS use costs should be measured on a forward-looking basis.

Q. IS THERE A RELATIONSHIP BETWEEN OSS DEVELOPMENT AND OSS USE COSTS, OR ARE THEY TOTALLY INDEPENDENT?

A. Even though, as explained above, the two costs are different in nature, they may still be related through an important economic trade-off. The level of technology embodied in an OSS interface system is not fixed in the long run. For example, systems may be more or less mechanized or automated, and rely on computer or artificial intelligence, expert systems, etc. to varying degrees. The less automated or complex systems require less human involvement or operation, while highly sophisticated and fully automated systems

[30] Even though I use the shorthand "OSS," it should be noted that my reference throughout is to OSS *interfaces* that BellSouth builds specifically for use by CLECs. Also, to be precise, while the type of cost in question may arise repeatedly as the interfaces are used to process different service orders, that cost remains fixed, hence, non-recurring *for each individual order*. There are also true recurring costs that are ongoing maintenance costs associated with each service order processed through the interfaces. My testimony does not address these recurring costs although BellSouth is entitled to recover them fully as well.

may require little or no human involvement. In this respect, capital and labor are substitutes, and more capital-intensive systems tend to be generally more expensive.

OSS development cost usually depends more upon the amount and type of capital built into the OSS. Thus, OSS embodying greater amounts of capital (or degree of automation) tend to have higher OSS *development* costs, while OSS that rely on less capital tend to have lower such costs. Since human labor is usually an important use-related or variable cost, the level of OSS use costs varies directly with how much of that resource is used. Thus, OSS that employ more capital but less labor tend to have lower OSS *use* costs, and those that employ less capital and more labor tend to have higher such costs. This inverse relationship between OSS development and OSS use costs is thus a product of the type of OSS installed.

Q. WHAT DECIDES THE OPTIMAL LEVEL OF OSS DEVELOPMENT AND OSS USE COSTS?

A. In a market economy, the actual technology platform that is adopted derives from the choices that suppliers and users of OSS make. No single individual or firm may ultimately be responsible for the system that emerges. Suppliers may have varied preferences about the types of systems they wish to install, how much intelligence they wish to invest in their systems, how quickly they wish to recover the economic cost of their systems, how much of their own labor or other resources they wish to dedicate to the operation of their systems, etc. Users may consider ease of use, availability of their own resources, customer willingness to pay, etc., and different users may value these characteristics differently. It is therefore difficult to determine the overall level of quality of OSS that would emerge in an unregulated, competitive market. Systems for buying and selling stocks or withdrawing money from banks are highly automated and accurate; systems for purchasing airline tickets are labor intensive and relatively more prone to error. In any case, whatever type of OSS emerges, it is certainly the case that—for a given level of quality—the technology platform should minimize the present value of the *combined* OSS development and OSS use costs associated with it. This minimization would take into account the economic trade-off between OSS development and OSS use costs discussed above.

Q. IS BELLSOUTH ENTITLED TO RECOVER ITS OSS-RELATED COSTS?

A. Yes. In light of the FCC's conclusion that OSS are network elements to which requesting carriers (e.g., CLECs) must be granted non-discriminatory access,[31] cost recovery for OSS should occur in the same manner as designated for other UNEs. Specifically, Section 252(d)(1)of the 1996 Act provides for recovery of the costs of UNEs and describes the methodology for doing so. This provision allows the UNE provider (such as BellSouth) to charge just and reasonable rates that are (1) based on forward-looking cost, (2) nondiscriminatory, and (3) inclusive of a reasonable profit.

Q. HAS EITHER THE 1996 ACT OR THE FCC LIMITED RECOVERY TO SOME, BUT NOT ALL, OSS-RELATED COSTS?

A. No. The 1996 Act makes no specific mention of OSS. In its implementing rules, the FCC has declared that OSS be treated just like any UNE. The FCC has never specifically limited recovery to some, but not all, OSS-related costs. From this I conclude that the FCC has intended all along that the provider of OSS should be able to recover *all* costs related to the development and use of OSS. As explained above, these costs include both one-time and ongoing costs.

Q. HAS THE AUTHORITY RULED ON WHETHER BELLSOUTH IS ENTITLED TO RECOVER ITS OSS DEVELOPMENT COSTS?

A. Yes. In Docket No. 97-01252, the Authority ruled that BellSouth may recover its one-time OSS interface development costs incurred on behalf of OSS-requesting carriers.[32] Specifically, the Authority decided that instead of recovering all non-recurring OSS-related costs in a single, one-time NRC, BellSouth should capitalize the one-time costs and recover them in a distributed manner over time.

Q. WHAT ECONOMIC PRINCIPLE GOVERNS THE MANNER IN WHICH THE

[31] Local Competition Order, ¶523 and ¶525.

[32] See the Direct Testimony of Alphonso J. Varner in this proceeding for an explanation and a cited passage from the Authority's Order in Docket No. 97-01262 approving such cost recovery.

COST OF ANY SERVICE SHOULD BE RECOVERED?

A. As I stated earlier, the economic principle that determines how the cost of a service should be recovered is cost causation. Requiring that entrants into a regulated market pay for the costs caused by their entry ensures that only efficient entry takes place. After the 1996 Act was passed, the FCC issued a *Notice of Proposed Rulemaking* in which it described its purpose as being:

> not to ensure that entry shall take place irrespective of costs, but to remove ... barriers ... that inefficiently retard entry, and to allow entry to take place where it can occur efficiently.[33]

Economists approve of this intention because it recognizes that entry into markets previously served by single suppliers, and subsequent competition in those markets, are not ends in themselves.[34] Rather, social policy should favor entry and competition where such entry ensures that customers are made better off. Where social policy mistakenly attempts to ensure the entry and survival of suppliers that are *less* efficient than incumbents, consumers typically end up paying for those protections in the form of higher prices or poorer service.

Q. HOW DO THESE PRINCIPLES APPLY TO OSS-RELATED COSTS?

A. Cost causation determines the source of a cost and assesses charges on that source for effecting full cost recovery. If BellSouth develops OSS for its own use, then it alone should properly be responsible for recovering all OSS-related costs. However, if BellSouth has to develop OSS for use by *other* carriers, then those other carriers should be responsible for recovery of the additional OSS-related costs caused directly by them.

Any failure to charge those other users of BellSouth's OSS for the additional OSS costs they cause—especially costs to develop OSS—would only generate perverse incentives and encourage inefficient behavior by the users. Specifically, carriers

[33] *Notice of Proposed Rulemaking* (NPRM) in CC Docket 98-96, ¶12.

[34] Adam Smith reminded us that with sufficient money and will, Scotland could enter the wine market and compete with France but that Scottish consumers—and surely Scottish oenophiles—would not necessarily be made better off by the experience.

requesting access to BellSouth's OSS would then have an incentive to do so excessively, in terms of both quantity and quality. This incentive could be strong because higher up-front OSS development costs incurred to construct more sophisticated systems can actually lower transactional or OSS use costs. If entrants are not charged for OSS development costs, it would clearly be in their self-interest to insist upon the construction of the most sophisticated OSS-related interfaces and systems imaginable, e.g., those with complex error-processing systems that make human intervention unnecessary. The cost of the ongoing use of OSS in such an environment would be lower than with less sophisticated systems, but the *total* economic cost of the OSS interface or capability could conceivably be higher, leaving society worse off. It does not pay to automate every transaction, and it may not be cost-effective to minimize human intervention. Rather, public policy must recognize the trade-off between OSS development costs and OSS use costs when determining what OSS-using entrants must be responsible for paying. If the cost causation principle is not reflected equally in the prices paid to recover *both* of these types of costs, entrants will demand excessively capital-intensive systems, and costs to telecommunications users will be higher than necessary.

Q. AS A GENERAL MATTER, WOULD ACCESS TO OSS PROVIDED BY BELLSOUTH TO CLECs LIKE ITC^DELTACOM BE LESS EXPENSIVE IF BELLSOUTH WERE TO DEPLOY NEW TECHNOLOGY REGARDLESS OF ITS EXISTING NETWORK OR WERE TO BUILD THOSE OSS FROM SCRATCH?

A. Not necessarily. The fact that BellSouth plans to serve CLEC demand with access to its existing OSS implies that the costs associated with such access are the costs that should be used to set prices. Moreover, the sum of one-time and transactional costs for a new OSS built from scratch would far exceed that of adding customized interfaces to the existing OSS. Of course, whatever method is used to supply OSS functions in the future, consistency requires that we calculate both OSS development and OSS use costs *using the same method.*

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

Exhibit WET-1

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Dr. Taylor received a B.A. magna cum laude in Economics from Harvard College, an M.A. in Statistics and a Ph.D. in Economics from the University of California at Berkeley. He has taught economics, statistics, and econometrics at Cornell and the Massachusetts Institute of Technology and was a post doctoral Research Fellow at the Center for Operations Research and Econometrics at the University of Louvain, Belgium.

At NERA, Dr. Taylor is a Senior Vice President, heads the Cambridge office and is Director of the Telecommunications Practice. He has worked primarily in the field of telecommunications economics on problems of state and federal regulatory reform, competition policy, terms and conditions for competitive parity in local competition, quantitative analysis of state and federal price cap and incentive regulation proposals, and antitrust problems in telecommunications markets. He has testified on telecommunications economics before numerous state regulatory authorities, the Federal Communications Commission, the Canadian Radio-Television and Telecommunications Commission, federal and state congressional committees and courts. Recently, he was chosen by the Mexican Federal Telecommunications Commission and Telmex to arbitrate the renewal of the Telmex price cap plan in Mexico. Other recent work includes studies of the competitive effects of major mergers among telecommunications firms and analyses of vertical integration and interconnection of telecommunications networks. He has appeared as a telecommunications commentator on PBS Radio and on The News Hour with Jim Lehrer.

He has published extensively in the areas of telecommunications policy related to access and in theoretical and applied econometrics. His articles have appeared in numerous telecommunications industry publications as well as *Econometrica*, the *American Economic Review*, the International *Economic Review*, the *Journal of Econometrics*, *Econometric Reviews*, the *Antitrust Law Journal*, *The Review of Industrial Organization*, and *The Encyclopedia of Statistical Sciences*. He has served as a referee for these journals (and others)

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EMPLOYMENT

NATIONAL ECONOMIC RESEARCH ASSOCIATES, INC. (NERA)
1988- Senior Vice President, Office Head, Telecommunications Practice Director. Dr. Taylor has directed many studies applying economic and statistical reasoning to regulatory, antitrust and competitive issues in telecommunications markets. In the area of environmental regulation, he has studied statistical problems associated with measuring the level and rate of change of emissions.

BELL COMMUNICATIONS RESEARCH, INC. (Bellcore)
1983-1988 Division Manager, Economic Analysis, formerly Central Services Organization, formerly American Telephone and Telegraph Company. While at Bellcore, Dr. Taylor performed theoretical and quantitative research focusing on problems raised by the implementation of access charges. His work included design and implementation of demand response forecasting for interstate access demand, quantification of potential bypass liability, design of optimal nonlinear price schedules for access charges and theoretical and quantitative analysis of price cap regulation of access charges.

BELL TELEPHONE LABORATORIES
1975-1983 Member, Technical Staff, Economics Research Center. Performed basic research on theoretical and applied econometrics, focusing on small sample theory, panel data and simultaneous equations systems.

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South Carolina Public Service Commission (Docket No. 97-101-C), April 1, 1997. Rebuttal June 30, 1997.
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Federal Communications Commission (CC Docket No. 96-149), April 17, 1997.
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Alabama Public Service Commission (Docket No. 25835), June 18, 1997. Rebuttal August 8, 1997.

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Mississippi Public Service Commission (Docket No. 97-AD-0321), July 1, 1997. Rebuttal September 29, 1997.

Regulatory Reform

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Reciprocal Compensation

Massachusetts Department of Telecommunications and Energy (Docket No. 98-67), September 25, 1998.
Washington Public Utilities Commission (Docket No. UT-990300, February 24, 1999. Rebuttal March 8, 1999.
Colorado Public Utilities Commission (Docket No. 99A-001T), March 15, 1999.
Massachusetts Department of Telecommunications and Energy (Docket No. D.T.E. 97-116-B), March 29, 1999.
North Carolina Utilities Commission (Docket No. P-500, Sub 10), July 9, 1999.
North Carolina Utilities Commission (Docket No. P-561, Sub 10), July 30, 1999.
Public Service Commission of South Carolina (Docket No. 1999-259-C), August 25, 1999.
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Contract Services

Superior Court Department of the Trial Court (Civil Action No. 95-6363F), affidavit, July 1996.
Connecticut Department of Public Utilities (Docket No. 99-03-17), June 18, 1999.

October, 1999

AFFIDAVIT

STATE OF: Georgia
COUNTY OF: Fulton

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared William E. Taylor, Ph.D.-Senior Vice President-National Economic Research Associates, Inc., who, being by me first duly sworn deposed and said that:

He is appearing as a witness before the Tennessee Regulatory Authority in Docket No. 99-00430 on behalf of BellSouth Telecommunications, Inc., and if present before the Authority and duly sworn, his testimony would be set forth in the annexed testimony consisting of 31 pages and 1 exhibit(s).

William E. Taylor

Sworn to and subscribed
before me this 15th
day of October, 1999

NOTARY PUBLIC

MICHEALE F. HOLCOMB
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2001

BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF DAVID A. COON

BEFORE THE TENNESSEE REGULATORY AUTHORITY

DOCKET NO. 99-00430

October 15, 1999

Q. PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. ("BELLSOUTH") AND YOUR BUSINESS ADDRESS.

A. My name is David A. Coon. I am employed by BellSouth as Director of Performance Measurements for the nine-state BellSouth region. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. WHAT IS YOUR PROFESSIONAL EXPERIENCE AND EDUCATIONAL BACKGROUND?

A. My career at BellSouth spans over 20 years and includes positions in Network, Regulatory, Finance, Corporate Planning, Small Business Services and Interconnection Operations. Prior to BellSouth I performed a variety of functions in the Network, Regulatory and Marketing Support organizations of C&P Telephone Company-Washington. I have extensive experience in the

development and use of quantitative measurements and results including the establishment, analysis and monitoring of BellSouth process measures. I received a Bachelors Degree in Civil Engineering from Ohio University and a Masters Degree in Engineering Administration from George Washington University. I received the Certified Management Accountant (CMA) designation in 1996 from the Institute of Management Accountants.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS DOCKET?

A. No.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony addresses the performance measurements portion of Issue 1(a) as provided in the Issues Matrix prepared by the TRA staff and attached to the Notice of Pre-Arbitration Conference dated July 29, 1999 which was later determined to be arbitrable in the October 6, 1999 Report and Intital Order of the Pre-Arbitration Officer. The portion of Issue 1(a) pertaining to guarantees will be addressed by BellSouth witness Alphonso Varner.

Issue 1(a): Should BellSouth be required to comply with the performance measures and guarantees for pre-ordering/ordering, resale, and unbundled network elements ("UNEs"), provisioning, maintenance, interim number portability and local number

portability, collocation, coordinated conversion and the bona fide request processes as set forth fully in Attachment 10 of Exhibit A of this Petition?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY ON THIS ISSUE?

A. The Authority should find that BellSouth's comprehensive set of Performance Measurements or Service Quality Measurements (SQMs) are sufficient to determine whether BellSouth is providing nondiscriminatory access and should further find that it is not appropriate or desirable to adopt individual performance measurements for every CLEC.

Q. PLEASE DESCRIBE BELLSOUTH'S SQMs.

A. BellSouth's SQMs, which are attached as Exhibit DAC-1, cover 9 separate functional categories: (1) Pre-Ordering OSS; (2), Ordering; (3) Provisioning; (4) Maintenance and Repair; (5) Billing; (6) Operator Services (Toll) and Directory Assistance; (7) E911; (8) Trunk Group Performance; (9) Collocation. BellSouth's measurements are the result of nearly two years of work with several state commissions, direction provided by the FCC and input from the CLECs. The SQMs are sufficient for the CLEC industry as a whole and should be sufficient for ITC^DeltaCom as well. It is unreasonable and unnecessary to have BellSouth adhere to a separate set of performance measures as ITC^DeltaCom proposes.

Q. HOW WERE BELLSOUTH'S PERFORMANCE MEASUREMENTS DEVELOPED?

A. Hearings were held in several states in the BellSouth region in which BellSouth and all CLECs had an opportunity to present a position on Performance Measurements. Following those hearings, Commission Orders were issued by the Georgia Commission (Docket 7892-U) and the Louisiana Commission (Docket U-22252, SubDocket C) specifying the Performance Measurements to be used. The Alabama Commission (Docket 25835) issued a Procedural Ruling on December 11, 1998, requiring BellSouth to file monthly performance measurements results for Alabama based on the BellSouth SQMs. The FCC also issued the Notice of Proposed Rulemaking, FCC Docket 98-56, RM 9101 which provided additional direction on the design of BellSouth's Performance Measurements.

In addition to the hearings mentioned above, another opportunity to shape Performance Measurements was available to ITC^DeltaCom by participation in the Louisiana SQM Workshops. Although the Louisiana Commission sponsored these Workshops, it was the desire of the participants that the Performance Measurements be consistent across the region. ITC^DeltaCom is not and never has been a participant in the workshops.

In summary, BellSouth's current set of Service Quality Measurements were developed over the last two years by working with various state commissions and CLECs. The SQMs insure that BellSouth provides ITC^DeltaCom and all other CLECs with non-discriminatory access as required by the 1996 Telecom Act. BellSouth's SQMs continue to be enhanced and modified based on requirements of the Industry. As an example, BellSouth is developing, as part of the Louisiana Workshops, a set of retail analogs and benchmarks for Unbundled Network Elements (UNEs). As these enhancements and modifications are added to the BellSouth SQMs, they will automatically be available to all CLECs do business in the BellSouth region.

Q: HOW WERE THE MEASUREMENTS PROPOSED BY ITC^DELTACOM DEVELOPED?

A: It appears as if ITC^DeltaCom's proposal is an excerpt of the Performance Measurements used by Southwestern Bell.

Q: WHY SHOULD THE COMMISSION NOT ESTABLISH A SEPARATE SET OF MEASUREMENTS JUST FOR ITC^DELTACOM?

A: In order to monitor non-discriminatory access, the Tennessee Regulatory Authority must have a set of Performance Measurements that is consistent for all CLECs and for the retail units of BellSouth. If each CLEC has a separate set of

Performance Measurements for its Interconnection Agreement as ITC^DeltaCom is attempting to do, comparisons between the service quality provided to the CLECs and to BellSouth retail would be impossible.

Furthermore, there is the more practical matter of how to administer all the data required for multiple sets of measurements. BellSouth has invested in excess of $50M developing the capability required for the current set of Performance Measurements. As of September 9, 1999, 772 CLECs have Interconnection Agreements with BellSouth in BellSouth's region. To attempt to produce a separate set of performance measurements for each one of them would be a near impossibility. It would be inconsistent with the FCC's desire that performance measurements and reporting requirements should "balance our goal of detecting possible instances of discrimination with our goal of minimizing, to the extent possible, burdens imposed on incumbent LECs", Notice of Proposed Rule Making (CC Docket 98-56) at Paragraph 36.

Q. HOW DO BELLSOUTH'S SQMS COMPARE TO THE ITC^DELTACOM ATTACHMENT 10?

A. BellSouth's existing Service Quality Measurements are documented in Exhibit DAC-1. The BellSouth measurements provide more detail in several areas such

as the ordering method, dispatch vs. non-dispatch provisioning and dispatch vs. non-dispatch maintenance and repair.

As part of my testimony, I have produced a matrix, Exhibit DAC-2, which does a measurement by measurement comparison between BellSouth's SQMs and the ITC^DeltaCom Attachment 10.

Q. DOES THE MATRIX DEMONSTRATE ANY SIGNIFICANT FINDINGS?

A. Yes. There are two significant findings. BellSouth's current Service Quality Measurements include 38 of the 45 measurements proposed by ITC^DeltaCom that are either identical, similar in concept and intent or differ only in format. Secondly, BellSouth's SQMs are more comprehensive than the performance measurements proposed in ITC^DeltaCom's Attachment 10 in that there are more measurements and levels of disaggregataion in BellSouth's SQMs than there are in ITC^DeltaCom's proposal.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes

BellSouth
Service Quality Measurements
Regional Performance Reports

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* These reports are subject to change due to regulatory requirements or to correct errors and etc.

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Service Quality Measurements
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PRE-ORDERING - OSS

Report/Measurement :
Average OSS Response Time and Response Interval
Definition:
Average response time and response intervals are the average times and number of requests responded to within certain intervals for accessing legacy data associated with appointment scheduling, service & feature availability, address verification, request for Telephone Numbers (TNs), and Customer Service Records (CSRs).
Exclusions:
None
Business Rules:
The average response time for retrieving pre-order/order information from a given legacy system is determined by summing the response times for all requests submitted to the legacy during the reporting period and dividing by the total number of legacy requests for that day X 100. The response interval starts when the client application (LENS or TAG for CLECs and RNS for BST) submits a request to the legacy system and ends when the appropriate response is returned to the client application. The number of legacy accesses during the reporting period, which take less than 2.3 seconds and the number, which take more than 6 seconds are also captured.
Level of Disaggregation:
• RSAG – Address (Regional Street Address Guide- Address) - stores street address information used to validate customer addresses • RSAG – TN (Regional Street Address Guide- Telephone Number) – contains information about facilities available and telephone numbers working at a given address. • ATLAS (Application for Telephone Number Load Administration and Selection) - acts as a warehouse for storing telephone numbers that are available for assignment by the system. It enables CLECs and BST service reps to select and reserve telephone numbers. • COFFI (Central Office Feature File Interface) – stores information about product and service offerings and availability. • DSAP (DOE Support Application) – provides due date information. • HAL (Hands-Off Assignment Logic) – a system used to access the Business Office Customer Record Information System (BOCRIS). It allows BST servers, including LENS, access to legacy systems. • P/SIMS (Product/Services Inventory Management System) – provides information on capacity, tariffs, inventory and service availability. • OASIS (Obtain Available Services Information Systems) - Information on feature and rate availability.
Calculation:
Σ[(Date & Time of Legacy Response) – (Date & Time of Request to Legacy)] / (Number of Legacy Requests During the Reporting Period) X 100
Report Structure:
• Not CLEC Specific • Not product/service specific • Regional Level

Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Legacy Contract (per reporting dimension) • Response Interval • Regional Scope	• Report Month • Legacy Contract (per reporting dimension) • Response Interval • Regional Scope

Retail Analog/Benchmark
CLEC Average Response Interval is comparable to BST Average Response Interval

Revision date: 09/14/99 (lg)

BellSouth
Service Quality Measurements
Regional Performance Reports

LEGACY SYSTEM ACCESS TIMES FOR RNS

System	Contract	Data	< 2.3 sec	> 6 sec	Avg. Sec	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x
ATLAS	ATLAS-TN	TN	x	x	x	x
DSAP	DSAP-DDI	Schedule	x	x	x	x
CRIS	CRSACCTS	CSR	x	x	x	x
OASIS	OASISBSN	Feature/Service	x	x	x	x
OASIS	OASISCAR	Feature/Service	x	x	x	x
OASIS	OASISLPC	Feature/Service	x	x	x	x
OASIS	OASISMTN	Feature/Service	x	x	x	x
OASIS	OASISBIG	Feature/Service	x	x	x	x

LEGACY SYSTEM ACCESS TIMES FOR LENS

System	Contract	Data	< 2.3 sec	> 6 sec	Avg. Sec	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x
ATLAS	ATLAS-TN	TN	x	x	x	x
DSAP	DSAPDDI	Schedule	x	x	x	x
HAL	HAL/CRIS	CSR	x	x	x	x
COFFI	COFFI/USOC	Feature/Service	x	x	x	x
P/SIMS	PSIMS/ORB	Feature/Service	x	x	x	x

LEGACY SYSTEM ACCESS TIMES FOR TAG

System	Contract	Data	< 2.3 sec	> 6 sec	Avg. Sec	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x
ATLAS	ATLASTN	TN	x	x	x	x
DSAP	DSAPDDI	Schedule	x	x	x	x
HAL	HAL/CRIS	CSR	x	x	x	x
CRIS	CRSEINIT	CSR	x	x	x	x
CRIS	CRSECSR	CSR	x	x	x	x

Revision date: 08/10/99 (lg)

BellSouth
Service Quality Measurements
Regional Performance Reports

PRE-ORDERING - OSS

Report/Measurement:	
OSS Interface Availability	
Definition:	
Percent of time OSS interface is functionally available compared to scheduled availability. Availability percentages for CLEC interface systems and for all Legacy systems accessed by them are captured	
Exclusions:	
None	
Business Rules:	
This measurement captures the availability percentages for the BST systems, which are used by CLECs during Pre-Ordering functions. Comparison to BST results allow conclusions as to whether an equal opportunity exists for the CLEC to deliver a comparable customer experience.	
Level of Disaggregation:	
• Regional Level	
Calculation:	
(Functional Availability) / (Scheduled Availability) X 100	
Report Structure:	
• Not CLEC Specific • Not product/service specific • Regional Level	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • Legacy contract type (per reporting dimension) • Regional Scope	• Report Month • Legacy contract type (per reporting dimension) • Regional Scope
Retail Analog/Benchmark:	
CLEC OSS Interface Availability is comparable to BST OSS Interface Availability	

Revision date: 09/14/99 (lg)

OSS Interface Availability

OSS Interface	% Availability
LENS	x
LEO Mainframe	x
LEO UNIX	x
LESOG	x
EDI	x
HAL	x
BOCRIS	x
ATLAS/COFFI	x
RSAG/DSAP	x
SOCS	x
TAG	x

BellSouth
Service Quality Measurements
Regional Performance Reports

ORDERING

Report/Measurement:
Percent Flow Through Service Requests (Summary)
Definition:
The percentage of Local Service Requests (LSR) submitted electronically via the CLEC mechanized ordering process that flow through to SOCS without manual intervention
Exclusions:
• Fatal Rejects • Auto Clarification • Manual Fallout • CLEC System Fallout • Supplements (subsequent versions) to cancel LSRs that are not LESOG eligible (Under development)
Business Rules:
The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), and flow through to SOCS without manual intervention. These LSRs can be divided into two classes of service; Business and Residence, and three types of service; Resale, Unbundled Network Elements (UNE), and specials. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier), or are not designed to flow through, i.e., Manual Fallout. **Definitions:** **Fatal Rejects:** Errors that prevent an LSR, submitted by the CLEC, from being processed further. When an LSR is submitted by a CLEC, LEO will perform edit checks to ensure the data received is correctly formatted and complete. For example, if the PON field contains an invalid character, LEO will reject the LSR and the CLEC will receive a Fatal Reject. **Auto-Clarification**: errors that occur due to invalid data within the LSR. LESOG will perform data validity checks to ensure the data within the LSR is correct and valid. For example, if the address on the LSR is not valid according to RSAG, the CLEC will receive an Auto-Clarification. **Manual Fallout**: errors that occur by design. Certain LSRs are designed to fallout of the Mechanized Order Process due to their complexity. These LSRs are manually processed by the LCSC. When a CLEC submits an LSR, LESOG will determine if the LSR should be forwarded to LCSC for manual handling. Following are the categories for Manual Fallout. 1. Complex services* 2. Expedites (requested by the CLEC) 3. Special pricing plans 4. Denials-restore and conversion, or disconnect and conversion orders 5. Partial migrations 6. Class of service invalid in certain states with some types of service 7. New telephone number not yet posted to BOCRIS 8. Low volume such as activity type "T" (move) 9. Pending order review required 10. More than 25 business lines 11. Restore or suspend for UNE combos 12. Transfer of calls option for the CLEC's end users 13. CSR inaccuracies such as invalid or missing CSR data in CRIS * Attached is a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through. **Total System Fallout:** Errors that require manual review by the LCSC to determine if the error is caused by the CLEC, or is due to system functionality. If it is determined the error is caused by the CLEC, the LSR will be sent back to the CLEC as clarification. If it is determined the error is BST caused, the LCSC representative will correct the error.

BellSouth
Service Quality Measurements
Regional Performance Reports

ORDERING – (Percent Flow Through Service Requests (Summary) – Continued)

Calculation:

Percent Flow Through Service Requests = Σ[(Total number of valid service requests that flow-through to SOCS)] / (Total number of valid service requests delivered to SOCS) X 100

Description:
Percent Flow Through = (The total number of LSRs that flow through LESOG to SOCS) / (the number of LSRs passed from LEO to LESOG) – Σ[(the number of LSRs that fall out for manual processing) + (the number of LSRs that are returned to the CLEC for clarification) + (the number of LSRs that contain errors made by CLECs)] X 100.

Report Structure:

- CLEC Aggregate
  - Region

Level of Disaggregation:

- Geography
  - Region
- Product (Under Development)
  - Residence
  - Business
  - UNE
  - Special

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report month • Total number of LSRs received, by interface, by CLEC: ➢ TAG ➢ EDI ➢ LENS • Total number of errors by type, by CLEC: ➢ Fatal rejects ➢ Total fallout for manual processing ➢ Auto clarification ➢ CLEC caused system fallout • Total number of errors by error code	• Report month • Total number of errors by type: ➢ BST system error

Retail Analog/Benchmark:

CLEC Flow Through/benchmark comparison (Under Development)

Revision Date: 09/03/99 (tm)

BellSouth
Service Quality Measurements
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ORDERING

Report/Measurement:

Percent Flow Through Service Requests (Detail)

Definition:

A detailed list by CLEC of the percentage of Local Service Requests (LSR) submitted electronically via the CLEC mechanized ordering process that flow through to SOCS without manual or human intervention.

Exclusions:

- Fatal Rejects
- Auto Clarification
- Manual Fallout
- CLEC System Fallout
- Supplements (subsequent versions) to cancel LSRs that are not LESOG eligible(Under development)

Business Rules:

The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), and flow through to SOCS without manual intervention. These LSRs can be divided into two classes of service; Business and Residence, and three types of service; Resale, Unbundled Network Elements (UNE) and specials. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier), or are not designed to flow through, i.e., Manual Fallout.

Definitions:

Fatal Rejects: Errors that prevent an LSR, submitted by the CLEC, from being processed further. When an LSR is submitted by a CLEC, LEO will perform edit checks to ensure the data received is correctly formatted and complete. For example, if the PON field contains an invalid character, LEO will reject the LSR and the CLEC will receive a Fatal Reject.

Auto-Clarification: errors that occur due to invalid data within the LSR. LESOG will perform data validity checks to ensure the data within the LSR is correct and valid. For example, if the address on the LSR is not valid according to RSAG, the CLEC will receive an Auto-Clarification.

Manual Fallout: errors that occur by design. Certain LSRs are designed to fallout of the Mechanized Order Process due to their complexity. These LSRs are manually processed by the LCSC. When a CLEC submits an LSR, LESOG will determine if the LSR should be forwarded to LCSC for manual handling. Following are the categories for Manual Fallout:

1. Complex services*
2. Expedites (requested by the CLEC)
3. Special pricing plans
4. Denials-restore and conversion, or disconnect and conversion orders
5. Partial migrations
6. Class of service invalid in certain states with some types of service
7. New telephone number not yet posted to BOCRIS
8. Low volume such as activity type "T" (move)
9. Pending order review required
10. More than 25 business lines
11. Restore or suspend for UNE combos
12. Transfer of calls option for the CLEC's end users
13. CSR inaccuracies such as invalid or missing CSR data in CRIS

*Attached is a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through.

Total System Fallout: Errors that require manual review by the LCSC to determine if the error is caused by the CLEC, or is due to system functionality. If it is determined the error is caused by the CLEC, the LSR will be sent back to the CLEC as clarification. If it is determined the error is BST caused, the LCSC representative will correct the error.

BellSouth
Service Quality Measurements
Regional Performance Reports

ORDERING – (Percent Flow Through Service Requests (Detail) – Continued)

Calculation:

Percent Flow Through Service Requests = (Total number of valid service requests that flow-through to SOCS) / (Total number of valid service requests delivered to SOCS) X 100

Description:

Percent Flow Through = The total number of LSRs that flow through LESOG to SOCS / (the number of LSRs passed from LEO to LESOG) – Σ[(the number of LSRs that fall out for manual processing + the number of LSRs that are returned to the CLEC for clarification + the number of LSRs that contain errors made by CLECs)] X 100.

Report Structure:

- Provides the flow through percentage for each CLEC (by alias designation) submitting LSRs through the CLEC mechanized ordering process. The report provides the following:
  - CLEC (by alias designation)
  - Number of fatal rejects
  - Mechanized interface used
  - Total mechanized LSRs
  - Total manual fallout
  - Number of auto clarifications returned to CLEC
  - Number of validated LSRs
  - Number of BST caused fallout
  - Number of CLEC caused fallout
  - Number of Service Orders Issued
  - Base calculation
  - CLEC error excluded calculation

Level of Disaggregation:

- CLEC Specific (by alias designation to protect CLEC specific proprietary data)
- Geographic:
  - Region
- Product (Under development)
  - Residence
  - Business
  - UNE
  - Special

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report month • Total number of LSRs received, by interface, by CLEC ➢ TAG ➢ EDI ➢ LENS • Total number of errors by type, by CLEC ➢ Fatal rejects ➢ Total fallout for manual processing ➢ Auto clarification ➢ CLEC errors • Total number of errors by error code	• Report month • Total number of errors by type: ➢ BST system error

Retail Analog/Benchmark:

CLEC Flow Through/benchmark comparison (Under development)

Revision Date: 09/03/99 (tm)

BellSouth
Service Quality Measurements
Regional Performance Reports

ORDERING

Report/Measurement:	
Flow Through Error Analysis	
Definition:	
An analysis of each error type (by error code) that was experienced by the LSRs that did not flow through to SOCS.	
Exclusions:	
Each Error Analysis is error code specific; therefore exclusions are not applicable.	
Business Rules:	
The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), and flow through to provisioning SOCS without manual intervention. These LSRs can be divided into two classes of service; Business and Residence, and two types of service; Resale and Unbundled Network Elements (UNE). This measurement captures the total number of errors by type. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier).	
Calculation:	
Σ Of errors by type.	
Report Structure:	
• Provides an analysis of each error type (by error code). The report is in descending order by count of each error code and provides the following: ➢ Error Type (by error code) ➢ Count of each error type ➢ Percent of each error type ➢ Cumulative percent ➢ Error Description ➢ CLEC Caused Count of each error code ➢ Percent of aggregate by CLEC caused count ➢ Percent of CLEC by CLEC caused count ➢ BST Caused Count of each error code ➢ Percent of aggregate by BST caused count ➢ Percent of BST by BST caused count	
Level of Disaggregation:	
Region	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report month • Total number of LSRs received • Total number of errors by type (by error code) ➢ CLEC caused error	• Report month • Total number of errors by type (by error code) ➢ BST system error
Retail Analog/Benchmark:	
Not Applicable	

Revision Date: 09/03/99 (tm)

BellSouth
Service Quality Measurements
Regional Performance Reports

Attachment
BellSouth Flow-through Analysis
For CLECs LSRs placed via EDI or TAG

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
1	Flat Rate/Residence	Yes	No	No	no	
2	Flat Rate/Business	Yes	No	No	no	
3	Pay Phone Provider	No	No	No	no	
4	Measured Rate/Res.	Yes	No	No	no	
5	Measured Rate/Bus.	Yes	No	No	no	
6	Area Plus	Yes	No	No	no	
7	Package/Complete Choice and area plus	Yes	No	No	no	
8	Optional Calling Plan	Yes	No	No	no	
9	Ga. Community Calling	Yes	No	No	no	
10	Call Waiting Deluxe	Yes	No	No	no	
11	Call Waiting	Yes	No	No	no	
12	Caller ID	Yes	No	No	no	
13	Speed Calling	Yes	No	No	no	
14	3 Way Calling	Yes	No	No	no	
15	Call Forwarding-Variable	Yes	No	No	no	
16	Remote Access to CF	Yes	No	No	no	
17	Enhanced Caller ID	Yes	No	No	no	
18	Memory Call	Yes	No	No	no	
19	Memory Call Ans. Svc.	Yes	No	No	no	
20	MTS	Yes	No	No	no	
21	RCF	Yes	No	No	no	
22	Ringmaster	Yes	No	No	no	
23	Call Tracing	Yes	No	No	no	
24	Call Block	Yes	No	No	no	
25	Repeat Dialing	Yes	No	No	no	
26	Call Selector	Yes	No	No	no	
27	Call Return	Yes	No	No	no	
28	Preferred Call Forward	Yes	No	No	no	
29	Touchtone	Yes	No	No	no	
30	Visual Director	Yes	No	No	no	
31	INP (all types?)	Yes	UNE	No	no	
32	Unbundled Loop-Analog 2W, SL1, SL2	Yes	UNE	No	Yes-designed, no-non-designed	
33	2 wire analog port	Yes	UNE	No	no	
34	Local Number Portability (always?)	Yes	UNE	No	no	
35	Accupulse	No	Yes	Yes	yes	See note at bottom of matrix.
36	Basic Rate ISDN	No	Yes	Yes	yes	LSR electronically submitted; no flow through

BellSouth
Service Quality Measurements
Regional Performance Reports

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
37	DID	No*	Yes	Yes	Yes	* yes with OSS'99
38	Frame Relay	No	Yes	Yes	yes	
39	Megalink	No	Yes	Yes	yes	
40	Megalink-T1	No	Yes	Yes	yes	
41	Native Mode LAN Interconnection (NMLI)	No	Yes	Yes	yes	
42	Pathlink Primary Rate ISDN	No	Yes	Yes	yes	
43	Synchronet	No	Yes	Yes	yes	LSR electronically submitted; no flow through
44	PBX Trunks	No	Yes	Yes	Yes	LSR electronically submitted; no flow through
45	LightGate	No	Yes	Yes	yes	
46	Smartpath	No	Yes	Yes	yes	
47	Hunting	No	Yes	no	no	LSR electronically submitted; no flow through
48	CENTREX	No	Yes	Yes	no	
49	FLEXSERV	No	Yes	Yes	yes	
50	Multiserv	No	Yes	Yes	yes	
51	Off-Prem Stations	No	Yes	Yes	yes	
52	SmartRING	No	Yes	Yes	yes	
53	FX	No	Yes	Yes	yes	
54	Tie Lines	No	Yes	Yes	Yes	
55	WATS	No	Yes	Yes	yes	
56	4 wire analog voice grade loop	No	UNE	Yes	yes-designed, no-non-designed	
57	4 wire DS1 & PRI digital loop	No	UNE	Yes	yes	
58	2 wire ISDN digital loop	No	UNE	Yes	yes	
59	4 wire DS1 & PRI digital loop	No	UNE	Yes	yes	
60	ADSL	No*	UNE	Yes	yes	* yes as of OSS'99?
61	HDSL	No	UNE	Yes	yes	
62	2 wire analog DID trunk port	No	UNE	Yes	Yes	
63	2 wire ISDN digital line side port	No	UNE	Yes	yes	
64	4 wire ISDN DSI digital trunk ports	No	UNE	Yes	yes	
65	UNE Combinations	y-loop+port	UNE	Yes	yes	
66	Directory Listings (simple)	No*	UNE	Yes	no	* yes as of OSS'99

BellSouth
Service Quality Measurements
Regional Performance Reports

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
67	Directory Listings (complex)	No*	UNE	yes	no	* yes as of OSS'99, captions and indentions
68	ESSX	No	Yes	Yes	no	

Note for last column: For all services that indicate 'No' for flow-through, the following reasons, in addition to errors or complex services, also prompt manual handling: Expedites from CLECs, special pricing plans, for denials – restore and conversion or disconnect and conversion both required, partial migrations (although conversions-as-is flow through), class of service invalid in certain states with some TOS – e.g. gov't, or cannot be changed when changing main TN on C activity, low volume – e.g. activity type T=move, pending order review required, more than 25 business lines, restore or suspend for UNE combos, transfer of calls option for CLEC end user – fixed with release 6.0, new TN not yet posted to BOCRIS. All but the last one are unique to the CLEC environment.

BellSouth
Service Quality Measurements
Regional Performance Reports

ORDERING

Report/Measurement:	
Percent Rejected Service Requests	
Definition:	
Percent Rejected Service Request is the percent of total Local Service Requests (LSRs) received which are rejected due to error or omission. An LSR is considered valid when it is electronically submitted by the CLEC and passes LEO edit checks to insure the data received is correctly formatted and complete.	
Exclusions:	
Service Requests canceled by the CLEC prior to being rejected/clarified.	
Business Rules:	
Fully Mechanized: An LSR is considered "rejected" when it is submitted electronically but does not pass LEO edit checks in the ordering systems (EDI, TAG, LEO, LESOG) and is returned to the CLEC. There are two types of "Rejects" in the Mechanized category: • A Fatal Reject occurs when a CLEC attempts to electronically submit an LSR but required fields are not populated correctly and the request is returned to the CLEC before it is considered an LSR. Fatal Rejects are included in the calculation for regional reports only. • An Auto Clarification is a valid LSR, which is electronically submitted but rejected from LESOG because it does not pass further edit checks for order accuracy. **Partially Mechanized:** A valid LSR, which is electronically submitted (via EDI or TAG), but cannot be processed electronically and "falls out" for manual handling. It is then put into "clarification" and (rejected) sent back to the CLEC. **Total Mechanized:** Combination of Fully Mechanized and Partially Mechanized LSRs. **Non Mechanized:** An LSR which is faxed or mailed to the LCSC for processing and is "clarified" (rejected) back to the CLEC by the BST service representative. **LNP:** Under Development	
Calculation:	
Percent Rejected Service Requests = (Total Number of Rejected Service Requests) / (Total Number of Service Requests Received) X 100 during the month.	
Report Structure:	
• Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized • State and Region • CLEC Specific • CLEC Aggregate	
Level of Disaggregation:	
• Resale Residence • Resale Business • Resale Specials • UNE • UNE Loop with NP • Other • Trunks	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Total number of LSRs • Total number of Rejects • Total Number of Errors • State and Region	• Report Month • Total number of LSRs • Total number of Errors • Adjusted Error Volume • State and Region
Retail Analog/Benchmark:	
Benchmark is under development. Retail Analog also under development	

Revision date: 09/13/99 (lg)

BellSouth
Service Quality Measurements
Regional Performance Reports

ORDERING

Report/Measurement:	
Reject Interval	
Definition:	
Reject Interval is the average reject time from receipt of an LSR to the distribution of a Reject. An LSR is considered valid when it is electronically submitted by the CLEC and passes LEO edit checks to insure the data received is correctly formatted and complete.	
Exclusions:	
Service Requests canceled by CLEC prior to being rejected/clarified	
Business Rules:	
Fully Mechanized: The elapsed time from receipt of a valid LSR (date and time stamp in ED or TAG) until the LSR is rejected (date and time stamp of reject in LEO). Fatal Rejects and Auto Clarifications are considered in the Fully Mechanized category. **Partially Mechanized:** The elapsed time from receipt of a valid LSR (date and time stamp in EDI or TAG) until it falls out for manual handling. The stop time on partially mechanized LSRs is when the LCSC Service Representative clarifies the LSR back to the CLEC via LEO. **Total Mechanized:** Combination of Fully Mechanized and Partially Mechanized LSRs. **Non-Mechanized**: The elapsed time from receipt of a valid LSR (date and time stamp from FAX stamp) until notice of the reject is returned to the CLEC via LON. **LNP**: Under development.	
Calculation:	
Reject Interval = Σ[(Date and Time of Service Request Rejection) – (Date and Time of Service Request Receipt)] / (Number of Service Requests Rejected in Reporting Period)	
Report Structure:	
• CLEC Specific • CLEC Aggregate • Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized, Trunks	
Level of Disaggregation:	
• Product Reporting Levels ➢ Interconnection Trunks ➢ Resale – Residence ➢ Resale – Business ➢ Resale – Design ➢ UNE Design ➢ UNE Non- Design ➢ UNE Loop with and w/o NP • Geographic Scope ➢ State, Region and further geographic disaggregation as required by State Commission Order • Mechanized: 0-4 minutes, 4-8 minutes, 8-12 minutes, 12-60 minutes, 0-1 hour 1-8 hours, 8-24 hours, >24 hours. • Non-mechanized: 0-1 hour, 1-4 hours, 4-8 hours, 8-12 hours, 12-16 hours, 16-20 hours, 20-24 hours >24 hours • Average Interval in Days. • Trunks:	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Reject Interval • Total Number of LSRs • Total number of Errors • State and Region	• Report Month • Reject Interval • Total number of LSRs • Total number of Errors • State and Region
Retail Analog/Benchmark:	
Benchmark is under development. Retail Analog also under development	

Revision date: 09/13/99 (lg)

BellSouth
Service Quality Measurements
Regional Performance Reports

ORDERING

Report/Measurement:
Firm Order Confirmation Timeliness
Definition:
Interval for Return of a Firm Order Confirmation (FOC Interval) is the average response time from receipt of valid LSR to distribution of a firm order confirmation.
Exclusions:
• Rejected LSRs • Partially Mechanized or Non-Mechanized LSRs received and/or FOCd outside of normal business hours.
Business Rules:
• **Mechanized** - The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in LENS, EDI, TAG) until the LSR is processed and appropriate service orders are generated in SOCS. • **Partially Mechanized** – The elapsed time from receipt of a valid electronically submitted LSR which falls out for manual handling by the LCSC personnel until appropriate service orders are issued by a BST service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS) to SOCS. • **Total Mechanized** - Combination of Fully Mechanized and Partially Mechanized LSRs • **Non-Mechanized** - The elapsed time from receipt of a valid LSR (fax receive date and time stamp) until appropriate service orders are issued by BST service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS) to SOCS. • **LNP**: Under development.
Calculation:
Firm Order Confirmation Timeliness = Σ[(Date and Time of Firm Order Confirmation) – (Date and Time of Service Request Receipt)] / (Number of Service Requests Confirmed in Reporting Period)
Report Structure:
• Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized • CLEC Specific • CLEC Aggregate
Level of Disaggregation:
• Product Reporting Levels ➢ Interconnection Trunks ➢ Resale – Residence ➢ Resale – Business ➢ Resale – Design ➢ UNE Design ➢ UNE Non- Design ➢ UNE Loop with and w/o NP ➢ Trunks • Geographic Scope ➢ State, Region and further geographic disaggregation (MSA) as required by State Commission Order • Mechanized: 0-15 minutes, 15-30 minutes, 30-45 minutes, 45-60 minutes, 60-90 minutes, 90-120 minutes, 120-240 minutes, 4-8 hours, 8-12 hours, 12-16 hours, 16-20 hours, 20-24 hours, 24-48 hours, > 48 hours. • Non-mechanized: 0-4 hours, 4-8 hours, 8-12 hours, 12-16 hours, 16-20 hours, 20-24 hours, 24-48 hours, > 48 hours. • Trunks: 0-5 days, 6-8 days, 9-11 days, 12-14 days, 15-17 days, 18-20 days, >20 days • < 10 and > 10 Circuits / Lines • Average Interval in Days.

BellSouth
Service Quality Measurements
Regional Performance Reports

ORDERING - (Firm Order Confirmation Timeliness – Continued)

Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Interval for FOC • Total number of LSRs • State and Region	• Report Month • Interval for FOC • Total Number of LSRs • State and Region
Retail Analog/Benchmark:	
Benchmark is under development. Retail Analog also under development	

Revision date: 09/13/99 (lg)

BellSouth
Service Quality Measurements
Regional Performance Reports

ORDERING

Report/Measurement:	
Speed of Answer in Ordering Center	
Definition:	
Measures the average time a customer is in queue.	
Exclusions:	
None	
Business Rules:	
The clock starts when the appropriate option is selected (i.e. 1 for Resale Consumer, 2 for Resale Multiline, and 3 for UNE-LNP, etc.) and the call enters the queue for that particular group in the LCSC. The clock stops when a BST service representative in the LCSC answers the call. The speed of answer is determined by measuring and accumulating the elapsed time from the entry of a CLEC call into the BellSouth automatic call distributor (ACD) until the a service representative in BSTs Local Carrier Service Center (LCSC) answers the CLEC call.	
Calculation:	
(Total time in seconds to reach the LCSC) / (Total Number of Calls) in the Reporting Period.	
Report Structure:	
• CLEC Aggregate • BST Aggregate (Combination of Residence Service Center and Business Service Center data under development)	
Level of Disaggregation:	
• CLEC Aggregate • BST Aggregate (Combination of Residence Service Center and Business Service Center data under development)	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Mechanized tracking through LCSC Automatic Call Distributor	• Mechanized tracking through BST Retail center support systems
Retail Analog/Benchmark:	
For CLEC, Speed of Answer in Ordering Center (LCSC) is comparable to Speed of Answer in BST Business Offices.	

Revision date: 09/13/99 (lg)

BellSouth
Service Quality Measurements
Regional Performance Reports

PROVISIONING

Report/Measurement:
Mean Held Order Interval & Distribution Intervals
Definition:
When delays occur in completing CLEC orders, the average period that CLEC orders are held for BST reasons, pending a delayed completion, should be no worse for the CLEC when compared to BST delayed orders.
Exclusions:
• Any order canceled by the CLEC will be excluded from this measurement. • Order Activities of BST associated with internal or administrative use of local services.
Business Rules:
Mean Held Order Interval: This metric is computed at the close of each report period. The held order interval is established by first identifying all orders, at the close of the reporting interval, that both have not been reported as completed in SOCS and have passed the currently committed due date for the order. For each such order, the number of calendar days between the committed due date and the close of the reporting period is established and represents the held order interval for that particular order. The held order interval is accumulated by the standard groupings, unless otherwise noted, and the reason for the order being held. The total number of days accumulated in a category is then divided by the number of held orders within the same category to produce the mean held order interval. CLEC Specific reporting is by type of held order (facilities, equipment, other), total number of orders held, and the total and average days. **Held Order Distribution Interval:** This measure provides data to report total days held and identifies these in categories of >15 days and > 90 days. (orders counted in >90 days are also included in >15 days).
Calculation:
Mean Held Order Interval: Σ (Reporting Period Close Date – Committed Order Due Date) / (Number of Orders Pending and Past The Committed Due Date) for all orders pending and past the committed due date. **Held Order Distribution Interval:** (# of Orders Held for ≥ 90 days) / (Total # of Orders Pending But Not Completed) X 100 (# of Orders Held for ≥ 15 days) / (Total # of Orders Pending But Not Completed) X 100
Report Structure:
• CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
• Product Reporting Levels ➢ POTS – Residence ➢ POTS – Business ➢ DESIGN ➢ PBX ➢ CENTREX ➢ ISDN ➢ UNE 2 Wire Loop with NP (Design and Non-Design) ➢ UNE 2 Wire Loop without NP (Design and Non-Design) ➢ UNE Loop Other with NP (Design and Non-Design) ➢ UNE Loop Other without NP (Design and Non-Design) ➢ UNE Other (Design and Non-Design) ➢ Switching (Under development) ➢ Local Transport (Under development) ➢ Combos (Under development) ➢ NP (Under development as separate category) ➢ Local Interconnection Trunks • Geographic Scope ➢ State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

BellSouth
Service Quality Measurements
Regional Performance Reports

PROVISIONING – (Mean Held Order Interval & Distribution Intervals – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number and PON (PON) • Order Submission Date (TICKET_ID) • Committed Due Date (DD) • Service Type(CLASS_SVC_DESC) • Hold Reason • Total line/circuit count (under development) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Order Number • Order Submission Date • Committed Due Date • Service Type • Hold Reason • Geographic Scope
Retail Analog/Benchmark:	
CLEC Residence Resale / BST Residence Retail CLEC Business Resale / BST Business Retail CLEC Design / BST Design CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN Interconnection Trunks-CLEC / Interconnection Trunks –BST UNEs-Retail Analog (under development at this time)	

Revision date: 06/24/99 (taf)

PROVISIONING

Report/Measurement:
Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notice
Definition:
When BST can determine in advance that a committed due date is in jeopardy, it will provide advance notice to the CLEC.
Exclusions:
• Any order canceled by the CLEC will be excluded from this measurement • Orders held for CLEC end user reasons • Orders submitted to BST through non-mechanized methods
Business Rules:
When BST can determine in advance that a committed due date is in jeopardy it will provide advance notice to the CLEC. The number of committed orders in a report period is the number of orders that have a due date in the reporting period.
Calculation:
Average Jeopardy Interval =Σ [(Date and Time of Scheduled Due Date on Service Order) - (Date and Time of Jeopardy Notice)]/[Number of Orders Notified of Jeopardy in Reporting Period). **Percent of Orders Given Jeopardy Notice** = Σ [(Number of Orders Given Jeopardy Notices in Reporting Period) / (Number of Orders Confirmed (due) in Reporting Period)
Report Structure:
• CLEC Specific and CLEC Aggregate • BST Aggregate (under development with estimated release date of 8/15/99 for June reporting)
Level of Disaggregation:
• Product Reporting Levels ➢ POTS – Residence ➢ POTS – Business ➢ DESIGN ➢ PBX ➢ CENTREX ➢ ISDN ➢ UNE 2 Wire Loop with NP (Design and Non-Design) ➢ UNE 2 Wire Loop without NP (Design and Non-Design) ➢ UNE Loop Other with NP (Design and Non-Design) ➢ UNE Loop Other without NP (Design and Non-Design) ➢ UNE Other (Design and Non-Design) ➢ Switching (Under development) ➢ Local Transport (Under development) ➢ Combos (Under development) ➢ NP (Under development as separate category) ➢ Local Interconnection Trunks ➢ Geographic Scope ➢ State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

BellSouth
Service Quality Measurements
Regional Performance Reports

PROVISIONING –
(Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notice – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number and PON • Date and Time Jeopardy Notice sent • Committed Due Date • Service Type **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • CLEC Order Number and PON • Date and Time Jeopardy Notice sent • Committed Due Date • Service Type **NOTE:** Code in parentheses is the corresponding header found in the raw data file.
Retail Analog/Benchmark:	
CLEC Residence Resale / BST Residence Retail CLEC Business Resale / BST Business Retail CLEC Design / BST Design CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN Interconnection Trunks-CLEC / Interconnection Trunks –BST UNEs-Retail Analog (under development at this time)	

Revision date: 09/15/99 (taf)

BellSouth
Service Quality Measurements
Regional Performance Reports

PROVISIONING

Report/Measurement:
Percent Missed Installation Appointments
Definition:
"Percent missed installation appointments" monitors the reliability of BST commitments with respect to committed due dates to assure that CLECs can reliably quote expected due dates to their retail customer as compared to BST.
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) • Disconnect (D) & From (F) orders
Business Rules:
Percent Missed Installation Appointments is the percentage of total orders processed for which BST is unable to complete the service orders on the committed due dates. Missed Appointments caused by end-user reasons will be included and reported separately. A business day is any time period within the same date frame, which means there cannot be a cutoff time for commitments as certain types of orders are requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.
Calculation:
Percent Missed Installation Appointments = Σ (Number of Orders Not Complete by Committed Due Date in Reporting Period) / (Number of Orders Completed in Reporting Period) X 100
Report Structure:
• CLEC Specific • CLEC Aggregate • BST Aggregate **Report explanation:** The difference between End User MA and Total MA is the result of BST caused misses. Here, Total MA is the total % of orders missed either by BST or CLEC end user and End User MA represents the percentage of orders missed by the end user

BellSouth
Service Quality Measurements
Regional Performance Reports

PROVISIONING – (Percent Missed Installation Appointments – Continued)

Level of Disaggregation:

- Reported in categories of <10 line/circuits; > 10 line/circuits
- Dispatch / No Dispatch
- Product Reporting Levels
  - POTS – Residence
  - POTS – Business
  - DESIGN
  - PBX
  - CENTREX
  - ISDN
  - UNE 2 Wire Loop with NP (Design and Non-Design)
  - UNE 2 Wire Loop without NP (Design and Non-Design)
  - UNE Loop Other with NP (Design and Non-Design)
  - UNE Loop Other without NP (Design and Non-Design)
  - UNE Other (Design and Non-Design)
  - Switching (Under development)
  - Local Transport (Under development)
  - Combos (Under development)
  - NP (Under development as separate category)
  - Local Interconnection Trunks
  - Geographic Scope
  - State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number and PON (PON) • Committed Due Date (DD) • Completion Date (CMPLTN DD) • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Order Number • Committed Due Date • Completion Date • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope

Retail Analog/Benchmark:

CLEC Residence Resale / BST Residence Retail
CLEC Business Resale / BST Business Retail
CLEC Design / BST Design
CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN
Interconnection Trunks-CLEC / Interconnection Trunks –BST
UNEs-Retail Analog (under development at this time)

Revision date: 06/24/99 (taf)

BellSouth
Service Quality Measurements
Regional Performance Reports

PROVISIONING

Report/Measurement :
Average Completion Interval (OCI) & Order Completion Interval Distribution
Definition:
The "average completion interval" measure monitors the interval of time it takes BST to provide service for the CLEC or its' own customers. The "Order Completion Interval Distribution" provides the percentage of orders completed within certain time periods.
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services • (Record Orders, Test Orders, etc.) • D (Disconnect) and F (From) orders. (From is disconnect side of a move order when the customer moves to a new address). • "L" Appointment coded orders (where the customer has requested a later than offered interval)
Business Rules:
The actual completion interval is determined for each order processed during the reporting period. The completion interval is the elapsed time from when the order is electronically entered into SOCS after the FOC on a CLEC order, or the date time stamp receipt into SOCS by BST on retail orders to the order completion date. The clock starts when a valid order number is assigned by SOCS and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed
Calculation:
Average Completion Interval: Σ [(Completion Date & Time) - (Order Issue Date & Time)] / Σ (Count of Orders Completed in Reporting Period) **Order Completion Interval Distribution:** Σ (Service Orders Completed in "X" days) / (Total Service Orders Completed in Reporting Period) X 100
Report Structure:
• CLEC Specific • CLEC Aggregate • BST Aggregate

FILE

BellSouth
Service Quality Measurements
Regional Performance Reports

PROVISIONING –
(Average Completion Interval (OCI) & Order Completion Interval Distribution – Continued)

Level of Disaggregation:

- Dispatch/No Dispatch categories applicable to all levels except trunks.
- Residence & Business reported in day intervals = 0,1,2,3,4, 5, 5+
- UNE and Design reported in day intervals = 0-5, 5-10, 10-15, 15-20, 20-25, 25-30, 30+
- All Levels are reported <10 line/circuits; >10 line/circuits
- Product Reporting Levels
  - POTS – Residence
  - POTS – Business
  - DESIGN
  - PBX
  - CENTREX
  - ISDN
  - UNE 2 Wire Loop with NP (Design and Non-Design)
  - UNE 2 Wire Loop without NP (Design and Non-Design)
  - UNE Loop Other with NP (Design and Non-Design)
  - UNE Loop Other without NP (Design and Non-Design)
  - UNE Other (Design and Non-Design)
  - Switching (Under development)
  - Local Transport (Under development)
  - Combos (Under development)
  - NP (Under development as separate category)
  - Local Interconnection Trunks
  - Geographic Scope
  - State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • CLEC Company Name • Order Number (PON) • Submission Date & Time (TICKET_ID) • Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • CLEC Order Number • Order Submission Date & Time • Order Completion Date & Time • Service Type • Geographic Scope

Retail Analog/Benchmark

CLEC Residence Resale / BST Residence Retail
CLEC Business Resale / BST Business Retail
CLEC Non-UNE Design / BST Design
CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN
Interconnection Trunks-CLEC / Interconnection Trunks-BST
UNEs-Retail Analog (under development at this time)

Revision date: 09/08/99 (taf)

BellSouth
Service Quality Measurements
Regional Performance Reports

PROVISIONING

Report/Measurement:
Average Completion Notice Interval
Definition:
The Completion Notice Interval is the elapsed time between the BST reported completion of work and the issuance of a valid completion notice to the CLEC.
Exclusions:
• Non-mechanized Orders • Cancelled Service Orders • Order Activities of BST associated with internal or administrative use of local services • D & F orders
Business Rules:
Measurement of interval of completion date and time by a field technician on dispatched orders, and 5PM on the due date for non-dispatched orders; to the release of a notice to the CLEC/BST of the completion status. On all orders (mechanized and non-mechanized) the field technician notifies the CLEC by telephone the work was complete and then he enters the work order completion information and completion time in his computer. This information switches through to the SOCS systems either completing the order or rejecting the order to the Work Management Center (WMC). If the completion is rejected, it is manually corrected and then completed by the WMC. The notice is returned on each individual order submitted and as the notice is sent electronically, it can only be switched to those orders that were submitted by the CLEC electronically.
Calculation:
Σ (Date and Time of Notice of Completion) – (Date and Time of Work Completion) / (Number of Orders Completed in Reporting Period)
Report Structure:
• CLEC Specific • CLEC Aggregate • BST Aggregate (in development-expected release date 08/15/99 reporting)
Level of Disaggregation:
• Reporting intervals in Hours: 0-1, 1-2, 2-4, 4-8, 8-12, 12-24, > 24, plus Overall Average Hour Interval • Reported in categories of <10 line/circuits; > 10 line/circuits • Product Reporting Levels ➢ POTS – Residence ➢ POTS – Business ➢ DESIGN ➢ PBX ➢ CENTREX ➢ ISDN ➢ UNE 2 Wire Loop with NP (Design and Non-Design) ➢ UNE 2 Wire Loop without NP (Design and Non-Design) ➢ UNE Loop Other with NP (Design and Non-Design) ➢ UNE Loop Other without NP (Design and Non-Design) ➢ UNE Other (Design and Non-Design) ➢ Switching (Under development) ➢ Local Transport (Under development) ➢ Combos (Under development) ➢ NP (Under development as separate category) ➢ Local Interconnection Trunks ➢ Geographic Scope ➢ State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

BellSouth
Service Quality Measurements
Regional Performance Reports

PROVISIONING – (Average Completion Notice Interval – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number • Work Completion Date • Work Completion Time • Completion Notice Availability Date • Completion Notice Availability Time • Service Type • Activity Type • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • Service Order Number • Work Completion Date • Work Completion Time • Completion Notice Availability Date • Completion Notice Availability Time • Service Type • Activity Type • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.
Retail Analog/Benchmark:	
CLEC Residence Resale / BST Residence Retail CLEC Business Resale / BST Business Retail CLEC Non-UNE Design / BST Design CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN Interconnection Trunks-CLEC / Interconnection Trunks-BST UNEs-Retail Analog (under development at this time)	

Revision date: 09/15/99 (taf)

BellSouth
Service Quality Measurements
Regional Performance Reports

PROVISIONING

Report/Measurement:	
Coordinated Customer Conversions	
Definition:	
This category measures the average time it takes BST to disconnect an unbundled loop from the BST switch and cross connect it to a CLEC's equipment. This measurement applies to service orders with and without NP, and where the CLEC has requested BST to provide a coordinated cutover.	
Exclusions:	
• Any order canceled by the CLEC will be excluded from this measurement. • Delays due to CLEC following disconnection of the unbundled loop • Unbundled Loops where there is no existing subscriber loop	
Business Rules:	
Where the service order includes NP, the interval includes the total time for the cutover including the translation time to place the line back in service on the ported line. The interval is calculated for the entire cutover time for the service order and then divided by items worked in that time to give the average per item interval for each service order.	
Calculation:	
Σ [(Completion Date and Time for Cross Connection of an Unbundled Loop)- (Disconnection Date and Time of an Unbundled Loop)] / Total Number of Unbundled Loop Items for the reporting period.	
Report Structure:	
• CLEC Specific • CLEC Aggregate	
Level of Disaggregation:	
• Reported in intervals <=5 minutes; >5,<15 minutes; >15 minutes, plus Overall Average interval • Product Reporting Levels ➢ UNE Loops without NP ➢ UNE Loops with NP ➢ Geographic Scope ➢ State, Region, and further geographic disaggregation as required by State Commission Order	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • CLEC Order Number • Committed Due Date (DD) • Service Type (CLASS_SVC_DESC) • Cutover Start Time • Cutover Completion time • Portability start and completion times (NP orders) • Total Items **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• No BST Analog Exists
Retail Analog/Benchmark:	
There is no retail analog for this measurement because it measures cutting loops to the CLEC. Benchmark under development.	

Revision date: 09/09/99 (taf)

BellSouth
Service Quality Measurements
Regional Performance Reports

PROVISIONING

Report/Measurement:
% Provisioning Troubles within 30 days of Service Order Activity
Definition:
Percent Provisioning Troubles within 30 days of Installation measures the quality and accuracy of installation activities.
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (R Orders, Test Orders, etc.) • D & F orders
Business Rules:
Measures the quality and accuracy of completed orders. The first trouble report from a service order after completion is counted in this measure. Subsequent trouble reports are measured in Repeat Report Rate. Reports are calculated searching in the prior report period for completed service orders and following 30 days after completion for a trouble report. D & F orders are excluded as there is no subsequent activity following a disconnect.
Calculation:
% Provisioning Troubles within 30 days of Service Order Activity = Σ (Trouble reports on all completed orders ≤ 30 days following service order(s) completion) / (All Service Orders completed in the calendar month) X 100
Report Structure:
• CLEC Specific, CLEC Aggregate, BST Aggregate
Level of Disaggregation:
• Reported in categories of <10 line/circuits; > 10 line/circuits • Dispatch / No Dispatch • Product Reporting Levels ➢ POTS – Residence ➢ POTS – Business ➢ DESIGN ➢ PBX ➢ CENTREX ➢ ISDN ➢ UNE 2 Wire Loop with NP (Design and Non-Design) ➢ UNE 2 Wire Loop without NP (Design and Non-Design) ➢ UNE Loop Other with NP (Design and Non-Design) ➢ UNE Loop Other without NP (Design and Non-Design) ➢ UNE Other (Design and Non-Design) ➢ Switching (Under development) ➢ Local Transport (Under development) ➢ Combos (Under development) ➢ NP (Under development as separate category) ➢ Local Interconnection Trunks ➢ Geographic Scope ➢ State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

BellSouth
Service Quality Measurements
Regional Performance Reports

PROVISIONING – (% Provisioning Troubles within 30 days of Service Order Activity – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number and PON • Order Submission Date(TICKET_ID) • Order Submission Time (TICKET_ID) • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Order Number • Order Submission Date • Order Submission Time • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope

Retail Analog/Benchmark:
CLEC Residence Resale / BST Residence Retail CLEC Business Resale / BST Business Retail CLEC Design / BST Design CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN Interconnection Trunks-CLEC / Interconnection Trunks –BST UNEs-Retail Analog (Under Development at this time)

Revision date: 09/09/99 (taf)

BellSouth
Service Quality Measurements
Regional Performance Reports

PROVISIONING

Report/Measurement :
Total Service Order Cycle Time (TSOCT) (under development 3Q99)
Definition:
This is a new measurement under development to measure the total service order cycle time from receipt of a valid service order request to the completion of the service order.
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services • (Record Orders, Test Orders, etc.) • D (Disconnect) and F (From) orders. (From is disconnect side of a move order when the customer moves to a new address). • "L" Appointment coded orders (where the customer has requested a later than offered interval) • Orders with CLEC/Subscriber caused delays or CLEC/Subscriber requested due date changes.
Business Rules:
The interval is determined for each order processed during the reporting period. This measurement combines two reports: FOC (Firm Order Confirmation) with Average Order Completion Interval. This interval starts with the receipt of a valid service order request and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed
Calculation :
Total Service Order Cycle Time (under development)
Report Structure:
• CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
• ISDN Orders included in Non Design - GA Only • Dispatch/No Dispatch categories applicable to all levels except trunks. • Intervals under development • Product Reporting Levels ➢ Interconnection Trunks ➢ POTS – Residence ➢ POTS – Business ➢ DESIGN ➢ PBX ➢ CENTREX ➢ ISDN ➢ UNE 2 Wire Loop with NP (Design and Non-Design) ➢ UNE 2 Wire Loop without NP (Design and Non-Design) ➢ UNE Loop Other with NP (Design and Non-Design) ➢ UNE Loop Other without NP (Design and Non-Design) ➢ UNE Other (Design and Non-Design) ➢ Switching (Under development) ➢ Local Transport (Under development) ➢ Combos (Under development) ➢ NP (Under development as separate category) ➢ Local Interconnection Trunks • Geographic Scope ➢ State, Region and further geographic disaggregation as required by State Commission Order

BellSouth
Service Quality Measurements
Regional Performance Reports

PROVISIONING – (Total Service Order Cycle Time (TSOCT) – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Interval for FOC • CLEC Company Name • Order Number (PON) • Submission Date & Time (TICKET_ID) • Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • CLEC Order Number • Order Submission Date & Time • Order Completion Date & Time • Service Type • Geographic Scope
Retail Analog/Benchmark	
Under development (BST retail analog available at this time would be Average Completion Interval)	

Revision date: 09/08/99 (taf)

BellSouth
Service Quality Measurements
Regional Performance Reports

MAINTENANCE & REPAIR

Report/Measurement:
Missed Repair Appointments
Definition:
The percent of trouble reports not cleared by the committed date and time.
Exclusions:
• Trouble tickets canceled at the CLEC request. • BST trouble reports associated with internal or administrative service. • Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble.
Business Rules:
The negotiated commitment date and time is established when the repair report is received. The cleared time is the date and time that BST personnel clear the trouble and closes the trouble report in his Computer Access Terminal (CAT) or workstation. If this is after the Commitment time, the report is flagged as a "Missed Commitment" or a missed repair appointment. When the data for this measure is collected for BST and a CLEC, it can be used to compare the percentage of the time repair appointments are missed due to BST reasons. Note: Appointment intervals vary with force availability in the POTS environment. Specials and Trunk intervals are standard interval appointments of no greater than 24 hours.
Calculation:
Percentage of Missed Repair Appointments =Σ (Count of Customer Troubles Not Cleared by the Quoted Commitment Date and Time) / Σ (Total Trouble reports closed in Reporting Period) X 100
Report Structure:
• CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
ISDN Troubles included in Non-Design – GA ONLY • Product Reporting Levels ➢ POTS – Residence, Business ➢ Design ➢ PBX, CENTREX and ISDN ➢ UNE 2 Wire Loop (Design and Non – Design) ➢ UNE Loop Other (Design and Non Design) ➢ UNE Other (Design and Non – Design) ➢ Switching, Local Transport and Combos (under development) ➢ Local Interconnection Trunks • Dispatch/No Dispatch categories applicable to all product levels • Geographic Scope ➢ State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area - MSA)

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • CLEC Company Name • Submission Date & Time (TICKET_ID) • Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Company Code • Submission Date & Time • Completion Date • Service Type • Disposition and Cause (Non-Design / Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope

BellSouth
Service Quality Measurements
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MAINTENANCE & REPAIR – (Missed Repair Appointments – Continued)

Retail Analog/Benchmark
CLEC Residence-Resale / BST Residence-Retail
CLEC Business-Resale / BST Business-Retail
CLEC Design-Resale / BST Design-Retail
CLEC PBX, Centrex, and ISDN Resale/ BST PBX, Centrex, and ISDN Retail
CLEC Trunking-Resale / BST Trunking-Retail
UNEs - Retail Analog (under development at this time.)

Revision date: 06/09/99 (see)

BellSouth
Service Quality Measurements
Regional Performance Reports

MAINTENANCE & REPAIR

Report/Measurement:
Customer Trouble Report Rate
Definition:
Initial and repeated customer direct or referred troubles reported within a calendar month per 100 lines/ circuits in service.
Exclusions:
• Trouble tickets canceled at the CLEC request. • BST trouble reports associated with administrative service. • Customer provided Equipment (CPE) troubles or CLEC equipment troubles.
Business Rules:
Customer Trouble Report Rate is computed by accumulating the number of maintenance initial and repeated trouble reports during the reporting period. The resulting number of trouble reports are divided by the total "number of service" lines, ports or combination of existing for the CLEC's and BST respectively at the end of the report month.
Calculation:
Customer Trouble Report Rate = (Count of Initial and Repeated Trouble Reports in the Current Period) / (Number of Service Access Lines in service at End of the Report Period) X 100
Report Structure:
• CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
ISDN Troubles included in Non Design – GA Only • Product Reporting Levels ➢ POTS Residence and Business ➢ Design ➢ PBX, CENTREX, and ISDN ➢ UNE 2 Wire Loop (Design and Non – Design) ➢ UNE Loop Other (Design and Non – Design) ➢ UNE Other (Design and Non – Design) ➢ Switching , Local Transport, and Combos (under development) ➢ Local Interconnection Trunks • Dispatch/No Dispatch categories applicable to all product levels • Geographic Scope ➢ State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area - MSA)

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • # Service Access Lines in Service at the end of period • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Company Code • Ticket Submission Date & Time • Ticket Completion Date • Service Type • Disposition and Cause (Non-Design / Non-Special Only) • Trouble Code (Design and Trunking Services) • # Service Access Lines in Service at the end of period • Geographic Scope

BellSouth
Service Quality Measurements
Regional Performance Reports

MAINTENANCE & REPAIR – (Customer Trouble Report Rate – Continued)

Retail Analog/Benchmark:
CLEC Residence-Resale / BST Residence -Retail
CLEC Business-Resale / BST Business-Retail
CLEC Design-Resale / BST Design-Retail
CLEC PBX, Centrex and ISDN Resale/ BST PBX, Centrex, and ISDN Retail
CLEC Trunking-Resale / BST Trunking-Retail
UNEs - Retail Analog (under development at this time)

Revision date: 06/09/99 (see)

BellSouth
Service Quality Measurements
Regional Performance Reports

MAINTENANCE & REPAIR

Report/Measurement:
Maintenance Average Duration
Definition:
The Average duration of Customer Trouble Reports from the receipt of the Customer Trouble Report to the time the trouble report is cleared.
Exclusions:
• Trouble reports canceled at the CLEC request • BST trouble reports associated with administrative service • Customer Provided Equipment (CPE) troubles or CLEC Equipment Troubles. • Trouble reports greater than 10 days
Business Rules:
For Average Duration the clock starts on the date and time of the receipt of a correct repair request. The clock stops on the date and time the service is restored (when the technician completes the trouble ticket on his/her CAT or work system).
Calculation:
Maintenance Average Duration = Σ(Date and Time of Service Restoration) – (Date and Time Trouble Ticket was Opened) / Σ(Total Closed Troubles in the reporting period)
Report Structure:
• CLEC Specific • BST Aggregate • CLEC Aggregate
Level of Disaggregation:
ISDN Troubles included in Non Design – GA Only • Product Reporting Levels ➢ POTS– Residence and Business ➢ Design ➢ PBX, CENTREX, and ISDN ➢ UNE 2 Wire Loop (Design Non – Design) ➢ UNE Loop Other (Design Non – Design) ➢ UNE Other (Design Non – Design) ➢ Switching, Local Transport and Combos (under development) ➢ Local Interconnection Trunks • Dispatch/No Dispatch categories applicable to all product levels • Geographic Scope ➢ State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area – MSA)

MAINTENANCE & REPAIR – (Maintenance Average Duration – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Total Tickets (LINE_NBR) • CLEC Company Name • Ticket Submission Date & Time (TIME_ID) • Ticket Completion Date (CMPLTN_DT • Service Type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • Total Tickets • BST Company Code • Ticket Submission Date • Ticket submission Time • Ticket completion Date • Ticket Completion Time • Total Duration Time • Service Type • Disposition and Cause (Non – Design / Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope
Retail Analog/Benchmark:	
CLEC Residence-Resale / BST Residence-Resale CLEC Business-Resale / BST Business-Retail CLEC Design-Resale / BST Design-Retail CLEC PBX, Centrex and ISDN Resale / BST PBX, Centrex and ISDN Retail CLEC Trunking-Resale /BST Trunking-Retail UNEs - Retail Analog (under development at this time)	

Revision date: 06/09/99 (see)

MAINTENANCE & REPAIR

Report/Measurement:

Percent Repeat Troubles within 30 Days

Definition:

Trouble reports on the same line/circuit as a previous trouble report received within 30 calendar days as a percent of total troubles reported.

Exclusions:

- Trouble Reports canceled at the CLEC request
- BST Trouble Reports associated with administrative service
- Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles.

Business Rules:

Includes Customer trouble reports received within 30 days of an original Customer trouble report.

Calculation:

Percentage of Missed Repair Appointments = (Count of Customer Troubles where more than one trouble report was logged for the same service line within a continuous 30 days) / (Total Trouble Reports Closed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

ISDN Troubles included in Non Design – GA Only

- Product Reporting Levels
  - POTS Residence and Business
  - Design
  - PBX, CENTREX and ISDN
  - UNE 2 Wire Loop (Design and Non – Design)
  - UNE Loop Other (Design and Non – Design)
  - UNE Other (Design Non – Design)
  - Switching, Local Transport and Combos (under development)
  - Local Interconnection Trunks
- Dispatch/No Dispatch categories applicable to all product levels
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area - MSA)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Total Tickets (LINE_NBR) • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMPLTN_DT) • Total and Percent Repeat Trouble Reports within 30 Days (TOT_REPEAT) • Service Type • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope **NOTE:** Code parentheses is the corresponding header format found in the raw data file.	• Report Month • Total Tickets • BST Company Code • Ticket Submission Date • Ticket Submission Time • Ticket Completion Date • Ticket Completion Time • Total and Percent Repeat Trouble Reports within 30 Days • Service Type • Disposition and Cause (Non – Design/ Non-Special only) • Trouble Code (Design and Trunking Services) • Geographic Scope

BellSouth
Service Quality Measurements
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MAINTENANCE & REPAIR – (Percent Repeat Troubles within 30 Days - Continued)

Retail Analog/Benchmark:
CLEC Residence-Resale / BST Residence-Retail
CLEC Business- Resale / BST Business-Retail
CLEC Design-Resale / BST Design-Retail
CLEC PBX, Centrex and ISDN Resale / BST PBX, Centrex and ISDN Retail
CLEC Trunking-Resale / BST Trunking-Retail
UNEs - Retail Analog (under development at this time)

Revision date: 06/09/99 (see)

BellSouth
Service Quality Measurements
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MANTENANCE & REPAIR

Report/Measurement:

Out of Service (OOS) > 24 Hours

Definition:

For Out of Service Troubles (no dial tone, cannot be called or cannot call out) the percentage of troubles cleared in excess of 24 hours. (All design services are considered to be out of service).

Exclusions:

- Trouble Reports canceled at the CLEC request
- BST Trouble Reports associated with administrative service
- Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles.

Business Rules:

Customer Trouble reports that are out of service and cleared in excess of 24 hours. The clock begins when the trouble report is created in LMOS and the trouble is counted if the time exceeds 24 hours.

Calculation:

Out of Service (OOS) > 24 hours = (Total Troubles OOS > 24 Hours) / Total OOS Troubles in Reporting Period) X 100

Report Structure:

- CLEC Specific
- BST Aggregate
- CLEC Aggregate

Level of Disaggregation:

ISDN Troubles included in Non Design – GA Only

- Product Reporting Levels
  - POTS Residence and Business
  - Design
  - PBX and CENTREX and ISDN
  - UNE 2 Wire Loop (Design and Non – Design)
  - UNE Loop Other (Design and Non – Design)
  - UNE Other (Design and Non – Design)
  - Switching, Local Transport and Combos (under development)
  - Local Interconnection Trunks
- Dispatch/No Dispatch categories applicable to all product levels
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area - MSA)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Total Tickets • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMPLTN_DT • Percentage of Customer Troubles out of Service > 24 Hours (OOS>24_FLAG) • Service type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE-DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • Total Tickets • BST Company Code • Ticket Submission Date • Ticket Submission time • Ticket Completion Date • Ticket Completion Time • Percent of Customer Troubles out of Service > 24 Hours • Service type • Disposition and Cause (Non – Design/ Non-Special only) • Trouble Code (Design and Trunking Services) • Geographic Scope

BellSouth
Service Quality Measurements
Regional Performance Reports

MANTENANCE & REPAIR – (Out of Service (OOS) > 24 Hours – Continued)

Retail Analog/Benchmark:
CLEC Residence-Resale / BST Residence- Retail
CLEC Business- Resale / BST Business-Retail
CLEC Design-Resale / BST Design-Retail
CLEC PBX, Centrex and ISDN Resale / BST PBX, Centrex and ISDN Retail
CLEC Trunking-Resale /BST Trunking- Retail
UNEs Retail Analog (under development at this time.)

Revision date: 06/09/99 (see)

BellSouth
Service Quality Measurements
Regional Performance Reports

MAINTENANCE & REPAIR

Report/Measurement:	
OSS Interface Availability	
Definition:	
The percentage of time the OSS Interface is functionally available compared to scheduled availability. Availability percentage for the CLEC and BST interface systems and for the legacy systems accessed by them are captured.	
Exclusions:	
None	
Business Rules:	
This measure is designed to compare the OSS availability versus scheduled availability of BST's legacy systems.	
Calculation:	
OSS Interface Availability = (Actual System Functional Availability) / (Actual planned System Availability) X 100	
Report Structure:	
• CLEC Aggregate • BST Aggregate • BST/CLEC	
Level of Disaggregation:	
• Region	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Availability of CLEC TAFI • Availability of LMOS HOST, MARCH and SOCS • CRIS, PREDICTOR, LNP, and OSPCM (under development at this time)	• Availability of BST TAFI • Availability of LMOS HOST, MARCH and SOCS
Retail Analog/Benchmark:	
Parity by design; Retail Analog	

Revision date: 06/09/99 (see)

BellSouth
Service Quality Measurements
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MAINTENANCE & REPAIR

Report/Measurement:	
OSS Response Interval and Percentages	
Definition:	
The response intervals are determined by subtracting the time a request is received on the BST side of the interface until the response is received from the legacy system. Percentages of requests falling into each interval category are reported, along with the actual number of requests falling into those categories.	
Exclusions:	
Queries received during scheduled system maintenance time.	
Business Rules:	
This measure is designed to monitor the time required for the CLEC and BST interface system to obtain from BST's legacy systems the information required to handle maintenance and repair functions. The clock starts on the date and time when the request is received and the clock stops when the response has been transmitted through that same point to the requester.	
Calculation:	
OSS Response Interval = (Query Response Date and Time for Category "X") - (Query Request Date and Time for Category "X") / (Number of Queries Submitted in the Reporting Period) where, "X" is 0-4, $\geq$ 4 to 10, $\geq$ 10, $\geq$ 30 seconds.	
Report Structure:	
• CLEC • BST Residence • BST Business (BST Total is under development at this time) by interface for each legacy system and function as appropriate.	
Level of Disaggregation:	
Region	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• CLEC Transaction Intervals	• BST Business and Residence transaction Intervals
Retail Analog/Benchmark:	
Retail Analog Audit Verification	

Revision date: 06/09/99 (see)

BellSouth
Service Quality Measurements
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MAINTENANCE & REPAIR

Report/Measurement:	
Average Answer Time – Repair Centers	
Definition:	
This measure demonstrates an average response time for the CLEC representative to contact a BST representative. The average time a CLEC Rep is in queue waiting for the LCSC or UNE Center Rep to answer.	
Exclusions:	
None	
Business Rules:	
This measure is designed to measure the time required for CLEC & BST from the time of the ACD choice to the time of being answered. The clock starts when the CLEC Rep makes a choice to be put in queue for the next repair attendant and the clock stops when the repair attendant answers the call.	
Level of Disaggregation:	
• Region. CLEC/BST Service Centers and BST Repair Centers are regional.	
Calculation:	
Average Answer Time for BST's Repair Centers = (Time BST Repair Attendant Answers Call) – (Time of entry into queue until ACD Selection) / (Total number of calls by reporting period)	
Report Structure:	
• CLEC Aggregate • BST Aggregate • CLEC Aggregate	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• CLEC Average Answer Time	• BST Average Answer Time
Retail Analog/Benchmark:	
Retail Analog Audit Verification	

Revision date: 06/09/99 (see)

BellSouth
Service Quality Measurements
Regional Performance Reports

BILLING

Report/Measurement:	
Invoice Accuracy	
Definition:	
This measure provides the percentage of accuracy of the billing invoices rendered to CLECs during the current month.	
Exclusions:	
• Adjustments not related to billing errors (e.g., credits for service outage, special promotion credits, adjustments to satisfy the customer)	
Business Rules:	
The accuracy of billing invoices delivered by BST to the CLEC must enable them to provide a degree of billing accuracy comparative to BST bills rendered to retail customers BST. CLECs request adjustments on bills determined to be incorrect. The BellSouth Billing verification process includes manually analyzing a sample of local bills from each bill period. The bill verification process draws from a mix of different customer billing options and types of service. An end-to-end auditing process is performed for new products and services. Internal measurements and controls are maintained on all billing processes.	
Calculation:	
Invoice Accuracy = (Total Billed Revenues during current month) – (Billing Related Adjustments during current month) / Total Billed Revenues during current month X 100	
Report Structure:	
• CLEC Specific • CLEC Aggregate • BST Aggregate	
Level of Disaggregation :	
• Product / Invoice Type ➢ Resale ➢ UNE ➢ Interconnection • Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Invoice Type • Total Billed Revenue • Billing Related Adjustments	• Report Month • Retail Type ➢ CRIS ➢ CABS • Total Billed Revenue • Billing Related Adjustments
Retail Analog/Benchmark	
CLEC Invoice Accuracy is comparable to BST Invoice Accuracy	

Revision date: 09/15/99 (lg)

BellSouth
Service Quality Measurements
Regional Performance Reports

BILLING

Report/Measurement:	
Mean Time to Deliver Invoices	
Definition:	
This measure provides the mean interval for billing invoices	
Exclusions:	
Any invoices rejected due to formatting or content errors.	
Business Rules:	
Measures the mean interval for timeliness of billing records delivered to CLECs in an agreed upon format. CRIS-based invoices are measured in business days, and CABS-based invoices in calendar days.	
Calculation:	
Mean Time To Deliver Invoices = Σ [(Invoice Transmission Date)– (Close Date of Scheduled Bill Cycle)] / (Count of Invoices Transmitted in Reporting Period)	
Report Structure:	
• CLEC Specific • CLEC Aggregate • BST Aggregate	
Level of Disaggregation:	
• Product / Invoice Type ➢ Resale ➢ UNE ➢ Interconnection • Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Invoice Type • Invoice Transmission Count • Date of Scheduled Bill Close	• Report Month • Retail Type ➢ CRIS ➢ CABS • Invoice Transmission Count • Date of Scheduled Bill Close
Retail Analog/Benchmark:	
• CRIS-based invoices will be released for delivery within six (6) business days • CABS-based invoices will be released for delivery within eight (8) calendar days. • CLEC Average Delivery Intervals for both CRIS and CABS Invoices are comparable to BST Average delivery time for both systems.	

Revision date: 09/15/99 (lg)

BellSouth
Service Quality Measurements
Regional Performance Reports

BILLING

Report/Measurement:	
Usage Data Delivery Accuracy	
Definition:	
This measurement captures the percentage of recorded usage that is delivered error free and in an acceptable format to the appropriate Competitive Local Exchange Carrier (CLEC). These percentages will provide the necessary data for use as a comparative measurement for BellSouth performance. This measurement captures Data Delivery Accuracy rather than the accuracy of the individual usage recording.	
Exclusions:	
None	
Business Rules:	
The accuracy of the data delivery of usage records delivered by BST to the CLEC must enable them to provide a degree of accuracy comparative to BST bills rendered to their retail customers. If errors are detected in the delivery process, they are investigated, evaluated and documented. Errors are corrected and the data retransmitted to the CLEC.	
Calculations:	
Usage Data Delivery Accuracy = Σ [(Total number of usage data packs sent during current month) – (Total number of usage data packs requiring retransmission during current month)] / (Total number of usage data packs sent during current month) X 100	
Report Structure:	
• CLEC Specific • CLEC Aggregate • BST Aggregate	
Level of Disaggregation:	
• Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non BellSouth Recorded	• Report Month • Record Type
Retail Analog/Benchmark:	
CLEC Usage Data Delivery Accuracy is comparable to BST Usage Data Delivery Accuracy	

Revision date: 09/15/99 (lg)

BellSouth
Service Quality Measurements
Regional Performance Reports

BILLING

Report/Measurement:	
Usage Data Delivery Completeness	
Definition:	
This measurement provides percentage of complete and accurately recorded usage data (usage recorded by BellSouth and usage recorded by other companies and sent to BST for billing) that is processed and transmitted to the CLEC within thirty (30) days of the message recording date. A parity measure is also provided showing completeness of BST messages processed and transmitted via CMDS. BellSouth delivers its own retail usage from recording location to billing location via CMDS as well as delivering billing data to other companies. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
Exclusions:	
None	
Business Rules:	
The purpose of these measurements is to demonstrate the level of quality of usage data delivered to the appropriate CLEC. Method of delivery is at the option of the CLEC.	
Calculation:	
Usage Data Delivery Completeness = Σ(Total number of Recorded usage records delivered during the current month that are within thirty (30) days of the message recording date) / Σ(Total number of Recorded usage records delivered during the current month) X 100	
Report Structure	
• CLEC Specific • CLEC Aggregate • BST Aggregate	
Level of Disaggregation:	
• Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non BellSouth Recorded	• Report Monthly • Record Type
Retail Analog/Benchmark:	
CLEC Usage Delivery Completeness is comparable to BST Usage Delivery Completeness	

Revision date: 09/15/99 (lg)

BellSouth
Service Quality Measurements
Regional Performance Reports

BILLING

Report/Measurement:	
Usage Data Delivery Timeliness	
Definition:	
This measurement provides a percentage of recorded usage data (usage recorded by BST and usage recorded by other companies and sent to BST for billing) that is delivered to the appropriate CLEC within six (6) calendar days from the receipt of the initial recording. A parity measure is also provided showing timeliness of BST messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
Exclusions:	
None	
Business Rules:	
The purpose of this measurement is to demonstrate the level of timeliness for processing and transmission of usage data delivered to the appropriate CLEC. The usage data will be mechanically transmitted or mailed to the CLEC data processing center once daily. The Timeliness interval of usage recorded by other companies is measured from the date BST receives the records to the date BST distributes to the CLEC. Method of delivery is at the option of the CLEC.	
Calculation:	
Usage Data Delivery Timeliness = Σ (Total number of usage records sent within six (6) calendar days from initial recording/receipt) / Σ (Total number of usage records sent) X 100	
Report Structure:	
• CLEC Aggregate • CLEC Specific • BST Aggregate	
Level of Disaggregation:	
• Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non-BellSouth Recorded	• Report Monthly • Record Type
Retail Analog/Benchmark:	
CLEC Usage Data Delivery Timeliness is comparable to BST Usage Data Delivery Timeliness	

Revision date: 09/15/99 (lg)

BellSouth
Service Quality Measurements
Regional Performance Reports

BILLING

Report/Measurement:	
Mean Time to Deliver Usage	
Definition:	
This measurement provides the average time it takes to deliver Usage Records to a CLEC. A parity measure is also provided showing timeliness of BST messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
Exclusions:	
None	
Business Rules:	
The purpose of this measurement is to demonstrate the average number of days it takes BST to deliver Usage data to the appropriate CLEC. Usage data is mechanically transmitted or mailed to the CLEC data processing center once daily. Method of delivery is at the option of the CLEC.	
Calculation:	
Mean Time to Deliver Usage = Σ (Record volume X estimated number of days to deliver the Usage Record) / total record volume	
Report Structure:	
• CLEC Aggregate • CLEC Specific • BST Aggregate	
Level of Disaggregation:	
• Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non-BellSouth Recorded	• Report Monthly • Record Type
Retail Analog/Benchmark:	
Mean Time to Deliver Usage to CLEC is comparable to Mean Time to Deliver Usage to BST	

Revision date: 09/15/99 (lg)

BellSouth
Service Quality Measurements
Regional Performance Reports

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
Speed to Answer Performance/Average Speed to Answer – Toll
Definition:
Measurement of the average time in seconds calls wait before answered by a toll operator.
Exclusions:
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
Business Rules:
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
Calculation:
The Average Speed to Answer for toll is calculated by using data from monthly system measurement reports taken from the centralized call routing switches. The "total call waiting seconds" is a sub-component of this measure which BST systems calculate by monitoring the number of calls in queue throughout the day multiplied by the time (in seconds) between monitoring events. The "total calls served" is the other sub-component of this measure, which BST systems record as the total number of calls handled by Operator Services toll centers. Since calls abandoned are not reflected in the calculation, the percent answered within the required timeframe is determined by using conversion tables with input for the abandonment rate.
Report Structure:
Reported for the aggregate of BST and CLECs • State
Level of Disaggregation:
None
Data Retained (on Aggregate Basis)
For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP. • Month • Call Type (Toll) • Average Speed of Answer
Retail Analog/Benchmark
Parity by Design

Revision Date: 06/29/99 (tg)

BellSouth
Service Quality Measurements
Regional Performance Reports

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
Speed to Answer Performance/Percent Answered within "X" Seconds – Toll
Definition:
Measurement of the percent of toll calls that are answered in less than "X" seconds. The number of seconds represented by "X" is thirty, except where a different regulatory benchmark has been set against the Average Speed to Answer by a State Commission.
Exclusions:
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
Business Rules:
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
Calculation:
The Percent Answered within "X" Seconds measurement for toll is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within "X" seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.
Report Structure:
Reported for the aggregate of BST and CLECs • State
Level of Disaggregation:
None
Data Retained (on Aggregate Basis)
For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP. • Month • Call Type (Toll) • Average Speed of Answer
Retail Analog/Benchmark
Parity by Design

Revision Date: 06/29/99 (tg)

BellSouth
Service Quality Measurements
Regional Performance Reports

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
Speed to Answer Performance/Average Speed to Answer – Directory Assistance (DA)
Definition:
Measurement of the average time in seconds calls wait before answer by a DA operator.
Exclusions:
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
Business Rules:
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
Calculation:
The Average Speed to Answer for DA is calculated by using data from monthly system measurement reports taken from the centralized call routing switches. The "total call waiting seconds" is a sub-component of this measure which BST systems calculate by monitoring the number of calls in queue throughout the day multiplied by the time (in seconds) between monitoring events. The "total calls served" is the other sub-component of this measure, which BST systems record as the total number of calls handled by Operator Services DA centers. Since calls abandoned are not reflected in the calculation, the percent answered within the required timeframe is determined by using conversion tables with input for the abandonment rate.
Report Structure:
Reported for the aggregate of BST and CLECs • State
Level of Disaggregation:
None
Data Retained (on Aggregate Basis)
For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP. • Month • Call Type (DA) • Average Speed of Answer
Retail Analog/Benchmark
Parity by Design

Revision Date: 06/29/99 (tg)

BellSouth
Service Quality Measurements
Regional Performance Reports

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
Speed to Answer Performance/Percent Answered within "X" Seconds – Directory Assistance (DA)
Definition:
Measurement of the percent of DA calls that are answered in less than "X" seconds. The number of seconds represented by "X" is twenty, except where a different regulatory benchmark has been set against the Average Speed to Answer by a State Commission.
Exclusions:
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
Business Rules:
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
Calculation:
The Percent Answered within "X" Seconds measurement for DA is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within "X" seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.
Report Structure:
Reported for the aggregate of BST and CLECs • State
Level of Disaggregation:
None
Data Retained (on Aggregate Basis)
For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP. • Month • Call Type (DA) • Average Speed of Answer
Retail Analog/Benchmark
Parity by Design

Revision Date: 06/29/99 (tg)

BellSouth
Service Quality Measurements
Regional Performance Reports

E911

Report/Measurement:
E911/Timeliness
Definition:
Measures the percentage of batch orders for E911 database updates (to CLEC resale and BST retail records) processed successfully within a 24-hour period.
Exclusions:
• Any resale order canceled by a CLEC • Facilities-based CLEC orders
Business Rules:
The 24-hour processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Mechanical processing starts when SCC (BST's E911 vendor) receives E911 files containing batch orders extracted from BST's Service Order Communication System (SOCS). Processing stops when SCC loads the individual records to the E911 database. No distinctions are made between CLEC resale records and BST retail records.
Calculation:
E911 Timeliness = Σ (Number of batch orders processed within 24 hours ÷ Total number of batch orders submitted) X 100
Report Structure:
Reported for the aggregate of CLEC resale updates and BST retail updates • State • Region
Levels of Disaggregation:
None
Data Retained
• Report month • Aggregate data
Retail Analog/Benchmark
Parity by Design

Revision Date: 06/29/99 (tg)

BellSouth
Service Quality Measurements
Regional Performance Reports

E911

Report/Measurement:
E911/Accuracy
Definition:
Measures the individual E911 telephone number (TN) record updates (to CLEC resale and BST retail records) processed successfully for E911 with no errors.
Exclusions:
• Any resale order canceled by a CLEC • Facilities-based CLEC orders
Business Rules:
Accuracy is based on the number of records processed without error at the conclusion of the processing cycle. Mechanical processing starts when SCC (BST's E911 vendor) receives E911 files containing telephone number (TN) records extracted from BST's Service Order Communication System (SOCS). No distinctions are made between CLEC resale records and BST retail records.
Calculation:
E911 Accuracy = Σ(Number of record individual updates processed with no errors ÷ Total number of individual record updates) X 100
Report Structure:
Reported for the aggregate of CLEC resale updates and BST retail updates • State • Region
Level of Disaggregation:
None
Data Retained
• Report month • Aggregate data
Retail Analog/Benchmark
Parity by Design

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BellSouth
Service Quality Measurements
Regional Performance Reports

E911

Report/Measurement:
E911/Mean Interval
Definition:
Measures the mean interval processing of E911 batch orders (to update CLEC resale and BST retail records).
Exclusions:
• Any resale order canceled by a CLEC • Facilities-based CLEC orders
Business Rules:
The processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Data is posted in 4-hour increments up to and beyond 24 hours. No distinctions are made between CLEC resale records and BST retail records.
Calculation:
E911 Mean Interval = Σ (Date and time of batch order completion – Date and time of batch order submission) ÷ (Number of batch orders completed)
Report Structure:
Reported for the aggregate of CLEC resale updates and BST retail updates • State • Region
Level of Disaggregation:
None
Data Retained (on Aggregate Basis)
• Report month • Aggregate data
Retail Analog/Benchmark
Parity by Design

Revision Date: 06/29/99 (tg)

BellSouth
Service Quality Measurements
Regional Performance Reports

TRUNK GROUP PERFORMANCE

Report/Measurement:

Trunk Group Service Report

Definition:

A report of the percent blocking above the Measured Blocking Threshold (MBT) on all final trunk groups between CLEC Points of Termination and BST end offices or tandems.

Exclusions:

- Trunk groups for which valid traffic data is not available
- High use trunk groups

Business Rules:

Traffic trunking data measurements are validated and processed by the Total Network Data System/Trunking (TNDS/TK), a Telcordia (BellCore) supported application, on an hourly basis for Average Business Days (Monday through Friday). The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for a 20 day period, and the busy hour is selected. The busy hour average data for each trunk group is captured for reporting purposes. Although all trunk groups are available for reporting, the report highlight those trunk groups with blocking greater than the Measured Blocking Threshold (MBT) and the number of consecutive monthly reports that the trunk group blocking has exceeded the MBT. The MBT for CTTG is 2% and the MBT for all other trunk groups is 3%.

Calculation:

Measured blocking = (Total number of blocked calls) / (Total number of attempted calls) X 100

Report Structure:

- BST Aggregate
  - CTTG
  - Local
- CLEC Aggregate
  - BST Administered CLEC Trunk
  - CLEC Administered CLEC Trunk
- CLEC Specific
  - BST Administered CLEC Trunk
  - CLEC Administered CLEC Trunk

Level of Disaggregation:

State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT	• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT

Retail Analog/Benchmark:

CLEC Trunk Blockage/BST Trunk Blockage

Revision Date: 09/15/99 (tm)

BellSouth
Service Quality Measurements
Regional Performance Reports

TRUNK GROUP PERFORMANCE

Report/Measurement:

Trunk Group Service Detail

Definition:

A detailed list of all final trunk groups between CLEC Points of Presence and BST end offices or tandems, and the actual blocking performance when the blocking exceeds the Measured Blocking Threshold (MBT) for the trunk groups.

Exclusions:

- Trunk groups for which valid traffic data is not available
- High use trunk groups

Business Rules:

Traffic trunking data measurements are validated and processed by the Total Network Data System/Trunking (TNDS/TK), a Telcordia (Bellcore) supported application, on an hourly basis for Average Business Days (Monday through Friday). The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for a 20 day period, and the busy hour is selected. The busy hour average data for each trunk group is captured for reporting purposes. Although all trunk groups are available for reporting, the report highlight those trunk groups with blocking greater than the Measured Blocking Threshold (MBT) and the number of consecutive monthly reports that the trunk group blocking has exceeded the MBT. The MBT for CTTG is 2% and the MBT for all other trunk groups is 3%.

Calculation:

Measured Blocking = (Total number of blocked calls) / (Total number of attempted calls) X 100

Report Structure:

• BST Specific ➢ Traffic Identity ➢ TGSN ➢ Tandem ➢ End Office ➢ Description ➢ Observed Blocking ➢ Busy Hour ➢ Number Trunks ➢ Valid study days ➢ Number reports ➢ Remarks	• CLEC Specific ➢ Traffic Identity ➢ TGSN ➢ Tandem ➢ CLEC POT ➢ Description ➢ Observed Blocking ➢ Busy Hour ➢ Number Trunks ➢ Valid study days ➢ Number reports ➢ Remarks

Level of Disaggregation:

State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT • Traffic identity, TGSN, end points, description, busy hour, valid study days, number reports	• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT • Traffic identity, TGSN, end points, description, busy hour, valid study days, number reports

Retail Analog/Benchmark:

CLEC Trunk Blockage/BST Trunk Blockage

Revision Date: 09/15/99 (tm)

BellSouth
Service Quality Measurements
Regional Performance Reports

COLLOCATION

Report/Measurement:
Collocation/Average Response Time
Definition:
Measures the average time (counted in business days) from the receipt of a complete and accurate collocation application (including receipt of application fees) to the date BellSouth responds in writing.
Exclusions:
• Requests to augment previously completed arrangements • Any application cancelled by the CLEC
Business Rules:
The clock starts on the date that BST receives a complete and accurate collocation application accompanied by the appropriate application fee. The clock stops on the date that BST returns a response. The clock will restart upon receipt of changes to the original application request.
Calculation:
Average Response Time = Σ(Request Response Date) – (Request Submission Date) / Count of Responses Returned within Reporting Period.
Report Structure:
• Individual CLEC (alias) aggregate • Aggregate of all CLECs
Level of Disaggregation:
• State, Region and further geographic disaggregation as required by State Commission Order • Virtual • Physical
Data Retained:
• Report period • Aggregate data
Retail Analog/Benchmark:
Under development

Revision Date: 06/29/99 (tg)

BellSouth
Service Quality Measurements
Regional Performance Reports

COLLOCATION

Report/Measurement:
Collocation/Average Arrangement Time
Definition:
Measures the average time (counted in business days) from the receipt of a complete and accurate Bona Fide firm order (including receipt of appropriate fee) to the date BST completes the collocation arrangement.
Exclusions:
• Any Bona Fide firm order cancelled by the CLEC • Bona Fide firm orders to augment previously completed arrangements • Time for BST to obtain permits • Time during which the collocation contract is being negotiated
Business Rules:
The clock starts on the date that BST receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee. The clock stops upon submission of the permit request and restarts upon receipt of the approved permit. Changes (affecting the provisioning interval or capital expenditures) that are submitted while provisioning is in progress may alter the completion date. The clock stops on the date that BST completes the collocation arrangement.
Calculation:
Average Arrangement Time = Σ(Date Collocation Arrangement is Complete) – (Date Order for Collocation Arrangement Submitted) / Total Number of Collocation Arrangements Completed during Reporting Period.
Report Structure:
• Individual CLEC (alias) aggregate • Aggregate of all CLECs
Level of Disaggregation:
• State, Region and further geographic disaggregation as required by State Commission Order • Virtual • Physical
Data Retained:
• Report period • Aggregate data
Retail Analog/Benchmark:
Under development

Revision Date: 06/29/99 (tg)

BellSouth
Service Quality Measurements
Regional Performance Reports

COLLOCATION

Report/Measurement:
Collocation/Percent of Due Dates Missed
Definition:
Measures the percent of missed due dates for collocation arrangements.
Exclusions:
• Any Bona Fide firm order cancelled by the CLEC • Bona Fide firm orders to augment previously completed arrangements • Time for BST to obtain permits • Time during which the collocation contract is being negotiated
Business Rules:
The clock starts on the date that BST receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee. The clock stops on the date that BST completes the collocation arrangement.
Calculation:
% of Due Dates Missed = Σ (Number of Orders not completed w/i ILEC Committed Due Date during Reporting Period) / Number of Orders Completed in Reporting Period) X 100
Report Structure:
• Individual CLEC (alias) aggregate • Aggregate of all CLECs
Level of Disaggregation:
• State, Region and further geographic disaggregation as required by State Commission Order • Virtual • Physical
Data Retained:
• Report period • Aggregate data
Retail Analog/Benchmark:
Under development

Revision Date: 06/29/99 (tg)

BellSouth
Service Quality Measurements
Regional Performance Reports

Appendix A: Reporting Scope*

Standard Service Groupings	*Pre-Order, Ordering* • Resale Residence • Resale Business • Resale Special • Local Interconnection Trunks • UNE • UNE - Loops w/LNP *Provisioning* • UNE Non-Design • UNE Design • UNE Loops w/LNP • Local Interconnection Trunks • Resale Residence • Resale Business • Resale Design • BST Trunks • BST Residence Retail • BST Business Retail *Maintenance and Repair* • Local Interconnection Trunks • UNE Non-Design • UNE Design • Resale Residence • Resale Business • BST Interconnection Trunks • BST Residence Retail • BST Business Retail Local Interconnection Trunk Group Blockage • BST CTTG Trunk Groups • CLEC Trunk Groups

BellSouth
Service Quality Measurements
Regional Performance Reports

Appendix A: Reporting Scope

Standard Service Order Activities *These are the generic BST/CLEC service order activities which are included in the Pre-Ordering, Ordering, and Provisioning sections of this document. It is not meant to indicate specific reporting categories.*	• New Service Installations • Service Migrations Without Changes • Service Migrations With Changes • Move and Change Activities • Service Disconnects (Unless noted otherwise)
Pre-Ordering Query Types: **Maintenance Query Types:**	• Address • Telephone Number • Appointment Scheduling • Customer Service Record • Feature Availability
Report Levels	• CLEC RESH • CLEC MSA • CLEC State • CLEC Region • Aggregate CLEC State • Aggregate CLEC Region • BST State • BST Region

* Scope is report, data source and system dependent, and, therefore, will differ with each report.

BellSouth
Service Quality Measurements
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Appendix B: Glossary of Acronyms and Terms

A	**ACD**	Automatic Call Distributor - A service that provides status monitoring of agents in a call center and routes high volume incoming telephone calls to available agents while collecting management information on both callers and attendants.
	AGGREGATE	Sum total of all items in like category, e.g. CLEC aggregate equals the sum total of all CLECs' data for a given reporting level.
	ASR	Access Service Request - A request for access service terminating delivery of carrier traffic into a Local Exchange Carrier's network.
	ATLAS	Application for Telephone Number Load Administration System - The BellSouth Operations System used to administer the pool of available telephone numbers and to reserve selected numbers from the pool for use on pending service requests/service orders.
	ATLASTN	ATLAS software contract for Telephone Number
	AUTO CLARIFICATION	The number of LSRs that were electronically rejected from LESOG and electronically returned to the CLEC for correction.
B	**BILLING**	The process and functions by which billing data is collected and by which account information is processed in order to render accurate and timely billing.
	BOCRIS	Business Office Customer Record Information System - A front-end presentation manager used by BellSouth organizations to access the CRIS database.
	BRC	Business Repair Center – The BellSouth Business Systems trouble receipt center which serves large business and CLEC customers.
	BST	BellSouth Telecommunications, Inc.
C	**CKTID**	A unique identifier for elements combined in a service configuration
	CLEC	Competitive Local Exchange Carrier
	CMDS	Centralized Message Distribution System - BellCore administered national system used to transfer specially formatted messages among companies.
	COFFI	Central Office Feature File Interface - A BellSouth Operations System database which maintains Universal Service Order Code (USOC) information based on current tariffs.

BellSouth
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Appendix B: Glossary of Acronyms and Terms - Continued

C	**COFIUSOC**	COFFI software contract for feature/service information
	CRIS	Customer Record Information System - The BellSouth proprietary corporate database and billing system for non-access customers and services.
	CRSACCTS	CRIS software contract for CSR information
	CSR	Customer Service Record
	CTTG	Common Transport Trunk Group - Final trunk groups between BST & Independent end offices and the BST access tandems.
D	**DESIGN**	Design Service is defined as any Special or Plain Old Telephone Service Order which requires BellSouth Design Engineering Activities
	DISPOSITION & CAUSE	Types of trouble conditions, e.g. No Trouble Found, Central Office Equipment, Customer Premises Equipment, etc.
	DLETH	Display Lengthy Trouble History - A history report that gives all activity on a line record for trouble reports in LMOS
	DLR	Detail Line Record - All the basic information maintained on a line record in LMOS, e.g. name, address, facilities, features etc.
	DOE	Direct Order Entry System - An internal BellSouth service order entry system used by BellSouth Service Representatives to input business service orders in BellSouth format.
	DSAP	DOE (Direct Order Entry) Support Application - The BellSouth Operations System which assists a Service Representative or similar carrier agent in negotiating service provisioning commitments for non-designed services and UNEs.
	DSAPDDI	DSAP software contract for schedule information
E	**E911**	Provides callers access to the applicable emergency services bureau by dialing a 3-digit universal telephone number.
	EDI	Electronic Data Interchange - The computer-to-computer exchange of inter and/or intra company business documents in a public standard format.
F	**FATAL REJECT**	The number of LSRs that were electronically rejected from LEO, which checks to see of the LSR has all the required fields correctly populated
	FLOW-THROUGH	In the context of this document, LSRs submitted electronically via the CLEC mechanized ordering process that flow through to the BST OSS without manual or human intervention.
	FOC	Firm Order Confirmation - A notification returned to the CLEC confirming that the LSR has been received and accepted, including the specified commitment date.

Appendix B: Glossary of Acronyms and Terms - Continued

G		
H	**HAL**	"Hands Off" Assignment Logic - Front end access and error resolution logic used in interfacing BellSouth Operations Systems such as ATLAS, BOCRIS, LMOS, PSIMS, RSAG and SOCS.
	HALCRIS	HAL software contract for CSR information
I	**ISDN**	Integrated Services Digital Network
K		
L	**LCSC**	Local Carrier Service Center - The BellSouth center which is dedicated to handling CLEC LSRs, ASRs, and Preordering transactions along with associated expedite requests and escalations.
	LEGACY SYSTEM	Term used to refer to BellSouth Operations Support Systems (see OSS)
	LENS	Local Exchange Negotiation System - The BellSouth LAN/web server/OS application developed to provide both preordering and ordering electronic interface functions for CLECs.
	LEO	Local Exchange Ordering - A BellSouth system which accepts the output of EDI, applies edit and formatting checks, and reformats the Local Service Requests in BellSouth Service Order format.
	LESOG	Local Exchange Service Order Generator - A BellSouth system which accepts the service order output of LEO and enters the Service Order into the Service Order Control System using terminal emulation technology.
	LMOS	Loop Maintenance Operations System - A BellSouth Operations System that stores the assignment and selected account information for use by downstream OSS and BellSouth personnel during provisioning and maintenance activities.
	LMOS HOST	LMOS host computer
	LMOSupd	LMOS updates
	LNP	Local Number Portability - In the context of this document, the capability for a subscriber to retain his current telephone number as he transfers to a different local service provider.
	LOOPS	Transmission paths from the central office to the customer premises.
	LSR	Local Service Request – A request for local resale service or unbundled network elements from a CLEC.
M	**MAINTENANCE & REPAIR**	The process and function by which trouble reports are passed to BellSouth and by which the related service problems are resolved.
	MARCH	A BellSouth Operations System which accepts service orders, interprets the coding contained in the service order image, and constructs the specific switching system Recent Change command messages for input into end office switches.

Appendix B: Glossary of Acronyms and Terms – Continued

N	NC	"No Circuits" - All circuits busy announcement
O	**OASIS**	Obtain Availability Services Information System - A BellSouth front-end processor, which acts as an interface between COFFI and RNS. This system takes the USOCs in COFFI and translates them to English for display in RNS.
	OASISBSN	OASIS software contract for feature/service
	OASISCAR	OASIS software contract for feature/service
	OASISLPC	OASIS software contract for feature/service
	OASISMTN	OASIS software contract for feature/service
	OASISNET	OASIS software contract for feature/service
	OASISOCP	OASIS software contract for feature/service
	ORDERING	The process and functions by which resale services or unbundled network elements are ordered from BellSouth as well as the process by which an LSR or ASR is placed with BellSouth.
	OSPCM	Outside Plant Contract Management System - Provides Scheduling Information.
	OSS	Operations Support System - A support system or database which is used to mechanize the flow or performance of work. The term is used to refer to the overall system consisting of hardware complex, computer operating system(s), and application which is used to provide the support functions.
	OUT OF SERVICE	Customer has no dial tone and cannot call out.
P	**POTS**	Plain Old Telephone Service
	PREDICTOR	The BellSouth Operations system which is used to administer proactive maintenance and rehabilitation activities on outside plant facilities, provide access to selected work groups (e.g. RRC & BRC) to Mechanized Loop Testing and switching system I/O ports, and provide certain information regarding the attributes and capabilities of outside plant facilities.
	PREORDERING	The process and functions by which vital information is obtained, verified, or validated prior to placing a service request.
	PROVISIONING	The process and functions by which necessary work is performed to activate a service requested via an LSR or ASR and to initiate the proper billing and accounting functions.
	PSIMS	Product/Service Inventory Management System - A BellSouth database Operations System which contains availability information on switching system features and capabilities and on BellSouth service availability. This database is used to verify the availability of a feature or service in an NXX prior to making a commitment to the customer.
	PSIMSORB	PSIMS software contract for feature/service

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Appendix B: Glossary of Acronyms and Terms – Continued

Q		
R	**RNS**	Regional Negotiation System - An internal BellSouth service order entry system used by BellSouth Consumer Services to input service orders in BellSouth format.
	RRC	Residence Repair Center - The BellSouth Consumer Services trouble receipt center which serves residential customers.
	RSAG	Regional Street Address Guide - The BellSouth database, which contains street addresses validated to be accurate with state and local governments.
	RSAGADDR	RSAG software contract for address search
	RSAGTN	RSAG software contract for telephone number search
S	**SOCS**	Service Order Control System - The BellSouth Operations System which routes service order images among BellSouth drop points and BellSouth Operations Systems during the service provisioning process.
	SOIR	Service Order Interface Record - any change effecting activity to a customer account by service order that impacts 911/E911.
T	**TAFI**	Trouble Analysis Facilitation Interface - The BellSouth Operations System that supports trouble receipt center personnel in taking and handling customer trouble reports.
	TAG	Telecommunications Access Gateway – TAG was designed to provide an electronic interface, or machine-to-machine interface for the bi-directional flow of information between BellSouth's OSSs and participating CLECs.
	TN	Telephone Number
	TOTAL MANUAL FALLOUT	The number of LSRs which are entered electronically but require manual entering into a service order generator.
U	**UNE**	Unbundled Network Element
V		
W	**WTN**	A unique identifier for elements combined in a service configuration
X		
Y		
Z		
Σ		Sum of:

BellSouth
Service Quality Measurements
Regional Performance Reports

Appendix C

BELLSOUTH'S AUDIT POLICY:

BellSouth currently provides many CLECs with audit rights as a part of their individual interconnection agreements. However, it is not reasonable for BellSouth to undergo an audit for every CLEC with which it has a contract. As of June, 1999, that would equate to over 732 audits per year and that number is continually growing. BellSouth has developed a proposed Audit Plan for use by the parties to an audit. If requested by a Public Service Commission, BellSouth will agree to undergo a comprehensive audit of the aggregate level reports for both BellSouth and the CLECs for each of the next five (5) years (1999 – 2005), to be conducted by an independent third party. The results of that audit will be made available to all the parties subject to proper safeguards to protect proprietary information. This aggregate level audit includes the following specifications:

1. The cost shall be borne 50% by BellSouth and 50% by the CLECs.

2. The independent third party auditor shall be selected with input from BellSouth, the PSC, if applicable, and the CLEC(s).

3. BellSouth, the PSC and the CLECs shall jointly determine the scope of the audit.

BellSouth reserves the right to make changes to this audit policy as growth and changes in the industry dictate.

EXHIBIT DAC-2

BellSouth – Tennessee

Comparison of ITC^DeltaCom proposed Performance Measurements to BST's existing Service Quality Measures

ITC^DeltaCom Proposed Measure	Comments on ITC^DeltaCom Proposed Measure	BST – Existing SQM	Comments on BST Existing SQM
PREORDERING			
1. Avg Response Time for OSS Pre-Order Interfaces	Specifies EDI response interval; however EDI has no pre-order capability. Specifies benchmarks.	Average OSS Response Interval – Preorder OSS	Similar measure to ITC proposal. BST offers additional performance results on legacy systems. Benchmark not required due to retail analog with RNS and with soon-to-be-developed ROS measurement. BST's measure is a regional measure, data is not CLEC specific.
Measurement not specified.		OSS Interface Availabililty – Pre-Order OSS.	BST's measure is a regional measure, data is not CLEC specific.
ORDERING			
2. % Firm Order Confirmations (FOCs) received within "X" hours	Specifies benchmark.	Firm Order Confirmation Timeliness	Similar measure. Provides an average FOC and also provides percent FOCs with various time intervals (0-15 mins, 15-30 mins, etc.) Much more detail than ITC requests. BST is in process of developing benchmark.
3. Percent Rejects		Percent Rejected Service Requests	Similar measure. Offers additional product disaggregation.
4. Mechanized Provisioning Accuracy	Not clear how this would be measured or how order change would be attributed to BST or ITC.	Measurement not specified.	
5. Order Process Percent Flow		Percent Flow Through	Similar measure.

BellSouth – Tennessee
Comparison of ITC^DeltaCom proposed Performance Measurements to BST's existing Service Quality Measures

ITC^DeltaCom Proposed Measure	Comments on ITC^DeltaCom Proposed Measure	BST – Existing SQM	Comments on BST Existing SQM
Through		Service Requests	
Measurement not specified.		Percent Flow-through Service Requests (Detail)	Provides additional detail by CLEC on LSR fallout for fatal rejects, autoclarify, design fallout and system fallout.
Measurement not specified.		Flow-through Error Analysis	Provides analysis of error causes.
Measurement not specified.		Reject Interval	Calculates time interval required to identify and reject LSR with error.
PROVISIONING			
6. Average Installation Interval	Specifies benchmarks.	Order Completion Interval	Similar measure. Includes provisioning interval but excludes FOC interval. Uses retail analogs where appropriate.
6. Average Installation Interval	Specifies benchmarks.	Total Service Order Cycle Time	Similar measure. Includes FOC interval and provisioning interval. This measure is under development. Uses retail analogs where appropriate.
7. Percent Installations Completed within "X" Business Days		Order Completion Interval Distrubution	Similar measure.
8. Percent of BellSouth Caused Missed Due Dates		Percent Missed Installation Appointments.	Similar measure. BST report shows total missed appointments and end-user caused misses. Percent BellSouth caused missed due dates is difference between the two.

BellSouth – Tennessee
Comparison of ITC^DeltaCom proposed Performance Measurements to BST's existing Service Quality Measures

ITC^DeltaCom Proposed Measure	Comments on ITC^DeltaCom Proposed Measure	BST – Existing SQM	Comments on BST Existing SQM
9. Percent Trouble Reports within 30 Days of Installation		% Provisioning Troubles within 30 days of Service Order Activity	Similar measure.
10. Percent BellSouth Missed Due Dates Due to Lack of Facilities	BellSouth caused facility misses are part of the total misses of measurement 8 above.	Percent Missed Installation Appointments.	Similar measure. This measure includes all misses, including those due to facilities.
11. Delay days for Missed Due Dates due to Lack of Facilities	Another way of measuring % BellSouth Caused Misses – measure #8 above. Also a sub-set of measure #12 below.	Mean Held Order Interval & Distribution Intervals	Similar measure. Provides metric on all orders delayed past due date plus breakdown for facilities, equipment and other causes.
12. Delay days for Missed Due Dates.	Another way of measuring % BellSouth Caused Misses – measure # 8 above.	Mean Held Order Interval & Distribution Intervals	Similar measure. Provides metric on all orders delayed past due date plus breakdown for facilities, equipment and other causes.
13. Percent BellSouth Caused Missed Due Dates greater than 30 days.	A disaggregation of % BellSouth Caused Misses – measure #8 above.	Percent Missed Installation Appointments and Mean Held Order Interval & Distribution Intervals	Similar measure – when these reports are viewed together. These two reports show total % Missed Due Dates and the number of misses of 15 days or greater and 90 days or greater.
Measurement not specified.		Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notices	Measures advance notice provided to CLECs when order is placed in jeopardy status.
Measurement not specified.		Average Completion Notice Interval	Measures timeliness of completion notice.

BellSouth – Tennessee
Comparison of ITC^DeltaCom proposed Performance Measurements to BST's existing Service Quality Measures

ITC^DeltaCom Proposed Measure	Comments on ITC^DeltaCom Proposed Measure	BST – Existing SQM	Comments on BST Existing SQM
MAINTENANCE			
14. Trouble Report Rate		Customer Trouble Report Rate	Similar measure. Depicts individual trouble report rates for resale, retail, design, UNEs and interconnection trunking.
15. Trouble Report Rate – UNEs		Customer Trouble Report Rate	Similar measure. Depicts individual trouble report rates for resale, retail, design, UNEs and interconnection trunking.
16. Percent Missed Repair Commitments UNEs.		Missed Repair Appointments.	Similar measure. Depicts individual missed repair appts for resale, retail, design, UNEs and interconnection trunking.
17. Receipt to Clear Duration		Maintenance Average Duration	Similar measure. Depicts individual average durations for resale, retail, design, UNEs and interconnection trunking – dispatch and no dispatch.
18. Mean Time to Restore – UNEs	Specifies benchmark.	Maintenance Average Duration	Similar measure. Depicts individual average durations for resale, retail, design, UNEs and interconnection trunking – dispatch and no dispatch. Benchmark is being developed for UNE.
19. Percent Out of Service less than 24 hours		Out of Service (OOS) greater than 24 Hours	Similar measure – although this is the inverse. Depicts individual values for resale, retail, design,

BellSouth – Tennessee
Comparison of ITC^DeltaCom proposed Performance Measurements to BST's existing Service Quality Measures

ITC^DeltaCom Proposed Measure	Comments on ITC^DeltaCom Proposed Measure	BST – Existing SQM	Comments on BST Existing SQM
			UNEs and interconnection trunking – dispatch and no dispatch.
20. Percent Out of Services less than 24 hours – UNEs	Specifies benchmark.	Out of Service (OOS) greater than 24 Hours	Similar measure – although this is the inverse. Depicts individual values for resale, retail, design, UNEs and interconnection trunking – dispatch and no dispatch. Benchmark is being developed for UNE.
21. Percent Repeat Reports	Measurement is within 10 calendar days.	Percent Repeat Troubles within 30 Days.	Similar measure. BST's measure is more stringent as it covers a longer period of time. Depicts individual values for resale, retail, design, UNEs and interconnection trunking – dispatch and no dispatch.
22. Percent Repeat Reports – UNEs	Measurement is within 10 calendar days. Specifies benchmark.	Percent Repeat Troubles within 30 Days.	Similar measure. BST's measure is more stringent as it covers a longer period of time. Depicts individual values for resale, retail, design, UNEs and interconnection trunking – dispatch and no dispatch. Benchmark is being developed for UNE
MISC ADMINISTRATIVE			
23. LCSC Average Speed of Answer.		Speed of Answer in Ordering Center	Similar measure.

BellSouth – Tennessee
Comparison of ITC^DeltaCom proposed Performance Measurements to BST's existing Service Quality Measures

ITC^DeltaCom Proposed Measure	Comments on ITC^DeltaCom Proposed Measure	BST – Existing SQM	Comments on BST Existing SQM
24. Percent Busy in the LCSC	Measures blocked calls in the LCSC. This measurement is somewhat duplicative, as there is a direct relationship between blocked calls and average speed of answer. Blocking of calls is a rare occurrence.	Measurement not specified.	
25. UNE Center Average Speed of Answer.		Speed of Answer in the Repair Center.	Similar measure.
26. Percent Busy in the UNE Center.	Measures blocked calls in the UNE Center. This measurement is somewhat duplicative, as there is a direct relationship between blocked calls and average speed of answer.	Measurement not specified.	
Measurement not specified.		OSS Interface Availability – Maintenance and Repair.	
Measurement not specified.		OSS Response Interval and Percent – Maintenance and Repair.	
INTERCONNECTION			
27. Percent Trunk Blockage		Trunk Group Service Report	Similar measure. Depicts trunk blockage on outgoing trunks from BellSouth end offices to ITC and blockage on Common Transport

BellSouth – Tennessee
Comparison of ITC^DeltaCom proposed Performance Measurements to BST's existing Service Quality Measures

ITC^DeltaCom Proposed Measure	Comments on ITC^DeltaCom Proposed Measure	BST – Existing SQM	Comments on BST Existing SQM
			Trunk groups.
28. Common Transport Trunk Blockage		Trunk Group Service Report	Similar measure. Depicts trunk blockage on outgoing trunks from BellSouth end offices to ITC and blockage on Common Transport Trunk groups.
29. Percent Missed Due Dates		Percent Missed Installation Appointments.	Similar measure. BST report includes missed appointments on interconnection trunking.
30. Delay Days for Missed Due Dates.		Mean Held Order Interval & Distribution Intervals	Similar measure. Provides metric on all orders delayed past due date plus breakdown for facilities, equipment and other causes.
31. Percent BellSouth Caused Missed Due Dates greater than 30 days.		Percent Missed Installation Appointments and Mean Held Order Interval & Distribution Intervals	Similar measure – when these reports are viewed together. These two reports show total % Missed Due Dates and the number of misses of 15 days or greater and 90 days or greater.
32. Average Trunk Restoration Interval.		Maintenance Average Duration	Similar measure. Depicts individual average durations for resale, retail, design, UNEs and interconnection trunking – dispatch and no dispatch.
33. % Interconnection Trunks Repaired within 24 hours	Another way of expressing the restoration interval of measurement #32 above.	Measurement not specified.	

BellSouth – Tennessee
Comparison of ITC^DeltaCom proposed Performance Measurements to BST's existing Service Quality Measures

ITC^DeltaCom Proposed Measure	Comments on ITC^DeltaCom Proposed Measure	BST – Existing SQM	Comments on BST Existing SQM
Measurement not specified.		Trunk Group Service Detail.	Depicts all trunk groups with blockage above objective.
INP and LNP			
34. % Installation Completed within 3 Business Days (1-10 lines)	This is a product and time disaggregation of Average Installation Interval (measurement #6 above) and Percent Installations Completed within "X" Business Days (meas #7) Specifies benchmark.	Order Completion Interval Distribution.	Similar measure. LNP is being added to this measurement.
35. % Installation Completed within 7 Business Days (11-20 lines)	This is a product and time disaggregation of Average Installation Interval (measurement #6 above) and Percent Installations Completed within "X" Business Days (meas #7) Specifies benchmark.	Order Completion Interval Distribution.	Similar measure. LNP is being added to this measurement.
36. % Installation Completed within 10 business Days (20+ lines)	This is a product and time disaggregation of Average Installation Interval (measurement #6 above) and Percent Installations Completed within "X" Business Days (meas #7) Specifies benchmark.	Order Completion Interval Distribution.	Similar measure. LNP is being added to this measurement.
37. Percent Missed Due Dates.	This is a product disaggregation of Percent of BellSouth Caused Missed Due Dates, measurement #8. LNP due date misses may be	Percent Missed Installation Appointments.	Similar measure. LNP is being added to this measurement.

BellSouth – Tennessee
Comparison of ITC^DeltaCom proposed Performance Measurements to BST's existing Service Quality Measures

ITC^DeltaCom Proposed Measure	Comments on ITC^DeltaCom Proposed Measure	BST – Existing SQM	Comments on BST Existing SQM
	due to the CLEC or to NPAC.		
911			
38. Average time to clear errors		E911/Accuracy	Similar measure in intent. Measures the percentage of total records initially processed without errors.
Measurement not specified.		E911/Timeliness	Measures the percentage of batch orders for E911 database updates (to CLEC resale and BST retail records) processed successfully within a 24-hour period.
Measurement not specified.		E911/Mean Interval	Measures the mean interval processing of E911 batch orders (to update CLEC resale and BST retail records).
COLLOCATION			
39. % Missed Collocation Dates		Collocation/Percent of Due Dates Missed	Similar measure.
40. Average Days Required to Complete Physical Collocation Facilities.		Collocation/Percent of Due Dates Missed	Similar measure.
41. % Requests Processed within 30 days.		Collocation/Average Response Time	Similar measure.
COORDINATED CONVERSIONS			
42. % Pre-mature disconnects		Measurement not specified.	Pre-mature disconnects would result in trouble reports.

BellSouth – Tennessee
Comparison of ITC^DeltaCom proposed Performance Measurements to BST's existing Service Quality Measures

ITC^DeltaCom Proposed Measure	Comments on ITC^DeltaCom Proposed Measure	BST – Existing SQM	Comments on BST Existing SQM
43. % BellSouth caused delayed Coordinated Cutovers		Measurement not specified.	
BILLING			
Measurement not specified.		Invoice Accuracy	
Measurement not specified.		Mean Time to Deliver Invoices	
Measurement not specified.		Usage Data Delivery Accuracy	
Measurement not specified.		Usage Data Delivery Completeness	
Measurement not specified.		Usage Data Delivery Timeliness	
Measurement not specified.		Mean Time to Deliver Usage	
BONA FIDE REQUEST PROCESS			
44. % Requests within 45 Business days	Needs additional clarification on the types of BFR. It is not clear how this measurement would pertain to non-discriminatory treatment.	Measurement not specified.	
45. % Quotes Provided for Authorized BFRs within 30 Business Days	Needs additional clarification on the types of BFR. It is not clear how this measurement would pertain to non-discriminatory treatment.	Measurement not specified.	

AFFIDAVIT

STATE OF: Georgia
COUNTY OF: Fulton

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared David A. Coon-Director, Interconnection Services-Performance Measurements, BellSouth Telecommunications, Inc., who, being by me first duly sworn deposed and said that:

He is appearing as a witness before the Tennessee Regulatory Authority in Docket No. 99-00430 on behalf of BellSouth Telecommunications, Inc., and if present before the Authority and duly sworn, his testimony would be set forth in the annexed testimony consisting of 7 pages and 2 exhibit(s).

David A Coon

David A. Coon

Sworn to and subscribed
before me this 15th
day of October, 1999

Michaele F Holcomb

NOTARY PUBLIC

MICHEALE F. HOLCOMB
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2001

BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF W. KEITH MILNER

BEFORE THE TENNESSEE REGULATORY AUTHORITY

DOCKET NO. 99-00430

OCTOBER 15, 1999

Q. PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. ("BELLSOUTH").

A. My name is W. Keith Milner. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375. I am Senior Director - Interconnection Services for BellSouth. I have served in my present role since February 1996, and have been involved with the management of certain issues related to local interconnection, resale, and unbundling.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

A. My business career spans over 29 years and includes responsibilities in the areas of network planning, engineering, training, administration, and operations. I have held positions of responsibility with a local exchange telephone company, a long distance company, and a research and development company. I have extensive experience in all phases of telecommunications network planning, deployment, and

operations (including research and development) in both the domestic and international arenas.

I graduated from Fayetteville Technical Institute in Fayetteville, North Carolina, in 1970, with an Associate of Applied Science in Business Administration degree. I later graduated from Georgia State University in 1992 with a Master of Business Administration degree.

Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE ANY STATE PUBLIC SERVICE COMMISSION, AND IF SO, BRIEFLY DESCRIBE THE SUBJECT OF YOUR TESTIMONY?

A. I have previously testified before the state Public Service Commissions in Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi and South Carolina, the Tennessee Regulatory Authority, and the Utilities Commission in North Carolina on the issues of technical capabilities of the switching and facilities network regarding the introduction of new service offerings, expanded calling areas, unbundling, and network interconnection.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY BEING FILED TODAY?

A. In my testimony, I will address the technical aspects of network related issues which have been raised in this docket. Those are, in whole or

FILE

in part, ITC^DeltaCom Issue Nos. 2(b), 2(c)(i), 2(c)(ii), 2(c)(v), 2(c)(viii), 2(c)(xiv), 2(f), 3(h), and 4(a).

Issue 2(a)(iv) and 2(b)(i): (a) What is the definition of parity? (b) Pursuant to the definition of parity, should BellSouth be required to provide the following and if so, under what conditions and at what rates: (1) Operational Support Systems ("OSS"), (2) UNEs, (3) Access to Numbering Resources, (4) An unbundled loop using Integrated Digital Loop Carrier ("IDLC") technology, and (5) Priority guidelines for repair and maintenance and UNE provisioning?

Q. WHICH PARTS OF THIS ISSUE ARE YOU ADDRESSING?

A. My testimony will address sub-parts (b)(3), (b)(4), and (b)(5). Sub-part (b)(1) is addressed in the testimony of Ron Pate. The definition of parity, prices, as well as sub-part (b)(2) is addressed in the testimony of Alphonso Varner.

Issue 2, 2(a)(iv) and 2(b)(i): Sub-part (b)(3) Pursuant to this definition, should BellSouth be required to provide the following and if so, under what conditions and at what rates: (3) access to numbering resources?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should find that BellSouth is not required to provide access to numbering resources as BellSouth no longer has responsibility for number administration.

Q. WHY SHOULD NOT BELLSOUTH BE REQUIRED TO PROVIDE ACCESS TO NUMBERING RESOURCES AS REQUESTED BY ITC^DELTACOM?

A. BellSouth should not be required to provide access to numbering resources to ITC^DeltaCom as BellSouth is no longer the North American Numbering Plan Administrator ("NANPA"). The transition of responsibility from Bellsouth to Lockheed-Martin as NANPA began on July 6, 1998 and concluded a year ago, on August 14, 1998, when Lockheed-Martin assumed full responsibility for number administration.

Issue 2, 2(a)(iv) and 2(b)(i): Sub-part (b)(4) - Pursuant to this definition, should BellSouth be required to provide the following and if so, under what conditions and at what rates: (4) an unbundled loop using integrated Digital Loop Carrier ("IDLC") technology?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. The Authority should find that BellSouth is providing nondiscriminatory access to unbundled IDLC-delivered loops

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. BellSouth will provide access to all its loops on an unbundled basis, including those loops served by Integrated Digital Loop Carrier ("IDLC"), by any means that is technically feasible. However, IDLC equipment allows the "integration" of loop facilities with switch facilities by eliminating equipment in the central office referred to as central office terminals or "COTs". Obviously, if a Competitive Local Exchange Carrier ("CLEC") wants to serve an end-user customer over the CLEC's own switch and that end-user customer was previously served over IDLC equipment, the loop can no longer be "integrated" with the BellSouth switch.

Q. HASN'T THE TRA ADDRESSED THIS ISSUE?

A. Yes, in part. The TRA, in its Interim Order (Docket No. 97-01262) of January 25, 1999, concluded that for customers served by IDLC technology, BellSouth must offer an unbundled loop which would allow end users to obtain the same level of performance as that offered by IDLC. Specifically, the unbundled loop should deliver to a CLEC a digital signal that is equivalent to that which enters a switch when IDLC is deployed. No additional digital to analog or analog to digital transformation should occur.

On February 4, 1999, BellSouth petitioned for reconsideration and

clarification of the TRA's Interim Order requesting the TRA to reconsider or, at the very least clarify, its initial decision on the issue of IDLC technology, which is unclear to BellSouth as to what the TRA is requiring Bellsouth to do. The digital signal that enters a switch when an IDLC system is deployed in BellSouth's network is at the DS1 level. When loops are provisioned to end users using IDLC technology, there is no break point in the circuit (within the central office) that would allow that circuit to be routed to any location other than the digital switch. The equipment that previously allowed such re-routing (that is, the COT) has been eliminated. If the TRA is requiring that BellSouth make such an IDLC system available to CLECs, BellSouth would have to calculate the cost of that system as well as appropriate provisioning costs, as permitted by the TRA's Interim Order. BellSouth believes that even where end users are served by IDLC, that the loop and switch port remain separate network elements rather than a single network element. Mr. Varner's testimony discusses the combinations of the local loop and the switch port.

To the extent that the TRA is requiring BellSouth to deliver to a CLEC a digital signal at the DS0 level, that signal would not be equivalent to the DS1 digital signal that enters BellSouth's switch when IDLC is employed. Also, although the TRA has ordered BellSouth to offer this "unbundled loop," the TRA does not address the technically feasible method by which it expects BellSouth to make this offering in order that "end users obtain the same level of performance as that offered by

IDLC" and without any "additional digital to analog or analog to digital transformations ...." The FCC has clearly identified the technically feasible methods by which an incumbent must unbundle an IDLC-delivered loop, First Report and Order ¶ 384, and it is not clear to BellSouth what more the TRA has in mind.

On April 20, 1999, the TRA held a Directors' Conference and addressed several issues including BellSouth's requested reconsideration of this issue. However, no written order has been entered. As a result, BellSouth can not determine how this issue will finally be resolved.

Q. WHAT ARE THE TECHNICALLY FEASIBLE METHODS THAT HAVE BEEN IDENTIFIED TO PROVIDE UNBUNDLED LOOPS TO REQUESTING CLECs?

A. The FCC identified several technically feasible methods to unbundle loops served by IDLC (First Report and Order, Paragraph 384). BellSouth utilizes these and other methods in provisioning unbundled loops where those loops are currently served by IDLC. BellSouth also is willing to consider any other technically feasible method proposed by ITC^DeltaCom.

To date, six methods have been identified, though not all six are available in a specific location. Briefly, the six methods are:

1. Remove the loop distribution pair from the IDLC and re-terminate the pair to either a spare metallic feeder pair (copper pair) or to spare universal digital loop carrier facility in the feeder route or Carrier Serving Area (CSA). For two-wire ISDN loops, the universal digital loop carrier facilities may be made available through the use of Conklin BRITEmux or Fitel-PMX 8uMux equipment.
2. Remove the loop distribution pair from the IDLC and re-terminate the pair to utilize spare capacity of existing Integrated Network Access (INA) systems or other existing IDLC that is terminated on a digital cross-connection system (DCS) equipment. This will allow the unbundled loop channel to be routed to a channel bank where it can be de-multiplexed for delivery to the requesting CLEC or for termination in a DLC channel bank for concentration.
3. Utilize switch functionality referred to as "side-door/hairpin" capabilities if any existing IDLC is terminated on a peripheral with these capabilities. In essence, this method allows the loop to remain terminated directly into the switch and the "side-door/hairpin" capabilities allow the loop to be provided individually to the requesting CLEC.
4. If a given IDLC system is not served by a switch peripheral that is capable of side-door/hairpin functionality, move the IDLC system to switch peripheral equipment that is side-door capable.

5. Install and activate new UDLC facilities or Next Generation Digital Loop Carrier (NGDLC) facilities and move the requested loop from the IDLC to the new facilities. In the case of UDLC, If growth will trigger activation of additional capacity within two years, activate new UDLC capacity to the distribution area. In the case of NGDLC, If channel banks are available for growth in the CSA, activate NGDLC unless the DLC enclosure is a cabinet already wired for older DLC systems.

6. Convert some existing IDLC capacity to UDLC. If growth will not trigger additional capacity within two years, convert some existing IDLC capacity to UDLC.

Q. DO YOU AGREE WITH THE SUGGESTION THAT BELLSOUTH'S PROVISION OF UNBUNDLED LOOPS TO CLECS DOES NOT ALLOW CLECS' END USER CUSTOMERS THE SAME QUALITY OF SERVICE THAT BELLSOUTH PROVIDES TO ITS RETAIL CUSTOMERS?

A. No. The suggestion is that IDLC circuits are somehow engineered to provide a better level of service than non-IDLC circuits. BellSouth designs its network to meet particular transmission parameters for particular grades of service. For general customer use, BellSouth uses both IDLC and non-IDLC loops to meet facility needs as they arise. If an end-user desires specific transmission parameters, then transmission devices may be used to increase or decrease gain over

portions of the loop or the entire loop, whether served by IDLC or non-IDLC loops, at an additional cost to the end-user. Similarly, in meeting facility needs for basic 2-wire UNEs, BellSouth draws from the same basic pool of facilities it uses for its retail users (indeed, in many cases, it is exactly the same facility). However, if the customer has been served by an IDLC loop, it may be necessary to move the customer to a non-IDLC facility for the reasons described above. If ITC^DeltaCom's end-user needs specific transmission parameters for a given UNE not provided by the technical specifications of the basic 2-wire UNE, ITC^DeltaCom may order a different UNE that provides those parameters, or it may submit a Bona Fide Request ("BFR") for a UNE with those unique transmission parameters.

Issue 2, 2(a)(iv) and 2(b)(i): Sub-part (b)(5) - Pursuant to this definition, should BellSouth be required to provide the following and if so, under what conditions and at what rates: (5) priority guidelines for repair and maintenance and UNE provisioning?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should find that BellSouth does not have the capability to administer its repair and maintenance guidelines in the same fashion for CLECs as it does for itself because BellSouth is not able to identify the CLEC's end-user, which is prerequisite to the administration of such guidelines.

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. With regard to repair and maintenance guidelines, BellSouth should not be required to follow the same priority guidelines because BellSouth is not able to identify the CLEC's end-user. On UNE loops, BellSouth's records show only the name of the CLEC, not the name or any other end-user information about the CLEC's customer. Without that information, BellSouth simply does not have the capability to administer repair and maintenance priority guidelines for CLECs. Although UNEs are, by definition, not analogous to retail services, BellSouth's target for restoration of a 2-wire UNE (2-wire analog voice grade loop non-designed (SL1)) is 24 hours. This target approximates BellSouth's objective for retail services. An interoffice transport DS1 UNE has a 4-hour repair interval. This compares to BellSouth's repair interval for retail special services, which include DS1, of 6.5 hours. In emergency restoration situations such as the total outage of a hospital, BellSouth will respond when notified by a CLEC in the same manner as if the hospital were served directly by BellSouth. Both the general repair guidelines and the emergency restoration procedures are set forth in the model Operational Understanding Between BellSouth Maintenance Centers and CLEC Maintenance Centers, which is available from BellSouth's CLEC Account Teams.

Provision of UNEs is not the same as provision of retail service. BellSouth does not provide UNEs to itself or to its retail customers. As such, UNE installation intervals are scheduled in accordance with BellSouth's Products & Services Interval Guide for Interconnection Services. This guide is available at BellSouth's Interconnection Services Web Page on the internet at http://www.interconnection.bellsouth.com/guides/intl_is2/indexf.htm.

Issue 2(c)(i) - Should BellSouth be required to provide NXX testing functionality to ITC^DeltaCom at parity? If so, at what rate?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should find that BellSouth has offered to provide an NXX testing option to ITC^DeltaCom that is equivalent to the means by which BellSouth carries out NXX testing for itself and to explore other testing options with ITC^DeltaCom. The Authority should find that nothing more is required.

Q. HAS BELLSOUTH PREVIOUSLY COMMUNICATED WITH ITC^DELTACOM ABOUT NXX TESTING FUNCTIONALITY?

A. Yes. In response to a request from ITC^DeltaCom in 1998, BellSouth considered this request and responded to it in a letter dated May 11, 1998, which contained the following points:

- First, BellSouth informed ITC^DeltaCom that it could accomplish the desired testing by installing a foreign exchange ("FX") line to the BellSouth offices in which ITC^DeltaCom wishes to conduct test calls. This suggestion was based on the fact that BellSouth itself utilizes FX lines to test its own switch provisioning.

- Second, BellSouth researched a proposal by ITC^DeltaCom to utilize a "software" fix that would provide remote call testing. BellSouth was informed by its switch suppliers that while the Northern Telecom DMS and the Siemens EWSD switches have such a capability, BellSouth's Lucent 5ESS switches are not equipped with the capability to provide such a feature. Because BellSouth's network architecture includes many 5ESS switches, BellSouth declined to provide the requested arrangement.

- Third, BellSouth informed ITC^DeltaCom that BellSouth had already responded to CLEC concerns about accurate and timely activation of all its NXX codes by establishing, effective May 15, 1998, an NXX activation Single Point of Contact ("SPOC"). Among other functions, the NXX SPOC coordinates the activation of CLEC NXX codes within BellSouth and provides a trouble-reporting center for CLEC code activation.

ITC^DeltaCom recently renewed its request for NXX testing functionality using what ITC^DeltaCom refers to as variable remote call forwarding, and the request is currently undergoing a coordinated review by affected BellSouth workgroups. Should it be determined that the request can be granted, BellSouth will apprise ITC^DeltaCom of its findings and the related costs which would be involved.

It is not necessary that any decision regarding this matter be considered as mandatory by any regulatory body. BellSouth believes it has met its obligations under the 1996 Act and the FCC's rules by offering the FX line option discussed above because it is the same means by which BellSouth accomplishes NXX testing for its own purposes. Further, as a practical matter, BellSouth believes that the operation of the NXX SPOC has dramatically reduced, if not eliminated, the perceived need by ITC^DeltaCom to conduct its own NXX testing and verification. Since its establishment in mid-1998, the NXX SPOC has operated very successfully in keeping NXX activation problems to a minimum. The NXX SPOC provides ITC^DeltaCom with a positive report on the activation of all of ITC^DeltaCom's NXXs that are activated in BellSouth. A written response is provided to ITC^DeltaCom when BellSouth's Complex Translations Group has provisioned the NPA/NXX in the appropriate BellSouth switches and BellSouth has completed mechanized Automatic Message Accounting ("AMA") testing and validation. Since it began operation, the NXX SPOC has tracked the provisioning and testing of approximately 1,700

NXXs for facility-based CLECs and Independent Telephone Companies and has been involved in the resolution of 121 customer related routing troubles.

Issue 2(c)(ii) – What should be the installation interval for the following loop cutovers:

a) Single

b) Multiple

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should find that, because the loop cutover process is a multiple step process requiring a great deal of coordination between BellSouth and the CLEC, it is appropriate for different installation intervals to be established based upon the number of loops to be cutover to the CLEC.

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. The target time for a conversion interval is 15 minutes for a single loop cutover. This allows for setup and conversion time as discussed in detail below. Multiple loop cutover targets are based on this time interval, but recognize efficiencies achieved during multiple loop cutovers.

Q. WHAT ARE REASONABLE INTERVALS FOR MULTIPLE LOOP CUTOVERS?

A. Fifteen minutes is the time targeted for a single loop cutover for the reasons discussed in detail below. Thus, the baseline for a multiple loop cutover for ten (10) loops would be one hundred and fifty (150) minutes and for thirty (30) loops would be four hundred and fifty (450) minutes. As noted earlier, BellSouth recognizes that some efficiencies are achieved in a multiple loop cutover situation. Therefore, BellSouth is willing to agree to an interval of sixty (60) minutes for up to ten (10) loop conversions and one hundred and twenty (120) minutes for conversions involving no more than thirty (30) loops. These intervals are reasonable and have been accepted by two of the largest facilities-based CLECs in BellSouth's region.

Q. WHAT IS INVOLVED IN PERFORMING A LOOP CUTOVER?

A. I have provided Exhibit WKM-1 that shows, pictorially and with a brief narrative, the various work steps involved in a typical loop cutover. These photographs were taken in BellSouth's Norcross, Georgia, central office; however, the work steps are identical in all nine states in BellSouth's region. Briefly, the work steps involved are:

- The BellSouth central office technician receives a call to begin cutover and asks for the cable pair number of the loop to be cutover. This is shown on page 1 of Exhibit WKM-1.

- The technician types the cable pair number into a database to find the order number. This is shown on page 2 of Exhibit WKM-1.
- The technician retrieves a copy of the work order for the unbundled loop. This is shown on page 3 of Exhibit WKM-1.
- The technician in the BellSouth central office responds to the BellSouth UNE Center's request to initiate the overall cutover of service from BellSouth to the CLEC. This is shown on page 4 of Exhibit WKM-1.
- The technician then verifies that the correct loop has been identified for cutover. This is done using a capability referred to as Automatic Number Announcement Circuit ("ANAC"). The technician plugs a test set onto the loop and dials a special code. The telephone number associated with that loop is played audibly. This is shown on page 5 of Exhibit WKM-1.
- Next, the technician locates existing jumper on the BellSouth Main Distributing Frame ("MDF") between the loop and the BellSouth switch. This is shown on pages 6-7 of Exhibit WKM-1.
- The technician locates and removes the end of the jumper connected to the BellSouth cable pair. This is shown on page 8 of Exhibit WKM-1.
- The technician then locates and removes the end of the jumper connected to the BellSouth switching equipment. This is shown on page 9 of Exhibit WKM-1.
- The technician then connects the first end of this new jumper between the loop and a connector block on a cable rack with tie

cables to the CLEC's collocation arrangement. This is shown on page 10 of Exhibit WKM-1.

- The technician then weaves the new jumper wire through the cable rack to reach the tie cables to the CLEC's collocation arrangement. This is shown on page 11 of Exhibit WKM-1.
- The technician connects the second end of the new jumper to the tie cable to the CLEC's collocation equipment. This is shown on page 12 of Exhibit WKM-1.
- The technician next verifies that the loop is connected to the expected switch port and telephone number in the CLEC's switch, again using ANAC capabilities. This is shown on page 13 of Exhibit WKM-1.
- Upon successful completion of the loop cutover, the technician verifies with the CLEC that the order was correctly worked, closes the order, and notifies the UNE Center. This is shown on page 14 of Exhibit WKM-1.

Naturally, any errors (both BellSouth's errors and the CLEC's errors) slow the process while corrections are identified and made. Thus, BellSouth should not be held responsible for delayed cutovers due to problems or errors caused by the CLEC. It is obvious from the many steps that have to be taken to correctly perform a loop cutover that the 15-minute timeframe appropriate for a single loop would not be a reasonable timeframe for a multiple loop cutover for a large end-user such as a major bank or manufacturing firm.

Q. IS BELLSOUTH IN TOTAL CONTROL OF THE LOOP CUTOVER PROCESS?

A. Absolutely not. As discussed above, loop cutovers require high levels of coordination between BellSouth and the CLEC to which the unbundled loop is being provided. If a CLEC fails to perform a function in a timely fashion, the delay directly impacts the overall cutover time. Therefore, any measurement of average loop cutover times will reflect not only the efficiency of BellSouth's systems and employees' skills, but also the efficiency of the CLEC's systems and employees' skills. For example, one step in the process occurs after the loop is removed from BellSouth's switch and is connected to the CLEC's switch. At this point in the cutover, tests are performed to verify that the loop is connected to the expected port in the CLEC's switch. However, if the CLEC has a defective switch port, or has provided an invalid switch port number, or any of a number of other possible errors occurs, BellSouth is powerless to move forward until the CLEC takes appropriate corrective steps. While the CLEC is doing so, the total cutover time clock is still running. Thus, while BellSouth strives to complete loop cutovers in as timely and effectively a manner as possible, BellSouth cannot be saddled with the entire responsibility for meeting the stated interval, especially given the CLEC's contribution to total cutover time.

Issue 2(c)(v) - Should BellSouth be required to designate specific UNE Center personnel for coordinating orders placed by ITC^DeltaCom?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should find that BellSouth is not required to specifically designate its personnel to serve only ITC^DeltaCom or any other individual CLEC but should continue to review its anticipated and historical staffing requirements and assign work activity in the most efficient manner possible in order to complete all necessary work functions for all CLECs.

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. BellSouth should not be required to designate personnel for cutovers just for ITC^DeltaCom. The revised language proposed by ITC^DeltaCom Attachment 2 - 2.2.5 is arbitrary in its assessment of how many personnel may be required to conduct a cutover. BellSouth carefully monitors total workload results and forecasts future workload requirements and the personnel needed to meet those requirements based on historic trends, business forecasts, and the experience of local managers. BellSouth assigns work activity in the most efficient manner to complete all functions, including work functions for all CLECs. Any deviations from this process, such as attempting to dedicate specific people to particular CLEC projects, would increase

costs without necessarily providing any improvement in cutover performance. BellSouth incurs significant costs in connection with providing personnel to handle all CLEC orders for services and UNEs; therefore, it is critical that BellSouth retain the flexibility needed to meet its service and contractual obligations without any requirement to dedicate specific personnel to particular functions.

Issue 2(c)(viii) - Should BellSouth be responsible for maintenance to HDSL and ADSL compatible loops provided to ITC^DeltaCom? If so, at what rate?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should find that BellSouth will provide, In the case of HDSL and ADSL compatible loops, maintenance and repair in accordance with the interconnection agreement.

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. BellSouth does not provide HDSL and ADSL "facilities" as UNEs to ITC^DeltaCom or to any other CLEC. BellSouth does, however, provide a federally tariffed ADSL service to certain customers. BellSouth's ADSL service is a separate and distinct offering from BellSouth's ADSL or HDSL *compatible* loop offering. The latter is offered as a unique network capability on a UNE basis to CLECs via

the service inquiry process. However, if BellSouth provides HDSL and ADSL services, BellSouth will provide maintenance and repair of the services in accordance with the terms of the tariff.

In the case of HDSL and ADSL compatible loops, BellSouth will provide maintenance and repair in accordance with the interconnection agreement. Loop modifications requested by a CLEC, such as ITC^DeltaCom, are not a UNE offering.

Q. HOW DOES THE ADSL COMPATIBLE LOOP DIFFER FROM THE TARIFFED ADSL SERVICE?

A. BellSouth's ADSL tariffed service does not normally involve installation of a new physical facility to the customer's premises because the ADSL service uses the customer's existing local service facility. Unless the Network Interface Device ("NID") needs to be replaced, ADSL tariff service does not generally require a premises visit by BellSouth. On the other hand, the ADSL compatible loop offering always requires a designed physical loop facility and requires dispatch of a BellSouth technician to the customer's premises. In addition, the ADSL compatible loop requires a service inquiry, design engineering, and connection and testing activities.

Q. WHAT ARE THE IMPLICATIONS OF THESE DIFFERENCES FOR MAINTENANCE AND REPAIR RESPONSIBILITIES?

A. With respect to maintenance and repair, if BellSouth is providing its HDSL or ADSL tariffed service, the maintenance and repair are offered as part of such service. On the other hand, if BellSouth is providing a loop that has been modified from its original technical standards at the request of ITC^DeltaCom, then BellSouth can not guarantee that the modified loop will meet the technical standards of a non-modified loop.

Issue 2(c)(xiv) - (a) Should BellSouth be required to coordinate with ITC^DeltaCom 48 hours prior to the due date of a UNE conversion? (b) If BellSouth delays the scheduled cutover date, should BellSouth be required to waive the applicable non-recurring charges?

Q. WHICH PARTS OF THIS ISSUE ARE YOU ADDRESSING?

A. My testimony addresses sub-part (a). Sub-part (b) is addressed in the testimony of Mr. Alphonso Varner.

Issue 2(c)(xiv): Sub-part (a) - Should BellSouth be required to coordinate with ITC^DeltaCom 48 hours prior to the due date of a UNE conversion?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should find that coordination 48 hours prior to the due date is unnecessary on every type of UNE conversion. However, with

respect to SL2 type loops only, the Authority should find that BellSouth's willingness to use its best efforts to schedule a conversion date and time 24 to 48 hours prior to the conversion is reasonable.

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. With regard to sub-part (a), BellSouth opposes the 48-hour requirement for all UNEs as set forth in ITC^DeltaCom's proposed language at Att. 4.9.1 as the language is too broad. For example, the language would include SL1 loops that are not normally subject to coordination. With regard to only SL2 loops, BellSouth agrees that it will exert its best efforts to schedule a conversion date and time 24 to 48 hours prior to a conversion.

Issue 2(f) - Should BellSouth be required to establish Local Number Portability (LNP) cutover procedures under which BellSouth must confirm with ITC^DeltaCom that every port subject to a "disconnect order" is worked at one time?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should find that BellSouth and ITC^DeltaCom have agreed to proposed language that will ensure the disconnect order is completed for all ported numbers as discussed above.

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. ITC^DeltaCom has included new timeframes in the proposed interconnection agreement language that BellSouth has reviewed but does not agree with. BellSouth, however, does agree that coordination between itself and ITC^DeltaCom is extremely important for LNP order cutovers. As such, BellSouth and ITC^DeltaCom have mutually agreed to proposed language whereby BellSouth will ensure that the disconnect order is completed for all ported numbers once the NPAC notification of ITC^DeltaCom's Activate Subscription Version for those numbers has been received by BellSouth.

Issue 3(h) - If ITC^DeltaCom needs to reconnect service following an order for a disconnect, should BellSouth be required to reconnect service within 48 hours?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should find that BellSouth's willingness to utilize its best efforts to reconnect service following an order for a disconnect within 24 hours of receipt of the new order is reasonable. The Authority should further find that BellSouth cannot commit to a guarantee of reconnection of service within 48 hours due to receiving orders from numerous other CLECs as well as BellSouth's own end-users.

Q WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. BellSouth should not be required to maintain facilities for any set period of time once a service has been disconnected. As a practical matter, once a UNE facility has been disconnected for any reason, that facility is subject to immediate reuse. In an area experiencing a shortage of facilities or a high growth rate, it would not be unusual for a facility used by an CLEC or by a BellSouth retail unit to be reassigned within minutes in order to complete a Local Service Request ("LSR") for a CLEC or a service order for a BellSouth retail end-user customer. Therefore, while BellSouth will exert its best efforts to reconnect facilities in unusual situations as expeditiously as possible, BellSouth can not commit to reconnect service after disconnection. It should be pointed out that the CLEC shares the responsibility to conduct appropriate tests prior to any cutover activity, thus avoiding any need to reconnect a service.

Issue 4(a): Should BellSouth provide cageless collocation to ITC^DeltaCom 30 days after a firm order is placed?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should find that requiring BellSouth to provide cageless collocation within 30 days is unreasonable and inconsistent with the provisioning activities required in connection with cageless collocation.

Q. IS BELLSOUTH REQUIRED BY THE FCC's RECENT ADVANCED SERVICES ORDER TO MAKE CAGELESS COLLOCATION AVAILABLE 30 DAYS AFTER A COMPLETE APPLICATION IS FILED, AS ITC^DELTACOM ASSERTS IN ITS PETITION?

A. No. BellSouth is not required by the FCC's Advanced Services Order to provide cageless collocation within 30 days. In fact, in paragraph 54 of the Order, the FCC states, "[w]e do not adopt specific provisioning intervals at this time. We have adopted several new collocation rules in this Order, and we do not yet have sufficient experience with the implementation of these new collocation arrangements to suggest time frames for provisioning." (¶ 54 First Report and Order and Further Notice of Proposed Rulemaking, CC Docket 98-147)

Q. SHOULD BELLSOUTH BE REQUIRED TO MAKE CAGELESS COLLOCATION AVAILABLE 30 DAYS AFTER DELTACOM'S SUBMISSION OF A BONA FIDE FIRM ORDER?

A. No. BellSouth's provisioning interval is not controlled by the time required to construct an arrangement enclosure. When BellSouth has performed the construction of an arrangement enclosure, the activities required to design and construct the enclosure were a relatively minor portion, and certainly not the controlling factor, in the provisioning interval for collocation. Included in the overall provisioning interval is the time required to complete the space conditioning, add to or

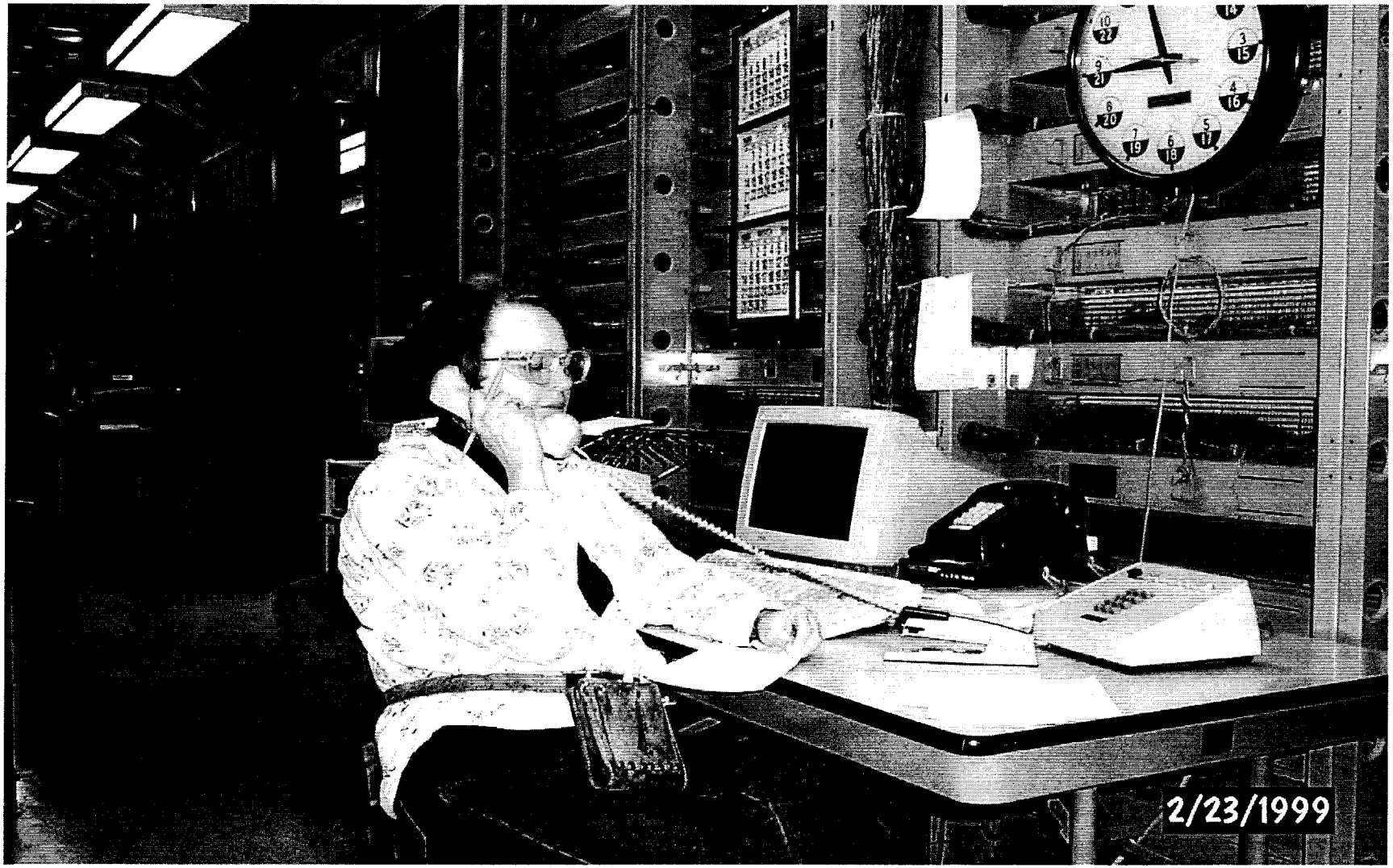
upgrade the heating, ventilation, and air conditioning system for that area, add to or upgrade the power plant capacity and power distribution mechanism, and build out network infrastructure components such as the number of cross-connects requested. When the construction of an arrangement enclosure is not required or is not performed by BellSouth, all other collocation area and network infrastructure work must still take place. The absence of enclosure construction has little, if any, bearing on the overall provisioning interval. BellSouth commits to complete its construction and provisioning activities as soon as possible but, at a maximum, within the intervals specified in the agreement BellSouth has proposed to ITC^DeltaCom. Because space preparation and network infrastructure work must be completed regardless of the type of arrangement selected, BellSouth's provisioning intervals of 90 business days under normal conditions or 130 business days under extraordinary conditions are appropriately applied to either enclosed (caged) or unenclosed (cageless) physical collocation.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

LOOP CUTOVER PROCESS

Step 1: Technician gets call to begin cutover.
Asks for cable pair information.



LOOP CUTOVER PROCESS

Step 2: Technician types in cable pair number to obtain order number.



LOOP CUTOVER PROCESS

Step 3: Technician retrieves copy of work order.



LOOP CUTOVER PROCESS

Step 4: Technician responds to UNE Center request to initiate overall cutover of service from BellSouth to CLEC.



LOOP CUTOVER PROCESS

Step 5: Technician conducts ANAC test to verify that correct loop is being cutover.



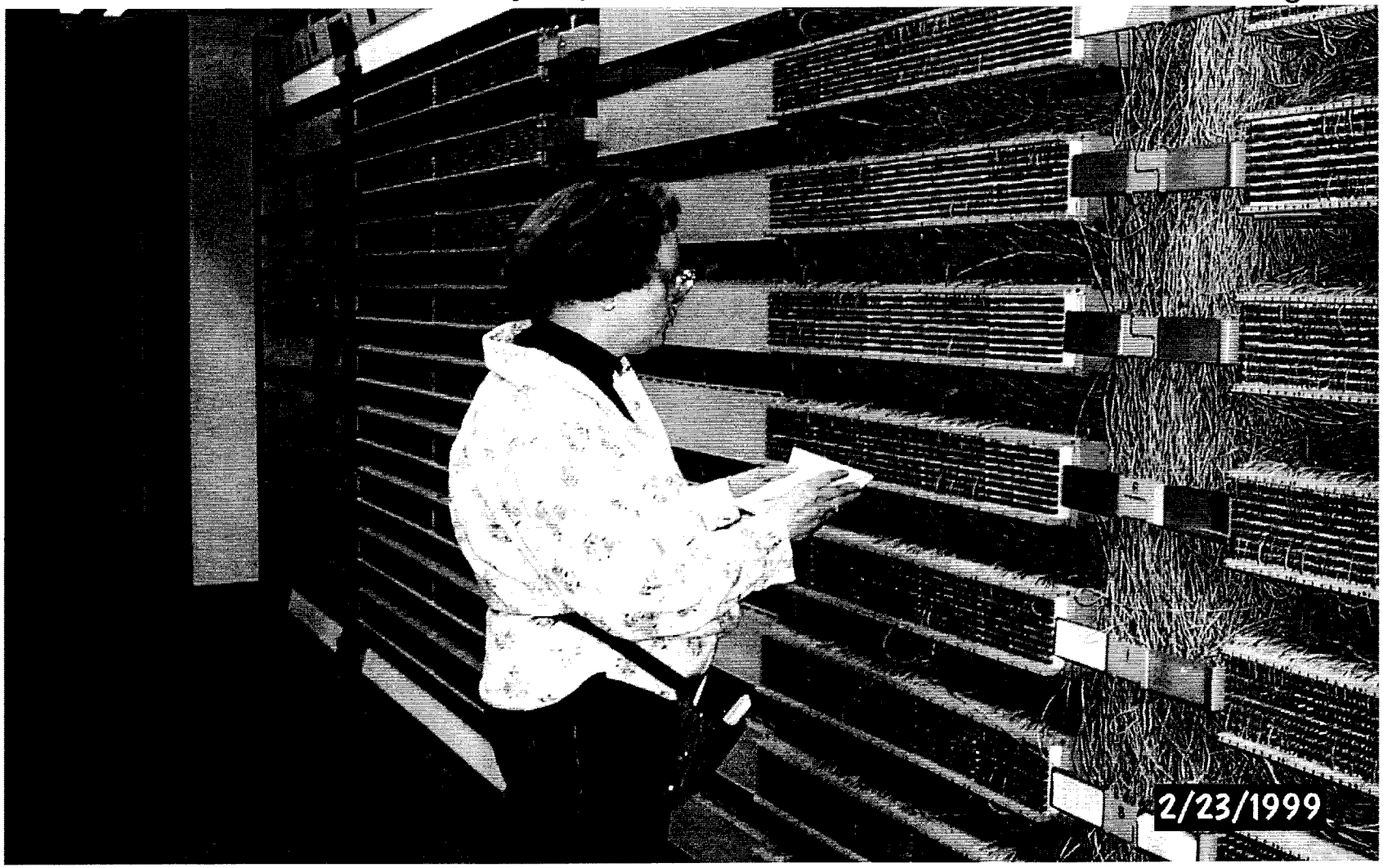
LOOP CUTOVER PROCESS

Step 6: Technician walks along Main Distributing Frame to locate both ends of jumper to be cut.



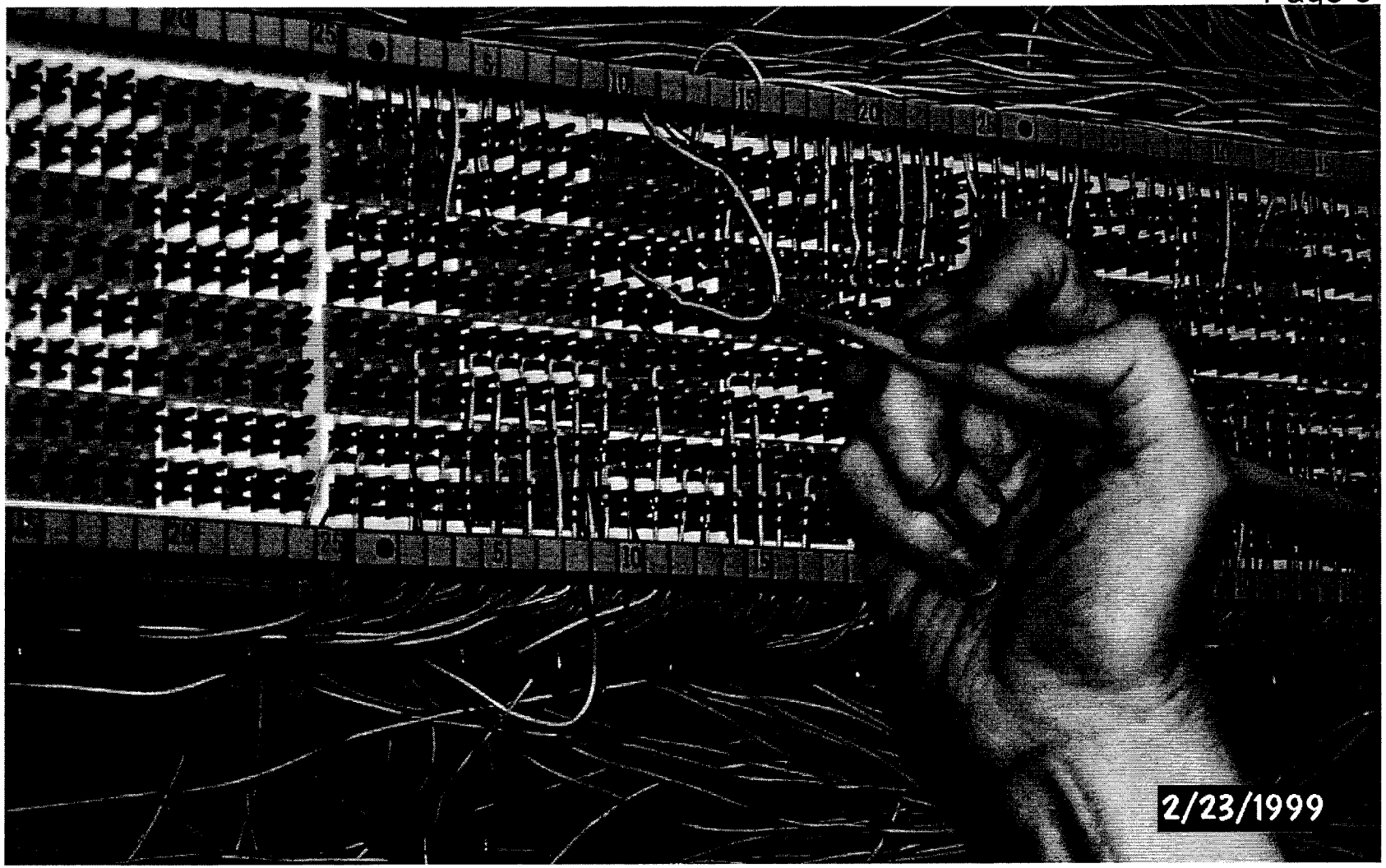
LOOP CUTOVER PROCESS

Step 7: Technician locates precise location of jumper.



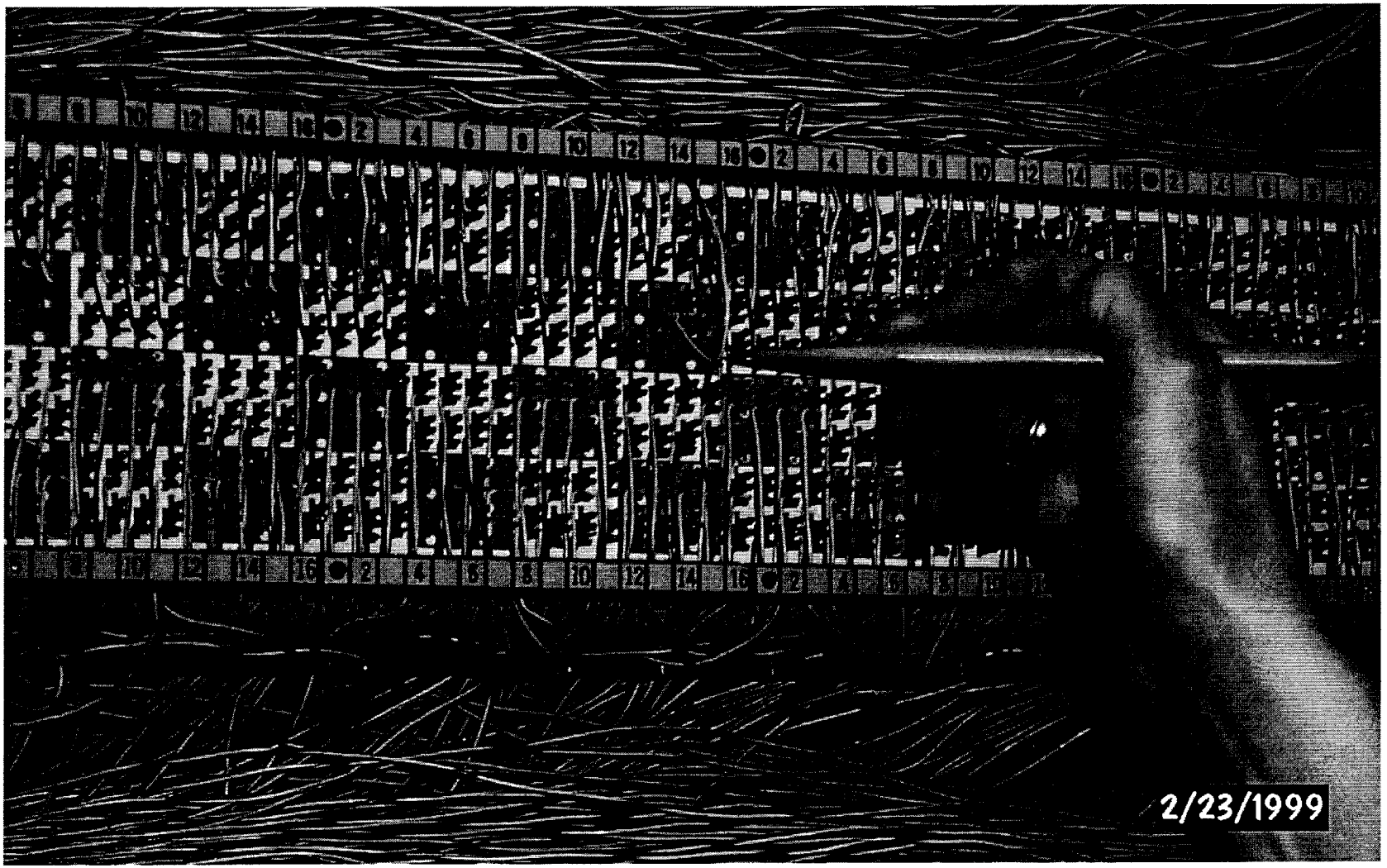
LOOP CUTOVER PROCESS

Step 8: Technician locates and removes end of jumper connected to the BellSouth cable pair.



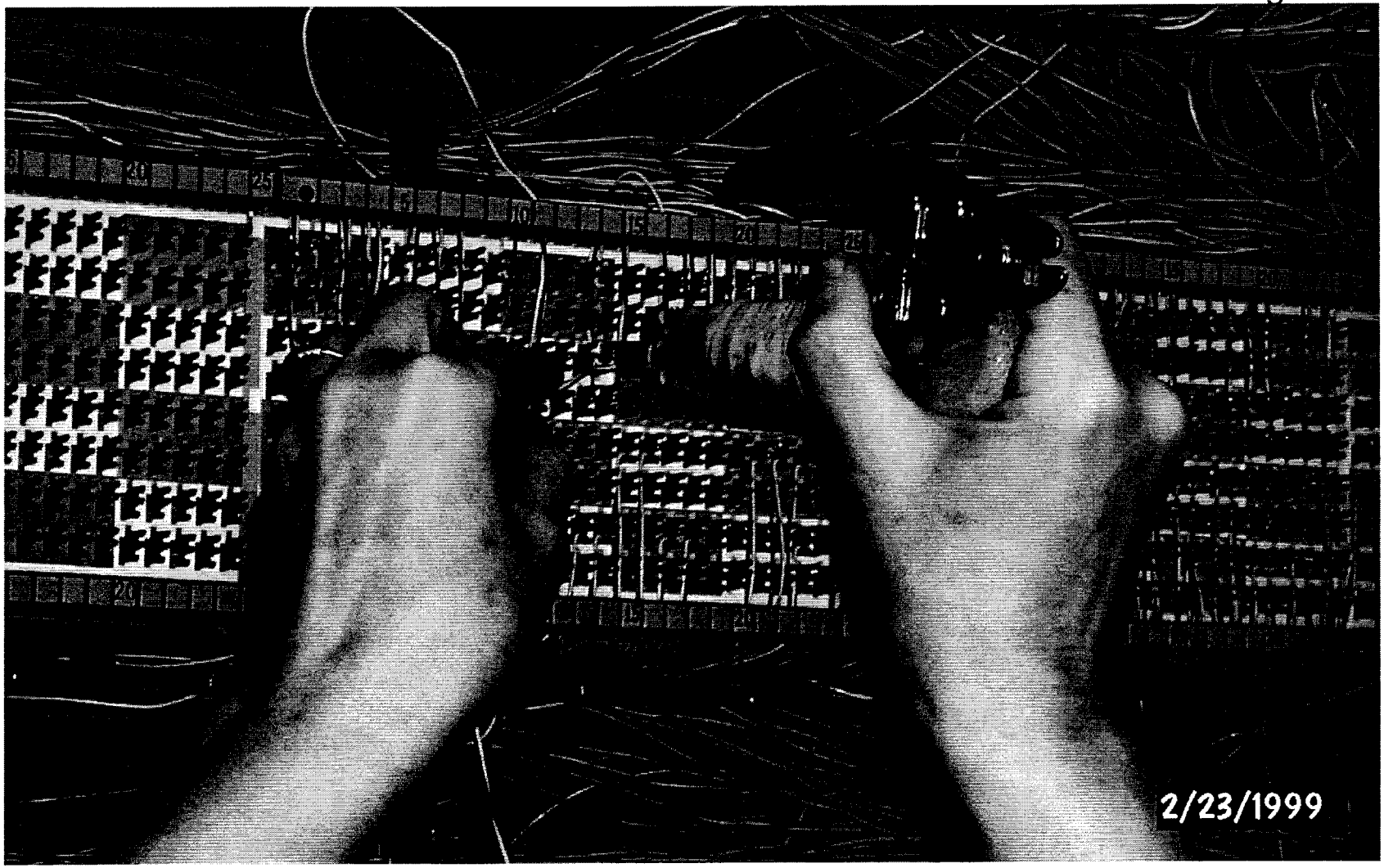
LOOP CUTOVER PROCESS

Step 9: Technician locates and removes end of jumper connected to the switching equipment.



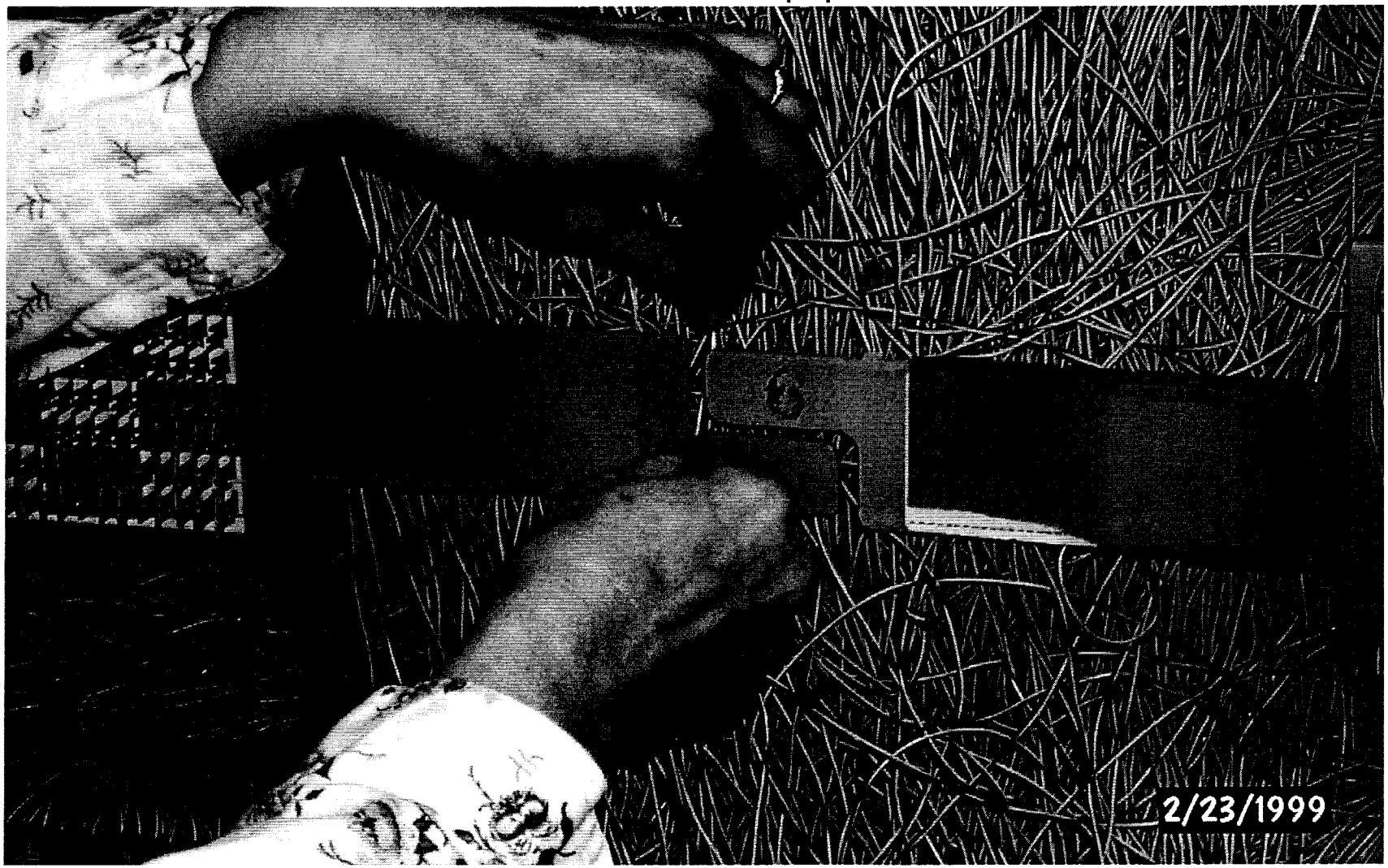
LOOP CUTOVER PROCESS

Step 10: Technician places new jumper on MDF.



LOOP CUTOVER PROCESS

Step 11: Technician weaves wire through cable rack to reach tie cable to CLEC's collocation equipment.



LOOP CUTOVER PROCESS

Step 12: Technician connects new jumper on frame to tie cables to CLEC equipment.



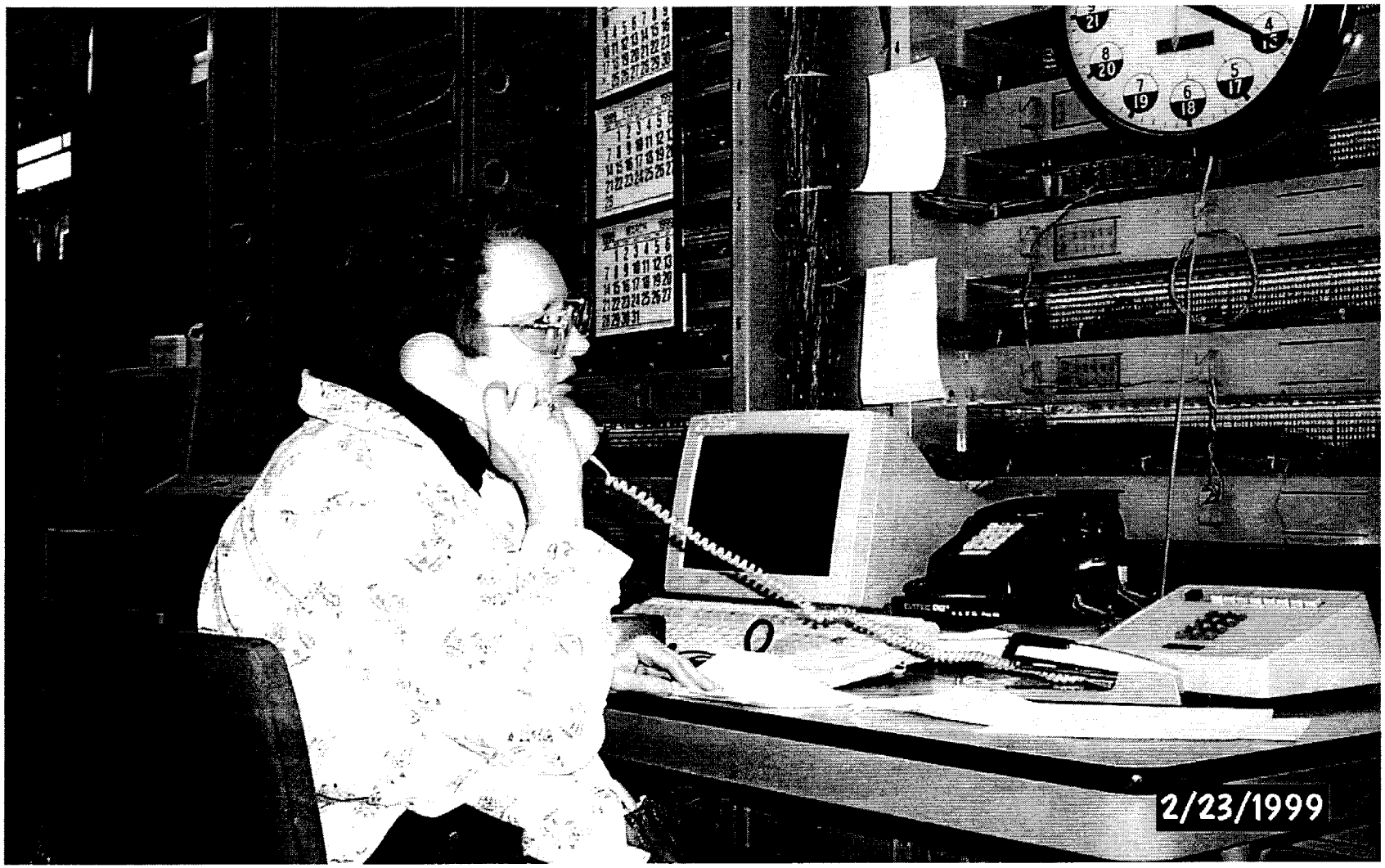
LOOP CUTOVER PROCESS

Step 13: Technician conducts ANAC test to verify that loop has been cut to correct CLEC switch port.



LOOP CUTOVER PROCESS

Step 14: Technician verifies cutover with CLEC, closes order, and notifies the UNE Center.



AFFIDAVIT

STATE OF: Georgia
COUNTY OF: Fulton

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared W. Keith Milner, Senior Director-Interconnection Services, BellSouth Telecommunications, Inc., who, being by me first duly sworn deposed and said that:

He is appearing as a witness before the Tennessee Regulatory Authority in Docket No. 99-00430 on behalf of BellSouth Telecommunications, Inc., and if present before the Authority and duly sworn, his testimony would be set forth in the annexed testimony consisting of 28 pages and 1 exhibit(s).

W. Keith Milner

Sworn to and subscribed
before me this 15th
day of October, 1999

MICHEALE F. HOLCOMB
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2001

NOTARY PUBLIC

BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF ALPHONSO J. VARNER

BEFORE THE TENNESSEE REGULATORY AUTHORITY

DOCKET NO. 99-00430

OCTOBER 15, 1999

Q. PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. ("BELLSOUTH") AND YOUR BUSINESS ADDRESS.

A. My name is Alphonso J. Varner. I am employed by BellSouth as Senior Director for State Regulatory for the nine-state BellSouth region. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. PLEASE GIVE A BRIEF DESCRIPTION OF YOUR BACKGROUND AND EXPERIENCE.

A. I graduated from Florida State University in 1972 with a Bachelor of Engineering Science degree in systems design engineering. I immediately joined Southern Bell in the division of revenues organization with the responsibility for preparation of all Florida investment separations studies for division of revenues and for reviewing interstate settlements.

Subsequently, I accepted an assignment in the rates and tariffs organization with responsibilities for administering selected rates and tariffs including

preparation of tariff filings. In January 1994, I was appointed Senior Director of Pricing for the nine-state region. I was named Senior Director for Regulatory Policy and Planning in August 1994, and I accepted my current position as Senior Director of Regulatory in April 1997.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony provides BellSouth's positions on numerous issues raised by ITC^DeltaCom Communications, Inc. ("DeltaCom") or ("ITC^DeltaCom")in its Petition for Arbitration filed with the Tennessee Regulatory Authority ("Authority") on June 11, 1999. Specifically, I respond to the following issues raised by DeltaCom, per the Joint List of Unresolved Issues filed with the TRA on August 19, 1999, in the following order: 1(a), 1(b), 2, 6(a), 2(b)(ii)-2(b)(iii), 2(c)(iii)-2(c)(iv), 2(c)(vi), 2(c)(xiv)(b), 3(1), 3(2), 5, 6(b)-6(e), 7(b)(iv), 8(b), 8(e), 8(f). I also address the ramifications of recent court decisions as they specifically relate to Issues 2(b)(ii), 2(b)(iii), and 3.

Q. PLEASE SUMMARIZE HOW THE RECENT COURT DECISIONS AFFECT THIS PROCEEDING.

A. On June 10, 1999, the United States Court of Appeals for the Eighth Circuit ("Eighth Circuit") issued an order in the *Iowa Utilities Board, et al.* case reinstating many of the previously vacated Federal Communications Commission's ("FCC") Rules. These Rules were originally issued in the FCC's First Report and Order and Second Report and Order dated August 8,

1996 in CC Docket 96-98. In light of the Eighth Circuit's recent and past decisions, along with the January 25, 1999, decision by the United States Supreme Court, the status of the FCC's rules can be divided into several categories as follows.

The FCC's pricing Rules 51.501-51.515 (Pricing of Elements) and 51.701-51.717 (Reciprocal Compensation for Transport and Termination of Local Telecommunications Traffic) have been reinstated. However, they are still being reevaluated by the Eighth Circuit Court of Appeals because their earlier ruling was based solely upon jurisdictional arguments and did not consider the various challenges raised to these rules on their merits. Although these rules are in effect while the Eighth Circuit revisits them, the final pricing rules will not be known until the Eighth Circuit acts, which could be several months in the future. In the interim, BellSouth proposes that the existing rates under the DeltaCom interconnection agreement continue in effect until the Authority issues a final order in Docket 97-01262. In addition, for rates not covered under the current agreement, BellSouth is proposing prices that are consistent with the FCC's pricing methodology and with cost studies filed by BellSouth in the Authority's UNE cost proceeding (Docket No. 97-01262), pursuant to the Authority's January 25, 1999 Order, as amended by decisions at the April 20, 1999 Directors' Conference. BellSouth also proposes that prices in effect under the current agreement, as well as prices established in this proceeding, be modified retroactive to the effective date of the new interconnection agreement, after the Authority's final order in Phase II of the UNE cost proceeding, and, if necessary, when the FCC issues its final rules.

The FCC's Unbundled Network Element ("UNE") Rule 51.319 (Specific unbundling requirements) was vacated after the Supreme Court's decision in *Iowa Utilities Bd.* The FCC recently completed its 319 proceeding, but has not yet issued its order. Until the FCC's rules become effective, there is no minimum list of UNEs that BellSouth is required to offer.

Even though the FCC's Rule 51.315(b) (Pre-existing combinations) has been reinstated by the Eighth Circuit, it cannot be effectively applied until the FCC reestablishes the UNE list in FCC Rule 51.319 that was vacated by the Supreme Court.

Finally, the FCC's Rules 51.315(c) through 51.315(f) (incumbent local exchange company ("ILEC") combination of UNEs) continue to be vacated. The Eighth Circuit, however, is seeking comments on whether it should take further action with respect to these rules. Since these rules are not in effect, any action by the Authority requiring BellSouth to combine network elements would be improper under the Telecommunications Act of 1996 ("Act").

After the FCC and the Eighth Circuit take further action in response to the Supreme Court's decision, BellSouth's position on the issues raised in this proceeding may be affected.

Q. BRIEFLY DESCRIBE THE REGULATORY STATUS OF THE FCC'S RULE 51.319 (SPECIFIC UNBUNDLING REQUIREMENTS) IN LIGHT OF

THE SUPREME COURT'S DECISION.

A. The FCC made its decision on which UNEs are required on September 15, 1999, but an order has not been issued, nor is it effective. Based on available documentation of the FCC's 319 ruling, it appears that two UNEs that are issues in this arbitration will be affected. The FCC has indicated that both switching and transport will have restrictions applied that limit their availability as UNEs. The specifics of these restrictions will not be known until the FCC's 319 order becomes effective. Based on the only documentation currently available regarding the FCC's decision on Rule 51.319, it appears that currently combined UNEs must be in existence and providing service to a BellSouth end-user at the time a CLEC requests the combination. However, the criteria for determining whether UNEs are currently combined will not be known definitively until the FCC's 319 Order becomes effective.

The Authority presumably will have, and should have, a role in implementing the "necessary" and "impair" standards. However, the Authority's decisions should, as a practical matter, await the FCC's further definition of those standards. Furthermore, even if the Authority eventually is empowered to decide which elements must remain combined, the FCC has not issued a written order indicating exactly which elements those are.

Q. WHAT IS YOUR UNDERSTANDING OF BELLSOUTH'S REGULATORY OBLIGATIONS IN LIGHT OF THE SUPREME COURT AND THE

EIGHTH CIRCUIT'S RULINGS REGARDING NETWORK ELEMENT COMBINATIONS?

A. With respect to network element combinations, the Supreme Court's vacating of the FCC's Rule 51.319 and its reinstatement of other rules directly impact the network elements BellSouth is required to provide. In accordance with the FCC's Rule 51.315(a), BellSouth is obligated to provide unbundled network elements in a manner that allows requesting telecommunications carriers to combine them in order to provide a telecommunications service. Although requesting telecommunications carriers may combine UNEs in any manner they choose, BellSouth is not required to combine unbundled elements for those carriers. The Eighth Circuit vacated the FCC's rules (§§ 51.315(c)-(f)) that purported to impose such a requirement. The Eighth Circuit's decision vacating these rules was not challenged by any party, and because those rules are not in effect, BellSouth is not required to combine network elements. However, BellSouth is willing to perform certain of these functions upon execution of a voluntary commercial agreement that is not subject to the requirements of the Act.

Q. WHAT IS BELLSOUTH'S POSITION WITH REGARD TO COMBINATIONS OF ELEMENTS THAT ALREADY EXIST IN BELLSOUTH'S NETWORK?

A. Regarding the provision of combinations that already exist in the network, there are no requirements that the Authority can implement until the FCC's

order becomes effective. When those rules become effective, BellSouth will be obligated to provide UNEs that are currently combined as defined by the FCC. The pricing rules applicable to such combinations could be affected by the Eighth Circuit's evaluation. Therefore, with regard to this issue, a final determination of which UNEs must remain connected and functional, as well as the prices for those combinations, will depend upon the outcome of further proceedings before the FCC and the Courts.

The Supreme Court specifically recognized the linkage between Rule 51.315(b) and the list of UNEs. In its discussion of the legality of Rule 51.315(b), the Court stated: "As was the case for the all-elements rule, our remand of Rule 319 [i.e., requiring application of the "necessary" and "impair" standards] may render the incumbents' concern on this score academic." (525 U.S. __, 142 L. Ed. 2d 834, 858). This linkage should not be ignored by requiring the provision of services which are allegedly pre-existing combinations of UNEs before the UNEs themselves are defined.

For the reasons outlined above, BellSouth proposes that the Authority simply require BellSouth to provide currently combined UNEs to the extent required by law. Only the FCC and courts can determine the applicable requirements. The Authority need not, nor should it, speculate on the outcome of these proceedings.

Q. PLEASE FURTHER DESCRIBE WHY THE AUTHORITY SHOULD WAIT ON ACTION BY THE FCC BEFORE SPECIFYING WHICH UNE

COMBINATIONS MUST BE OFFERED.

A. For the moment, while we have indications, no one knows for certain exactly *what* network elements must be made available to competing carriers. Even though the Eighth Circuit has simply reinstated the FCC's Rule 51.315(b) prohibiting ILECs from separating already-combined network elements before leasing them to competitors, the FCC will be defining the criteria to determine which elements are currently combined in its 319 order. In short, there is no reasonable way for the Authority to mandate combinations of network elements unless and until it is clear what those elements are and what constitutes currently combined UNEs.

Q. WHAT HAS THE AUTHORITY PREVIOUSLY DECIDED IN REGARD TO UNE PRICING?

A. The Authority issued its Interim Order in Phase I of Proceeding to Establish Prices for Interconnection and Unbundled Network Elements (Docket 97-01262) on January 25, 1999 ("January 25, 1999 Order"). Pursuant to that order, BellSouth filed cost studies on February 24, 1999, reflecting adjustments as ordered by the Authority. In addition, on February 4, 1999, BellSouth filed a Motion for Reconsideration and Clarification. In its Directors' Conference on April 20, 1999, the Authority revised some decisions and clarified certain others. A final order in this generic UNE cost proceeding has not yet been issued.

Q. IN THE ABSENCE OF A FINAL ORDER IN THE UNE COST PROCEEDING, WHAT DOES BELLSOUTH PROPOSE ARE THE APPROPRIATE RATES FOR ELEMENTS REQUESTED IN ITC^DELTACOM'S PETITION?

A. BellSouth proposes that the existing rates under the DeltaCom agreement continue in effect until the Authority issues a final order in Docket 97-01262. Once such an order has been issued, BellSouth will true-up those existing rates, as well as rates for other services that DeltaCom may request that are not covered by the current agreement, consistent with the parties' interconnection agreement.

Q. PLEASE EXPLAIN THE INFORMATION CONTAINED IN YOUR EXHIBIT AJV-1.

A. Exhibit AJV-1 attached to my testimony includes only rates for those capabilities which DeltaCom may request in connection with cageless or shared collocation, which is an issue in its Petition for Arbitration, and which were not addressed in Docket 97-01262. The source of the rate is denoted by "Cost Study" to indicate rates being proposed based on the new cost studies that have been filed in this proceeding. Finally, in order for BellSouth to meet the requirements of the FCC's recent Advanced Services Order as it relates to the provision of collocation, BellSouth has included an interim rate for Security Access System. The interim rate, subject to true-up, is a cost-based rate approved by the Florida Public Service Commission in its April 29, 1998

Order in Dockets 960757, 960833, and 960846. BellSouth will file with the Authority a complete cost study for Security Access Systems that will be conducted using the cost methodology and inputs specified by the Authority in its orders in Docket 97-01262.

Issue 1(a): Should BellSouth be required to comply with the performance measures and guarantees for pre-ordering/ordering, resale, and unbundled network elements ("UNEs"), provisioning, maintenance, interim number portability and local number portability, collocation, coordinated conversions and the bona fide request processes as set forth fully in Attachment 10 of Exhibit A to this Petition?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. Consistent with its prior decisions on this issue, the Authority should find that DeltaCom's proposal to have the Authority impose so called "performance guarantees" is unnecessary and not required under Section 251 of the Act.

Q. CAN THE AUTHORITY IMPOSE "PENALTIES" OR LIQUIDATED DAMAGES FOR FAILURE TO MEET SERVICE QUALITY MEASUREMENTS?

A. No. DeltaCom apparently believes that performance measurements can only be enforced through penalties, guarantees or liquidated damages awards. The issue of so called performance guarantees, a.k.a. "penalties" or liquidated damages, is not an appropriate issue for arbitration, nor should they be

imposed as a contractual remedy. Although I am not a lawyer, it is my understanding that State Commissions, including the Authority, lack the statutory authority to award or impose liquidated damages. Thus, the Authority has no authority to award the relief DeltaCom seeks. In fact, the Authority has already correctly determined that it will not "require a system of penalties and credits" in the context of an arbitration of an interconnection agreement. (See Brief of the Tennessee Regulatory Authority, Case No. 3-97-0161, at 26, U.S. Dist. Court, M.D. Tenn. (filed April 13, 1998)). The Authority also declined to impose penalties in the NEXTLINK arbitration. Therefore, the Authority should reject DeltaCom's proposal to have the Authority impose so called "performance guarantees".

Even if a guarantee, penalty or liquidated damage award could be arbitrated, such award is completely unnecessary. State law and State and Federal Commission procedures are available, and are perfectly adequate, to address any breach of contract situation should it arise. The SQMs that BellSouth has proposed are fully enforceable through the Authority's complaint process in the event of BellSouth's failure to meet such measurements.

Issue 1(b): Should BellSouth be required to waive any nonrecurring charges when it misses a due date? If so, under what circumstances and for which UNEs?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. The Authority should not impose a requirement in the interconnection

agreement that BellSouth waive nonrecurring charges whenever it misses a due date, regardless of the circumstances. Any waiver of nonrecurring charges should be voluntarily agreed to by the parties.

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. BellSouth has voluntarily agreed to waive nonrecurring charges under a number of circumstances. However, as already discussed in 1(a) above, the Authority does not have the authority to impose penalties or liquidated damages in an interconnection agreement. Furthermore, from time to time, both parties may have reasonable circumstances which might cause a delay in the schedule. There is no mechanism in place to track all such delays, nor to track exactly which party is responsible. Therefore, a provision for a waiver in every single instance is not appropriate or necessary.

Issue 2, 2(a)(iv), 2(b)(i) and 6(a): (a) What is the definition of parity? (b) Pursuant to this definition, should BellSouth be required to provide the following, and if so, under what conditions and at what rates: (1) Operational Support Systems ("OSS"), (2) UNEs, (3) Access to Numbering Resources, (4) An unbundled loop using Integrated Digital Loop Carrier ("IDLC") technology, and (5) Priority guidelines for repair and maintenance and UNE provisioning?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. The Authority should affirm that the definition of parity already agreed to for

the interconnection agreement is sufficient, and that BellSouth is providing ITC^DeltaCom access to OSS and UNEs at parity. The appropriate rates for network elements requested by ITC^DeltaCom should be: (1) rates currently in its interconnection agreement on an interim basis that will be trued-up retroactively once the Authority issues a final order in Docket 97-01262; and (2) rates established in this proceeding for elements not specified in the parties' existing agreement and that are not at issue in Docket 97-01262.

Issue 2(a): What is the definition of parity?

Q. WHAT IS BELLSOUTH'S RESPONSE TO SUB-PART (a) OF THIS ISSUE REGARDING THE DEFINITION OF PARITY?

A. The FCC has defined parity in the context of resale, interconnection and UNEs. The applicable definition for this issue is that of parity for UNEs. The FCC has defined parity for UNEs to mean that an ILEC will "provide an efficient competitor a meaningful opportunity to compete." (FCC 96-325, Second Order for Reconsideration, adopted December 13, 1996, § I., ¶ 9.) BellSouth believes that no further definition of "parity" is necessary.

Q. WHICH ITEMS OF SUB-PART (b) OF THE ABOVE ISSUE ARE YOU ADDRESSING?

A. My testimony addresses Item (b)(1) and Item (b)(2). Item (b)(1) is further addressed in the testimony of Ron Pate; items (b)(3), (b)(4) and (b)(5), are

addressed in the testimony of Keith Milner.

Issue 2(b)(1): Pursuant to the definition of parity, should BellSouth be required to provide the following, and if so, under what conditions and at what rates: (1) Operational Support Systems ("OSS")?

Q. WHAT IS THE BASIS FOR BELLSOUTH CHARGING DELTACOM FOR BELLSOUTH'S OPERATIONS SUPPORT SYSTEMS ("OSS")?

A. BellSouth is entitled under the Act and the FCC's orders and rules to recover its costs in providing access to OSS to CLECs. This issue has been addressed in numerous forums. For example, in AT&T's appeal of the Kentucky Commission's decision in the AT&T arbitration (C.A. No. 97-79, 9/9/98), the U.S.D.C. for the Eastern District of Kentucky expressly confirmed that BellSouth is entitled to recover its costs for developing operations support systems. The District Court's Order at p. 16 states: "Because the electronic interfaces will only benefit the CLECs, the ILECs, like BellSouth, should not have to subsidize them. BellSouth has satisfied the nondiscrimination prong by providing access to network elements that is substantially equivalent to the access provided for itself. AT&T is the cost causer, and it should be the one bearing all the costs; there is absolutely nothing discriminatory about this concept." The Authority addressed charges for OSS in its January 25, 1999 Order in Docket 97-01262, and in the April 20, 1999 Directors' Conference, the Authority clarified that BellSouth shall recover the cost of OSS from all carriers using those systems. Since only CLECs use the interfaces built for

CLEC access to BellSouth's OSS, CLECs, including DeltaCom, should pay for them.

Q. WHAT IS THE APPROPRIATE RATE FOR OSS?

A. Once the Authority has entered a final order in Docket 97-01262, which will establish rates for access to BellSouth's OSS, those rates should apply retroactively to the effective date of the new agreement.

Issue 2(b)(2): Pursuant to the definition of parity, should BellSouth be required to provide the following, and if so, under what conditions and at what rates: (2) UNEs?

Q. WHAT ARE BELLSOUTH'S OBLIGATIONS TO PROVIDE UNES AT PARITY, AND IS BELLSOUTH IN COMPLIANCE?

A. BellSouth is obligated, by the Act, to provide DeltaCom and any other CLEC with nondiscriminatory access to unbundled network elements. BellSouth complies with its obligations under the Act and FCC orders to provide services to CLECs in a non-discriminatory manner. BellSouth provides UNEs in accordance with the definition of parity that applies to UNEs as stated in response to Issue 2(a).

Q. WHAT IS YOUR UNDERSTANDING OF DELTACOM'S CLAIM THAT BELLSOUTH IS NOT OFFERING SERVICES AT PARITY?

A. DeltaCom is requesting implementation of an impossible circumstance, not parity. DeltaCom wants to require BellSouth to provide UNEs to DeltaCom on the same terms that BellSouth provides services to its retail customers. This is impossible, because the provision of UNEs is not the same as the provision of retail service. BellSouth does not provide UNEs to itself nor to its retail customers. Under these circumstances, the FCC has defined parity to mean that UNEs are provided in a manner that gives an efficient CLEC a meaningful opportunity to compete. This is the standard that should be adopted, and the previously discussed SQM will document whether BellSouth is meeting this standard.

Q. WHAT ARE THE APPROPRIATE RATES FOR UNES?

A. The appropriate rates, pending a final order in Docket 97-1262, are the rates in the current DeltaCom agreement. As stated previously, upon issuance of a final order by the Authority, and possibly upon further rulings by the FCC, these rates should be trued-up retroactively to the effective date of the new interconnection agreement.

Issue 2(b)(ii): Until the Commission makes a decision regarding UNEs and UNE combinations, should BellSouth be required to continue providing those UNEs and combinations that it is currently providing to DeltaCom under the interconnection agreement previously approved by this Commission?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. The Authority should affirm BellSouth's agreement to continue to provide any individual UNE currently offered, but under the condition that the network elements offered may change once the FCC issues its order on Rule 51.319. The Authority should find that BellSouth is not required to combine UNEs for CLECs. The FCC's rules requiring ILECs to combine UNEs were vacated by the Eighth Circuit Court, and remain vacated today. The FCC's final ruling under 319 will determine the extent to which there are currently combined UNEs in BellSouth's network which CLECs can order. Whatever action the Authority takes in this arbitration must be consistent with the FCC's order.

Q. IS BELLSOUTH OBLIGATED TO CONTINUE PROVIDING INDIVIDUAL UNEs THAT IT IS CURRENTLY PROVIDING TO DELTACOM?

A. BellSouth still has obligations under the Act to offer access to its network on an unbundled basis. BellSouth's voluntary commitment to the FCC that, until Rule 51.319 is resolved, BellSouth will continue to offer as a UNE any individual network element currently offered as a UNE, exceeds its obligations under the Act. DeltaCom has asked for continued access to those UNEs which it is using to provide service to customers today. BellSouth has agreed to continue to provide any individual UNE currently offered, but under the condition that the network elements offered may change once the FCC issues its final order on Rule 51.319.

Q. IS BELLSOUTH OBLIGATED TO COMBINE UNEs FOR CLECs?

A. No. It is BellSouth's understanding that DeltaCom wants BellSouth to provide UNE combinations at a rate equal to the sum of the individual elements. BellSouth's commitment to provide individual UNEs did not extend generally to UNE combinations. As previously discussed, in October, 1997, the Eighth Circuit court vacated the FCC's rules (§§51.315(c)-(f)) that attempted to impose a requirement to combine UNEs. The Eighth Circuit's decision vacating these rules was not challenged by any party before the Supreme Court. Because those rules are not in effect, BellSouth is not required to combine network elements on behalf of CLECs.

Furthermore, the Authority has previously held that it will not require BellSouth to provide UNE combinations to CLECs when it found in the NEXTLINK Arbitration Order: "That, to the extent BellSouth is willing to combine network elements for NEXTLINK, the parties should negotiate the charge that would apply to such combinations with the combinations and charges not being subject to the requirements of the 1996 Act." (First Order of Arbitration Award, Docket No. 98-00123, dated May 18, 1999, at p. 14.) The decision of the Authority should be the same in this arbitration as it was for NEXTLINK.

Q. NOTWITHSTANDING ITS LACK OF OBLIGATION, HAS BELLSOUTH OFFERED TO PROVIDE CERTAIN COMBINATIONS OF NETWORK

ELEMENTS?

A. Yes. BellSouth is willing to combine certain elements upon execution of a voluntary commercial agreement that is not subject to the Act. Although BellSouth does not generally offer to combine network elements without a voluntary commercial agreement, there are certain combinations that BellSouth will provide without a commercial agreement in order to fulfill its obligations under existing interconnection agreements. For example, BellSouth offers common transport. The only technically feasible method to offer common transport is to combine it with the switch port. Consequently, BellSouth will combine the port and common transport. The list below identifies those elements which BellSouth offers in combination at the sum of the UNE prices:

- Loop and cross connect
- Port and cross connect
- Port and common transport
- Port and cross connect and common transport
- Loop with loop channelization (inside central office)
- Loop and loop channelization (inside central office) and Cross Connect

Requiring BellSouth to combine UNEs was not intended by the Act, and BellSouth would certainly not voluntarily provide all combinations at UNE prices. However, as explained earlier, BellSouth is willing to provide combinations of certain functions upon execution of a voluntary commercial agreement that is not subject to the requirements of the Act.

Issue 2(b)(iii): (a) Should BellSouth be required to provide to DeltaCom the following combinations: (1) Loop Port Combinations, (2) Loop Transport UNE Combinations, (3) Loop UNE connected to Access Transport? (b) If so, what should the rates be?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. The Authority should find that BellSouth is not required to provide combinations of network elements, such as those requested in this issue, unless and until the FCC's final order makes it clear what those elements are. Thus, the Authority should not grant DeltaCom the relief it seeks. In any event, BellSouth is only obligated to provide combinations of elements to the extent those elements are currently combined in BellSouth's network as defined by the FCC's order.

Q. WHAT IS BELLSOUTH'S POSITION REGARDING PROVISION OF LOOP/PORT COMBINATIONS?

A. As previously discussed, Bellsouth is not required to provide combinations. The FCC will determine the extent that loops and ports are defined as UNEs and the circumstances when such UNEs are determined to be currently combined. When those rules become effective, BellSouth will comply with the FCC's rules.

Q. IS THE ENHANCED EXTENDED LOOP A UNE?

A. No, indications are that the FCC did not include Enhanced Extended Loops ("EELs") on the UNE list. Apparently, the FCC did consider whether EELs should be on the list of UNEs and decided EELs should not be a network element. To provide Enhanced Extended Loops ("EELs") as requested by ITC^DeltaCom, BellSouth would have to combine UNEs, an activity that BellSouth is not required to do.

Q. ARE THERE CURRENTLY COMBINED UNES THAT CONSTITUTE AN EXTENDED LOOP?

A. To provide EELs as requested by DeltaCom, BellSouth will have to combine UNEs. Since BellSouth is not obligated to perform this function, DeltaCom's request should be denied for that reason alone. There is no facility currently in place that would convert a BellSouth customer to DeltaCom's collocation space. If a customer is connected to DeltaCom's space, the customer is receiving service from DeltaCom, not BellSouth. The facility requested by DeltaCom must be created by BellSouth; it does not already exist.

Q. IS IT CLEAR THAT THE FCC WILL PERMIT ITC^DELTACOM TO USE THE EEL AS IT HAS REQUESTED?

A. To provide EELs as requested by DeltaCom, BellSouth would have to combine UNEs. Since BellSouth is not obligated to perform this function, DeltaCom's

request should be denied for that reason alone.

Q. WHAT DOES BELLSOUTH PROPOSE THIS COMMISSION DO IN LIGHT OF THE CURRENT STATUS OF 319 RULES?

A. The FCC and the courts are the only bodies that can resolve these questions. Until these questions are resolved, the prudent course of action is to obligate BellSouth to provide EELs in accordance with the FCC's and the court's decisions. BellSouth believes that this Commission does not need to speculate about FCC or court action to resolve this issue.

Q. WHAT IS BELLSOUTH'S POSITION ON PROVISION OF A LOOP CONNECTED TO ACCESS TRANSPORT?

A. Provision of a loop connected to access transport would be a combination of a UNE (loop) with a tariffed service (access transport). BellSouth is under no obligation, either by the contract or by the Act or The FCC's Rules, to combine UNEs with BellSouth's retail services.

Issue 2(c)(iii): BellSouth has offered order coordination; should SL1 orders without order coordination be specified by BellSouth with an a.m. or p.m. designation?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. The Authority should find that BellSouth's offer to specify an A.M. or P.M. designation for installation is reasonable and that BellSouth not be required to designate A.M. or P.M. installation in situations where access to the customer's premises is not required, or if the customer is indifferent as to the time of day for installation.

Q. IS BELLSOUTH WILLING TO SPECIFY AN A.M. OR P.M. DESIGNATION ON SL1 ORDERS WITHOUT ORDER COORDINATION?

A. Not in every case. If access to the customer's premises is not required, or if access is required but the customer is indifferent as to time of day, BellSouth should not be required to designate A.M. or P.M. installation. From a business management standpoint, BellSouth should not be required to tie up resources, nor to incur additional costs, to meet scheduling restrictions when the customer is indifferent as to timing. However, if access to the customer's premises is required, and the customer requests an A.M. or P.M. designation, BellSouth is willing to comply. This treatment is comparable to the scheduling that BellSouth offers its retail customers. BellSouth is willing to discuss language which would distinguish requirements under the different situations as explained above.

Q. CAN DELTACOM RECEIVE MORE DEFINITIVE APPOINTMENT TIMES?

A. Yes. BellSouth offers a service for Order Coordination. The price for this

service will be established by the Authority's order in Docket 97-01262. If DeltaCom wants this service, it can purchase it. DeltaCom is requesting more definitive appointments for the SL1 loop without paying the cost for them. The costs for SL1 excluded certain capabilities, such as specified conversion time, to provide a lower priced option for CLECs. It would be inappropriate to require BellSouth to incur these additional costs for a service that specifically excluded those costs and where other options are available.

Issue 2(c)(iv): Should the party responsible for delaying a cutover also be responsible for the other party's reasonable labor costs? If so, at what cost?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. The Authority should find that a provision requiring the payment of labor costs by the party allegedly causing the delay is not appropriate or necessary for inclusion in the interconnection agreement.

Q. DOES BELLSOUTH AGREE WITH DELTACOM ON THIS ISSUE?

A. No. When problems in loop cutovers arise, either party may encounter circumstances which are not necessarily within their control, but which result in the cutover being delayed. To track costs and blame for each instance would be a burdensome and unnecessary business practice. BellSouth has found, after investigating such circumstances, that it is frequently unclear who is at fault; in fact, in many cases, both parties contributed to the delay. Due to

administrative and other burdens, a provision for payment of labor costs by the party allegedly causing the delay should not be included in the interconnection agreement.

Issue 2(c)(vi): Should each party be responsible for the repair charges for troubles caused or originated outside of its network? If so, how should each party reimburse the other for any additional costs incurred for isolating the trouble to the other's network?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. With respect to repair charges or troubles caused or originated outside of the party's network, the Authority should find that each party should be responsible for the repair cost of the initial investigation or isolation of repairs. Thereafter, if additional testing and diagnosis are required to isolate trouble on the network for the same complaint, the party on whose network the trouble is ascertained should bear the cost of the repairs and shall reimburse the other party for the additional cost incurred in isolating the trouble.

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. BellSouth has always maintained that the party responsible for the repairs should bear the costs associated with those repairs. In essence, when DeltaCom purchases an unbundled loop from BellSouth, it is leasing

"exclusive access" to that element for a specified period of time, and the price DeltaCom pays for the loop includes the cost of maintenance and repair. FCC First Report and Order ¶ 258, CC Docket No. 96-98. To the extent the loop requires maintenance or repair by BellSouth, there is no additional charge to DeltaCom. However, DeltaCom should bear the responsibility for repairs on facilities that it owns or leases from a party other than BellSouth.

Further, DeltaCom asserts that "to the extent such trouble was caused by a third party, BellSouth should seek reimbursement from such third party". BellSouth understands that this issue, as to third party networks, has been resolved. However, BellSouth reserves the right to file testimony should this issue be further disputed.

Q. SHOULD DELTACOM BE RESPONSIBLE FOR LOCATING TROUBLES WITHIN ITS FACILITIES, INCLUDING LOOPS LEASED FROM BELLSOUTH?

A. Yes. DeltaCom should be responsible for the initial trouble report isolation and testing. When determined by DeltaCom that the trouble resides in BellSouth's network, BellSouth will assume repair responsibilities via a trouble report. BellSouth will perform necessary isolation/testing functions, process, and resolve the maintenance condition.

For example, if a trouble is reported on an SL1 loop and it is proven to be a BellSouth trouble, then BellSouth absorbs the costs associated with the repair.

If DeltaCom reports a trouble on an SL1 loop and no trouble is found, BellSouth will charge DeltaCom for any dispatching and testing (both inside and outside the central office) required by BellSouth in order to confirm the loop's working status. If a trouble is reported on an SL2 loop and it is proven to be a BellSouth trouble, the rates charged for SL2 loops cover the costs of dispatching and testing of troubles inside the central office. If DeltaCom reports a trouble on an SL2 loop and no trouble is found, BellSouth will charge DeltaCom for any dispatching and testing performed outside the central office.

Q. SHOULD BELLSOUTH REIMBURSE DELTACOM FOR ANY ADDITIONAL COSTS DELTACOM INCURS IN ISOLATING THE TROUBLE TO BELLSOUTH'S NETWORK?

A. No. Each party should be responsible for its own costs incurred in determining the cause of trouble with respect to its own network. BellSouth should not reimburse DeltaCom for any additional costs DeltaCom incurs in isolating the trouble to BellSouth's network. Likewise, if a BellSouth end user experiences trouble calling a DeltaCom customer, BellSouth does not bill DeltaCom for costs incurred to isolate a trouble to DeltaCom's network.

Issue 2(c)(xiv): (a) Should BellSouth be required to coordinate with DeltaCom 48 hours prior to the due date of a UNE conversion? (b) If BellSouth delays the scheduled cutover date, should BellSouth be required to waive the applicable non-recurring charges? (c) Should BellSouth be required to perform dial tone tests at least 48 hours prior to the scheduled cutover date?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. The Authority should find that BellSouth is not required under the Act or the FCC rules to waive non-recurring charges in this situation.

Q. HOW ARE THE SUB-PARTS OF THIS ISSUE BEING ADDRESSED?

A. My testimony addresses part (b) of this issue. Please see the testimony of Mr. Keith Milner for responses to (a) and (c).

Q. WHAT IS BELLSOUTH'S POSITION REGARDING WAIVER OF THE APPLICABLE NON-RECURRING CHARGES IF BELLSOUTH DELAYS THE SCHEDULED CUTOVER DATE?

A. BellSouth is not required under the Act or the FCC rules to waive non-recurring charges in such a situation. Both parties may have reasonable circumstances which might cause a delay in the schedule. There is no mechanism in place to track all delays, and who is responsible. Therefore, a provision for a waiver in any instance is not appropriate to be included in the interconnection agreement.

Issue 3(1): Should BellSouth be required to pay reciprocal compensation to ITC^DeltaCom for all calls that are properly routed over local trunks, including calls to Internet Service Providers (ISPs)?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. The Authority should only order the parties to comply with the compensation mechanism that the FCC orders for ISP-bound traffic. The FCC has held that ISP traffic is not governed by the reciprocal compensation obligations of Section 251 of the Act and that ISP-bound traffic is under the FCC's jurisdiction. As a result, compensation for ISP traffic is not properly the subject of an arbitration under Section 252 of the Act. The FCC has stated that it has jurisdiction over this traffic and has instituted a proceeding to develop an appropriate compensation mechanism. Consequently, any action taken by the Authority is only temporary and may even be negated by the FCC.

Q. WHAT IS BELLSOUTH'S POSITION REGARDING APPLICABILITY OF RECIPROCAL COMPENSATION TO "ALL CALLS THAT ARE PROPERLY ROUTED OVER LOCAL TRUNKS"?

A. Reciprocal compensation is applicable to local traffic, not necessarily to all traffic routed over "local" trunks. Specifically, FCC Rule 51.701 defines local traffic to which reciprocal compensation is applicable as "telecommunications traffic between a LEC and a telecommunications carrier other than a CMRS provider that originates and terminates within a local service area established by the state commission". "Local" trunks may actually carry access, or toll traffic, in addition to local traffic.

Q. WHAT IS BELLSOUTH'S POSITION ON THE APPLICABILITY OF RECIPROCAL COMPENSATION TO ISP-BOUND TRAFFIC?

A. Reciprocal compensation is not applicable to ISP-bound traffic. BellSouth's position is that payment of reciprocal compensation for ISP-bound traffic is inconsistent with the law and is not sound public policy.

Q. IS THERE ANY REASON FOR THE AUTHORITY TO ADDRESS THIS ISSUE?

A. No. The FCC's recent Declaratory Ruling, FCC 99-38 in CC Docket Nos. 96-98 and 99-68, released February 26, 1999 ("Declaratory Ruling"), clearly established that the FCC has, will retain, and will exercise jurisdiction over this traffic. As a practical matter, it appears fruitless for state commissions to deal with this issue at this time. Although the FCC appears to temporarily give states the authority to create an interim compensation arrangement until the FCC establishes rules, the FCC's authority to confer this ability on the states is being challenged in court. Consequently, states could find that they do not have the authority to create even an interim compensation arrangement. Even if the states do have the authority, such authority is valid only until the FCC completes its rulemaking on the subject. Therefore, any effort devoted by the Authority to establishing an interim compensation arrangement for ISP-bound traffic may not be the best use of resources.

Q. SHOULD THE AUTHORITY ARBITRATE THIS ISSUE?

A. No. BellSouth recommends the Authority not address this issue. Compensation for ISP traffic is not subject to a Section 252 arbitration. Reciprocal compensation in the Act is limited to "local traffic". As the FCC's Declaratory Ruling makes clear, traffic to ISPs is not local interstate in nature (Footnote 87):

> *As noted, section 251(b)(5) of the Act and our rules promulgated pursuant to that provision concern inter-carrier compensation for interconnected local telecommunications traffic. We conclude in this Declaratory Ruling, however, that ISP-bound traffic is non-local interstate traffic. Thus, the reciprocal compensation requirements o section 251(b)(5) of the Act and Section 51, Subpart H (Reciprocal Compensation for Transport and Termination of Local Telecommunications Traffic) of the Commission's rules do not govern inter-carrier compensation for this traffic. As discussed, supra, in the absence a federal rule, state commissions have the authority under section 252 of the Act to determine inter-carrier compensation for ISP-bound traffic.*

Thus, it is not subsumed in the Act's reciprocal compensation obligations and should not be arbitrated. Although the FCC's Declaratory Ruling attempts to authorize states to arbitrate the issue of inter-carrier compensation for ISP-bound traffic, the FCC cannot simply expand the scope of Section 252 to cover such arbitrations. Consequently, compensation for such traffic is not subject to arbitration under Section 252.

Q. HOW DOES THE ISSUE THAT ITC^DELTACOM HAS RAISED COMPARE TO THE ISP ISSUES ALREADY ADDRESSED BY THE AUTHORITY IN PREVIOUS PROCEEDINGS?

A. The issues in this case must be addressed in a different context from the Authority's previous decisions. The Authority has previously addressed this issue in two contexts. First, the Authority has addressed the ISP traffic in the context of a complaint regarding the proper interpretation of language in an existing agreement. The issue in this case deals with the appropriate language to include in a new agreement. There is no existing language to interpret in this case. Thus, any previous rulings regarding language interpretation are irrelevant. BellSouth notes, however, that its position, which was confirmed by the FCC, has always been that calls to ISPs were not local calls; thus, BellSouth never anticipated paying reciprocal compensation on calls to ISPs.

The second context where the Authority addressed this issue was in the NEXTLINK arbitration. However, that arbitration was conducted before the FCC issued its Declaratory Ruling. Consequently, the Authority did not have benefit of the FCC's findings that compensation for ISP traffic is not covered by Section 251, is not local and is access traffic under the interstate jurisdiction. These findings must be incorporated into the Authority's deliberations and findings in this case. BellSouth notes that its position in the NEXTLINK arbitration was consistent with the FCC's findings in the Declaratory Ruling.

Q. HAVE OTHER STATES IN BELLSOUTH'S REGION RULED ON THE ISSUE OF RECIPROCAL COMPENSATION IN AN ARBITRATION SINCE THE FCC'S DECLARATORY ORDER WAS ISSUED?

A. Yes. The Public Service Commission of South Carolina's October 4, 1999 Order in the ITC^DeltaCom arbitration case, Docket No. 1999-259-C states: "The Commission finds that ISP-bound traffic is non-local interstate traffic. As such, the Commission finds on a going-forward basis and for the purposes of this interconnection agreement that ISP-bound traffic is not subject to the reciprocal compensation obligations of the 1996 Act."

Q. YOU HAVE STATED THAT IT IS NOT APPROPRIATE FOR THE AUTHORITY TO ADDRESS ISP-BOUND TRAFFIC IN THE CONTEXT OF SECTION 251 OF THE ACT. WHAT DOES BELLSOUTH RECOMMEND THE AUTHORITY DO WITH RESPECT TO THE ISSUE OF RECIPROCAL COMPENSATION FOR ISP-BOUND TRAFFIC?

A. It is not necessary for the Authority to take any action during the interim period since compensation for ISP traffic is not an obligation under Section 251 and any state commission's decision on this issue is, at best, temporary until the FCC's plan becomes effective. Although action by the Authority pending the FCC's ruling is not necessary, if the Authority wishes to address the issue of interim carrier compensation for ISP traffic, BellSouth suggests three possible options, any of which would be interim until such time as the

FCC completes its rulemaking proceeding on inter-carrier compensation:

(1) The Authority could direct the parties to create a mechanism to track ISP-bound calls originating on each parties' respective networks on a going-forward basis. The parties would apply the inter-carrier compensation mechanism established by a final, nonappealable order of the FCC retroactively from the date of the Interconnection Agreement approved by the Authority, and the parties would "true-up" any compensation that may be due for ISP-bound calls.

(2) A second option proposed by BellSouth is an inter-carrier revenue sharing compensation arrangement for ISP-bound access traffic that is consistent with the proposal BellSouth filed with the FCC. This proposal is also consistent with the inter-carrier compensation mechanisms that apply for other access traffic. This option is based on apportionment of revenues collected for the access service among the carriers incurring costs to provide the service. The revenue to be apportioned among carriers is the charge for the business exchange service that the ISP pays.

(3) The Authority could direct the parties to implement a bill-and-keep arrangement for ISP-bound traffic until such time as the FCC's rulemaking on inter-carrier compensation is completed. By definition, a bill-and-keep arrangement is a mechanism in which neither of the two interconnecting carriers would charge the other for ISP-bound traffic that originates on the other carrier's network. Under all three options, the CLEC is being

compensated by the ISP. Under Option (2), in the interim, BellSouth would be the net recipient of revenue from the CLEC. While option (2) is theoretically correct, BellSouth is willing to forego that compensation for the interim period in exchange for the administrative simplicity of bill-and-keep. Furthermore, a bill-and-keep arrangement removes any uncertainty surrounding application of the FCC's mechanism inherent in Option (1).

Q. PLEASE FURTHER DESCRIBE OPTION (2): BELLSOUTH'S PROPOSED INTER-CARRIER REVENUE SHARING COMPENSATION PLAN.

A. In its Comments and Reply Comments to the FCC's Notice of Proposed Rulemaking in CC Docket No. 99-68, In the Matter of Inter-Carrier Compensation for ISP-Bound Traffic ("Inter-Carrier Compensation NPRM"), BellSouth puts forth its proposal for the appropriate inter-carrier compensation mechanism. (See Exhibit AJV-6) BellSouth's proposal is guided by and is consistent with FCC precedent regarding inter-carrier compensation for jointly provided interstate services. BellSouth's proposal recognizes, as does the FCC, that the revenue source for ISP-bound traffic is derived from the service provided to the ISP. (See In the Matter of Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Transport Rate Structure and Pricing and End User Common Line Charges, CC Docket Nos. 96-262,94-1, 91-213 and 95-72, First Report and Order,12 FCC Rcd 15982, 16133-16134 (1997)) Equally important, BellSouth's proposal ties the level of inter-carrier compensation directly to the level of compensation that each carrier derives from the jointly provided service.

In this proceeding, BellSouth proposes an interim flat-rated sharing mechanism that is based on apportionment of revenues collected for the access service among the carriers incurring costs to provide the service. The revenue to be apportioned among carriers is the charge for the business exchange service that the ISP pays. Typically, the ISP purchases Primary Rate ISDN ("PRI") service as the business exchange product used to provide the access service. BellSouth believes that, in the interim, a flat-rated compensation process is appropriate since the revenues collected are based on flat-rated charges. Exhibit AJV-7 attached to this testimony is BellSouth's Proposed Interim ISP Inter-Carrier Access Service Compensation Plan ("Interim Plan").

In describing BellSouth's Interim Plan, I use the term "Serving LEC" to refer to a LEC that has an ISP as its customer and the term "Originating LEC" to refer to a LEC whose end user customers originate traffic that is delivered to the Serving LEC's network and is bound for an ISP. BellSouth's Interim Plan takes into account the following facts:

1) Only the Serving LEC bills the ISP for access service. The ISP is billed at rates established by the Serving LEC;
2) The FCC has limited the price for an ISP dial-up connection to the equivalent business exchange service rate;
3) the Originating LEC incurs costs to carry ISP-bound traffic to the Serving LEC;
4) the Originating LEC has no means to recover its costs directly from the ISP (unless, of course, the Originating LEC and the Serving LEC are one in

the same); and

5) The Originating LEC must recover its costs, to the extent possible, from the Serving LEC.

BellSouth's Interim Plan presumes that all LECs who serve ISPs will participate in the plan. Otherwise, only those parties that will benefit will participate – i.e., a LEC that originates more ISP-bound traffic than it transports to an ISP will be a net receiver.

Q. PLEASE EXPLAIN FURTHER WHY A SEPARATE SHARING PLAN IS NEEDED FOR ACCESS SERVICE PROVIDED TO ISPs?

A. The need for a separate sharing plan is created by the FCC's decree that the price charged for access service provided to ISPs is the business exchange rate. Unlike other switched access services, which are billed on a usage-sensitive basis, ISPs typically purchase from the flat rate business exchange tariff.

Because non-ISP switched access service is billed on a usage-sensitive basis, it is relatively easy for each carrier to be compensated for the portion of the access service that it provides. The most commonly used method of compensation is for each carrier to bill the IXC directly for the portion of access service it provides. For example, for originating access, the originating LEC bills the IXC for the switching and for the portion of transport that the originating LEC provides, and the terminating LEC bills the IXC for the portion of transport that it provides.

With ISP traffic, the above method is unworkable. Since the ISP is billed business exchange service rates, only one LEC can bill the ISP. Also, since the rate paid by the ISP is a flat rate charge designed for another service, i.e., business exchange service, there is no structural correlation between the cost incurred by the LEC and the price paid by the ISP. However, the business exchange rate paid by the ISP is the only source of revenue to cover any of the costs incurred in provisioning access service to the ISP. Therefore, a plan to share the access revenue paid by the ISP among all the carriers involved in sending traffic to the ISP is needed.

Q. DOESN'T BELLSOUTH COVER THE COST OF ORIGINATING TRAFFIC TO ISPs FROM ITS OWN END USERS?

A. No, nor would it be appropriate to do so. Again, ISPs purchase access services, albeit at local business exchange rates. The local exchange rates paid by end user customers were never intended to recover costs associated with providing access service and were established long before the Internet became popular.

Q. PLEASE DESCRIBE THE SPECIFICS OF BELLSOUTH'S INTERIM REVENUE SHARING PLAN.

A. BellSouth's Interim Revenue Sharing Plan contains the following steps that are further described in Exhibit AJV-7:

(1) Each Serving LEC will be responsible for identifying all minutes of use ("MOUs") which are ISP-bound that each Originating LEC delivers to the Serving LEC's network;

(2) each trunk (DS0-equivalent) will be assumed to carry 9,000 MOUs on average per month (equates to 150 hours per trunk per month);

(3) based on ISP-bound MOUs identified by the Serving LEC and provided to the Originating LEC, the Originating LEC will calculate the quantity of DS1 facilities required to transport the Originating LEC's ISP-bound traffic to the Serving LEC as follows:
(ISP-bound MOUs / 9,000 MOUs per trunk / 24 trunks per DS1);

(4) Serving LEC will advise Originating LECs of the average PRI rate charged to ISPs. The Serving LEC can use either its tariffed rate or the average rate actually charged to ISPs;

(5) Originating LEC calculates compensation due to it by the Serving LEC as follows:
(Quantity of DS1s x Serving LEC's PRI rate x sharing percentage);

(6) Originating LEC bills the Serving LEC on a quarterly basis; and

(7) The ISP-bound MOUs and the PRI rates as reported by the Serving LEC are subject to audit by the Originating LEC(s). The amount of compensation could be affected by results of an audit.

To the extent two parties have additional issues, contract negotiations between the parties can determine other terms and conditions. For example, due to technical capabilities, the two LECs may agree that the Originating LEC will identify the ISP-bound minutes of use.

Q. WHAT IS THE BASIS FOR USING 9,000 MOUs AS THE AVERAGE MONTHLY USAGE PER TRUNK?

A. Nine thousand (9,000) MOUs is a proxy that was used by the FCC for FGA access before actual usage could be measured. Further, this average level of usage has been used in other situations as a proxy for IXC usage.

Q. WHAT SHARING PERCENTAGE DOES BELLSOUTH PROPOSE BE APPLIED TO THE SERVING LEC'S REVENUES TO COMPENSATE BELLSOUTH FOR ITS NETWORK USED TO CARRY ISP-BOUND TRAFFIC?

A. BellSouth proposes a sharing percentage of 9.4% that will be applied to the Serving LEC's ISP revenues to calculate the compensation due BellSouth when BellSouth is an Originating LEC. Likewise, when BellSouth is the Serving LEC, BellSouth proposes that a sharing percentage of 9.4% will be applied by the Originating LEC(s) when calculating compensation BellSouth owes.

Q. HOW DID BELLSOUTH DETERMINE THE SHARING PERCENTAGE IT PROPOSES?

A. BellSouth's calculation of its sharing percentage is shown in Exhibit AJV-8 attached to this testimony. First, BellSouth considered that switching,

transport and loop costs are incurred to carry traffic from the Originating LEC's end office to the ISP location. Since the Serving LEC incurs the loop cost between its end office and the ISP location, the Serving LEC should retain revenues to cover its loop cost. However, switching and transport costs are jointly incurred by both the Originating LEC and the Serving LEC.

Therefore, BellSouth believes that an appropriate sharing percentage is developed by determining the ratio of switching and transport costs to total costs (switching, transport and loop), and then dividing that percentage by two since each carrier bears a portion of the switching and transport cost. In order to determine the ratio, BellSouth looked to the Benchmark Cost Proxy Model ("BCPM") results filed in Tennessee in the Universal Service Fund proceedings. The average, statewide voice grade loop, switching and transport capital costs produced by BCPM are $20.31, $4.43 and $.27, respectively. Therefore, the loop capital cost represents 81.2% of the total average statewide capital cost, which means that the switching and transport capital costs represent 18.8% of the total capital cost. Again, dividing the 18.8% by two in order to account for the fact that both carriers incur switching and transport costs results in a sharing percentage of 9.4%.

BellSouth also reviewed ARMIS data and determined that the relationship between loop, switching and transport investment as reported in ARMIS is very similar to the relationship calculated from the BCPM results. The ARMIS data shows that, for 1998, in Tennessee, total loop investment was $3,000,129,000, switching investment was $600,170,000 and transport

investment was $129,556,000, resulting in ratios of 80.44% for loop, 16.09% for switching and 3.47% for transport, which are close to the ratios that result from the BCPM data.

Q. DOES BELLSOUTH'S PROPOSED SHARING PERCENTAGE ONLY APPLY TO TRAFFIC IT ORIGINATES TO A SERVING LEC?

A. No. When BellSouth is the serving LEC and a CLEC's end users call an ISP served by BellSouth, BellSouth should compensate the CLEC. BellSouth proposes to use the same method and sharing percentage (9.4%) to compensate the CLEC as it proposes for billing the CLEC.

Q. WHAT IMPACT WOULD BELLSOUTH'S PROPOSAL HAVE ON A CLEC SUCH AS DELTACOM?

A. BellSouth's proposal would have a very small impact. As an example, I will assume that DeltaCom serves its ISP customers with PRI service which is equivalent to a DS1 (24 DS0s). Further, I will assume that DeltaCom charges its ISP customers a market-based rate of $850 per month per PRI. If BellSouth as the Originating LEC generates 55 million ISP-bound MOUs per month to DeltaCom, then the amount of monthly compensation that BellSouth's proposal would result in DeltaCom owing to BellSouth is calculated as follows:

55,000,000 / 9000 / 24 = 254.63 DS1s

254.63 DS1s x $850.00 x .094 = $20,344.37

At a PRI rate of $850, DeltaCom will collect $216,436 in revenue from its ISP customer(s) just for the traffic originated by BellSouth. Total compensation DeltaCom owes to BellSouth for the 55,000,000 MOUs BellSouth originated to DeltaCom would be only $20,344.37.

Q. HOW DOES YOUR PROPOSAL AFFECT THE RELATIVE COST RECOVERY OF THE LECs INVOLVED IN PROVIDING THE ACCESS SERVICE?

A. Since the FCC has ordered that ISPs are to be provided service by ILECs at business exchange rates, the fact is that when the access service is provided by a single LEC to the ISP, the rates it charges the ISP are typically not fully compensatory. This situation arises because the ISP is being charged a flat rate charge (which was intended for another service) for a high volume usage-sensitive service. Under BellSouth's sharing proposal, each carrier should recover roughly the same percentage of its costs. For example, if the carrier would have recovered 50% of its costs if it served the ISP alone, the underlying premise of this proposal is that each carrier should recover roughly 50% of its costs.

Q. SHOULD THIS PLAN BE CONTINUED ONCE THE FCC ESTABLISHES A USAGE-BASED COMPENSATION MECHANISM?

A. Probably not. The need for this plan was created based on the fact that ISPs currently are allowed to pay business exchange rates for access service.

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Should the FCC change the application of access charges to ISPs or establish a different compensation mechanism, this plan should be re-evaluated.

Q. PLEASE DESCRIBE OPTION (3): BILL-AND-KEEP.

A. Bill-and-keep is a compensation mechanism in which neither of two interconnecting carriers charges the other for the termination of ISP-bound traffic that originates on the other carrier's network.

Q CAN THE AUTHORITY USE BILL-AND-KEEP AS AN INTERIM MECHANISM?

A. If the Authority can order any mechanism at all, it can order bill-and-keep. The FCC did not specify the type of interim mechanism a state could use. Of course, whether the FCC could authorize states to apply any mechanism is subject to court review.

Q. WHY MIGHT A BILL-AND-KEEP ARRANGEMENT BE AN APPROPRIATE COMPENSATION MECHANISM?

A. Although the FCC has not addressed bill-and-keep with respect to non-251 traffic, such as ISP traffic, it has been addressed in FCC Rule 51.713 with respect to traffic where 251(b)(5) applies (i.e. local traffic to which reciprocal compensation applies). FCC Rule 51.713 defines bill-and-keep arrangements as those in which neither of the two interconnecting carriers charges the other

for the termination of local telecommunications traffic that originates on the other carrier's network. Rule 51.713 further provides for use of bill-and-keep arrangements if the state commission determines that the amount of local telecommunications traffic from one network to the other is roughly balanced with the amount of local telecommunications traffic flowing in the opposite direction, and is expected to remain so.

In the FCC 's NPRM in Docket 95-185 (January 11, 1996), the FCC recommended bill-and-keep as an interim compensation arrangement for cellular providers. The NPRM states that bill-and-keep is an appropriate interim mechanism where the incremental cost of using shared network facilities is equal to (or approximately) zero for both networks. This recommendation can be applied to compensation sharing for ISP-bound traffic, with the distinction that network providers would recover their costs from ISPs, not end-user customers.

Although the NPRM and FCC rule mentioned above discuss bill-and-keep as a settlement mechanism for local traffic, in this proceeding, bill-and-keep is being proposed as a possible means of settling compensation for ISP-bound traffic, which is non-local access traffic.

Q. WHAT IS THE COMMON PRINCIPLE UNDERLYING THE CIRCUMSTANCES WHERE THE FCC HAS FOUND BILL-AND-KEEP TO BE A REASONABLE COMPENSATION MECHANISM?

A. In both of the circumstances discussed above, the net amount of compensation would be relatively small. Under bill-and-keep, neither carrier compensates the other carrier for use of its facilities. Consequently, the net compensation realized by each carrier is zero under bill-and-keep. If the amounts of compensation are small anyway, payment of reciprocal compensation produces results that are close to bill-and-keep without the complexity of actually recording data and billing between the parties.

Q. ARE THE NET COMPENSATION PAYMENTS UNDER AN APPROPRIATE INTER-CARRIER COMPENSATION MECHANISM EXPECTED TO BE SMALL?

A. Since this is access traffic, carriers are only compensated for the facilities provided that are used to connect the ISP's end-users to the CLEC serving the ISP. Using the plan discussed in Option (2), BellSouth would only receive 9.4% of the revenues billed to the ISP for the number of facilities used. That amount is relatively small by itself. The net compensation to BellSouth would be further reduced by payments made to a CLEC for connecting end-users to an ISP served by BellSouth.

Q. ARE CLECS HARMED BY UTILIZING BILL-AND-KEEP?

A. No. Actually, BellSouth is foregoing its revenue for this interim period. BellSouth typically provides far more connections between ISP end-users and CLECs than CLECs provide from ISP end-users to BellSouth. As a result,

BellSouth would be the net recipient of compensation.

Q. WHY IS BELLSOUTH WILLING TO FOREGO THIS COMPENSATION?

A. BellSouth is willing to forego this compensation for several reasons: (1) the compensation arrangement is for an interim period only, (2) the amounts to be paid are small, and (3) the tradeoff is foregoing a small amount of revenue in exchange for administrative simplicity.

Q. WHY DOES BELLSOUTH OPPOSE PAYING RECIPROCAL COMPENSATION FOR ISP TRAFFIC?

A. The interstate access connection that permits an ISP to communicate with its subscribers falls within the scope of exchange access and, accordingly, constitutes an access service as defined by the FCC:

> *Access Service* includes services and facilities provided for the origination or termination of <u>any</u> interstate or foreign telecommunications. (47 CFR Ch. 1 §69.2(b)) (emphasis added)

The fact that the FCC has exempted enhanced service providers, including ISPs, from paying interstate switched access charges does not alter the fact that the connection an ISP obtains is an access connection. The FCC confirmed this fact in its Declaratory Ruling, at paragraph 16: "The fact that ESPs are exempt from access charges and purchase their PSTN links through local tariffs, does not transform the nature of traffic routed to ESPs." Instead, the exemption limits the compensation that an ILEC in providing such a

connection can obtain from an ISP. Further, under the access charge exemption, the compensation derived by an ILEC providing the service to an ISP has been limited to the rates and charges associated with business exchange services. Nevertheless, the ISP's service involves interstate communications. The ISP obtains access service that enables a communications path to be established by its subscriber. The ISP, in turn, recovers the cost of the telecommunications services it uses to deliver its service through charges it assesses on the subscribers of the ISP's service.

Where two or more carriers are involved in establishing the communications path between the ISP and the ISP's subscriber, the access service to the ISP is jointly provided. Such jointly provided access arrangements are not new or unique nor are the associated mechanisms to handle inter-carrier compensation. The services ISPs obtain for access to their subscribers are technically similar to the line side connections available under Feature Group A. For such line side arrangements, the FCC has relied on revenue sharing agreements for the purpose of inter-carrier compensation. The long history and precedent regarding inter-carrier compensation for interstate services are instructive and relevant to the FCC's determinations in this proceeding.

Q. HOW DO THE ACT AND THE FCC'S FIRST REPORT AND ORDER IN CC DOCKET 96-98 ADDRESS RECIPROCAL COMPENSATION?

A. Reciprocal compensation applies only when local traffic is terminated on either party's network. One of the Act's basic interconnection rules is contained in

47 U.S.C. § 251(b)(5). That provision requires all local exchange carriers "to establish reciprocal compensation arrangements for the transport and termination of telecommunications." Section 251(b)(5)'s reciprocal compensation duty arises, however, only in the case of local calls. In fact, in its August 1996 Local Interconnection Order (CC Docket No. 96-98), paragraph 1034, the FCC made it perfectly clear that reciprocal compensation rules do not apply to interstate or interLATA traffic such as interexchange traffic:

> *We conclude that Section 251(b)(5), reciprocal compensation obligation, should apply only to traffic that originates and terminates within a local area assigned in the following paragraph. We find that reciprocal compensation provisions of Section 251(b)(5) for transport and termination of traffic do not apply to the transport and termination of interstate or intrastate interexchange traffic.*

This interpretation is consistent with the Act, which establishes a reciprocal compensation mechanism to encourage local competition.

Further, in Paragraph 1037 of that same Order, the FCC stated:

> *We conclude that section 251(b)(5) obligations apply to all LECs in the same state-defined local exchange areas, including neighboring incumbent LECs that fit within this description.*

Therefore, since ISP-bound traffic is not local traffic it is not subject to the reciprocal compensation obligations contained in Section 251 of the Act.

Q. PLEASE FURTHER DISCUSS THE FCC'S FEBRUARY 26, 1999 DECLARATORY RULING.

A. The FCC has once again confirmed that ISP-bound traffic is access service subject to interstate jurisdiction and is not local traffic. In its Declaratory Ruling, the FCC concluded that "ISP-bound traffic is non-local interstate traffic." (fn 87) The FCC noted in its decision that it traditionally has determined the jurisdiction of calls by the end-to-end nature of the call. In paragraph 12 of this same order, the FCC concluded "that the communications at issue here do not terminate at the ISP's local server, as CLECs and ISPs contend, but continue to the ultimate destination or destinations, specifically at an Internet website that is often located in another state." Further, in paragraph 12 of its Declaratory Ruling, the FCC finds that "[a]s the Commission stated in *BellSouth MemoryCall*, the Authority has jurisdiction over, and regulates charges for, the local network when it is used in conjunction with the origination and termination of interstate calls."

The FCC's decision makes plain that no part of an ISP-bound communication terminates at the facilities of an ISP. Once it is understood that ISP-bound traffic "terminates" only at distant websites, which are almost never in the same exchange as the end-user, it is evident that these calls are not local.

Q. IS BELLSOUTH'S POSITION REGARDING JURISDICTION OF ISP TRAFFIC CONSISTENT WITH THE FCC'S FINDINGS AND ORDERS?

A. Yes. BellSouth's position is supported by, and is consistent with, the FCC's findings and Orders which state that for jurisdictional purposes, traffic must be judged by its end-to end nature, and must not be judged by looking at individual components of a call. Therefore, for purposes of determining jurisdiction for ISP-bound traffic, the originating location and the final termination must be looked at from an end-to-end basis. BellSouth's position is consistent with long-standing FCC precedent.

Q. PLEASE DESCRIBE IN MORE DETAIL THE TRAFFIC THAT IS ELIGIBLE FOR RECIPROCAL COMPENSATION.

A. As I have previously stated, only local traffic is eligible for reciprocal compensation. Exhibit AJV-2 to my testimony contains two diagrams. Both of these diagrams illustrate local calls between end users. Diagram A illustrates a typical local call where both ends of the call are handled by a single carrier's network which, in this example, is an ILEC's network. In this scenario, the ILEC receives a monthly fee from its end user to apply towards the cost of that local call. For that payment, the ILEC provides the end user with transport and termination of local calls throughout the local calling area. End users typically do not pay for calls terminated to them. Importantly, in this case, the end user is the ILEC's customer, which means that the end user pays the ILEC revenue for the service.

By comparison, Diagram B illustrates a typical local call that is handled by two carriers - one end of the call is handled by an ILEC, and a CLEC handles the other end of the call. In this scenario, when the ILEC's end user makes a local call to the CLEC's end user, the ILEC's end user is paying the ILEC the same price for local exchange service as in Diagram A. The ILEC, however, is not the provider of the entire network facilities used to transport and deliver the local call. The CLEC is providing part of the facilities and is incurring a cost. Since the end user is an ILEC customer, the CLEC has no one to charge for that cost. As previously noted, end users do not typically pay for local calls terminated to them, so the CLEC cannot be expected to charge its end user. While the ILEC is receiving the same revenues as shown in Diagram A, its costs are lower. Consequently, reciprocal compensation would be paid by the ILEC to compensate the CLEC for terminating that local call over its network. If the reciprocal compensation rate equals the ILEC's cost, the ILEC is indifferent to whether the ILEC or the CLEC completes the call.

Likewise, if a CLEC's end user completes a local call to an ILEC's end user, the CLEC receives the payment for local exchange service from the end user, and the CLEC pays the ILEC reciprocal compensation for the portion of the ILEC's facilities used to terminate the local call. In accordance with the Act, the purpose of reciprocal compensation is to ensure that each carrier involved in carrying a local call is compensated for its portion of that call. The following table contains a simple illustration of the application of reciprocal compensation:

DIAGRAM A:	ILEC	CLEC
END USER REVENUE	$15	$0
SERVICE COST	($35)	$0
NET MARGIN	($20)	$0
DIAGRAM B:	ILEC	CLEC
END USER REVENUE	$15	$0
RECIPROCAL COMPENSATION	($2)	$2
SERVICE COST	($33)	($2)
NET MARGIN	($20)	$0

Q. ARE ISP's CARRIERS?

A. Yes. ISPs are carriers; hence, service provided to them is access service. This simple fact undermines DeltaCom's claim for reciprocal compensation. The FCC has been very clear in its rulings that reciprocal compensation does not apply on access service. Some cites from the FCC Declaratory Ruling clearly establish this fact:

- Paragraph 5: "Although the Commission has recognized that enhanced service providers (ESPs), including ISPs, use interstate access services..."
- Paragraph 5: "Thus, ESPs generally pay local business rates and interstate subscriber line charges for their switched access connections..."
- Paragraph 16: "The Commission traditionally has characterized the link from an end user to an ESP as an interstate access service."
- Paragraph 16: "That the Commission exempted ESPs from access charges indicates its understanding that ESPs in fact use interstate access service; otherwise, the exemption would not be necessary."

- Paragraph 17: "The commission consistently has characterized ESPs as 'users of access service' but has treated them as end users for pricing purposes."

(Emphasis added.)

Treating ISPs as carriers is not a recent creation of the FCC. From their inception over 30 years ago, data carriers have been regulated by the FCC as interstate carriers. These carriers were allowed to collect traffic at business rates. When access charges were established in the early eighties, the FCC reconfirmed that these carriers, i.e., ESPs/ISPs, were being provided access service, but ESPs/ISPs received an exemption from regular access charges and were allowed to continue collecting traffic for the price of business service. Importantly, the FCC was clear that the service being provided was access service, not local service. The business rate was simply the price charged for the access service. This same arrangement was undisturbed by the Act and was recently reconfirmed by the FCC in its Declaratory Ruling.

Q. WHY IS THE FACT THAT ISPs ARE CARRIERS AND ARE PURCHASING ACCESS SERVICE IMPORTANT?

A. The fact that ISPs are carriers is important because carriers must pay the full cost of the access service provided to them. The carrier, not the end user that calls them, is the customer for access service. When an interexchange carrier ("IXC") or an ISP purchases access service, it is the IXC or the ISP, not the end user, who is the customer of the local exchange carrier ("LEC") for that

service. It is the IXC or the ISP who must pay the cost of the access service provided to them. Since the IXC or the ISP (and not the end user) pays for access service, the cost of the local network used to provide access service is appropriately excluded from the cost of universal service. This arrangement is based on the fact that the ISP or IXC is the retail provider of service to the end user. The LEC provides an input (access service) that the ISP or IXC uses to provide its retail service, e.g., internet or long distance service. Consequently, the LEC's customer is the ISP or the IXC, not the end user; and the ISP or IXC must pay the cost of the access service provided to them. The end user is a customer of the ISP or IXC for calls directed to these carriers.

Q. YOU STATE THAT ISP-BOUND TRAFFIC IS JURISDICTIONALLY INTERSTATE. DOES THIS AFFECT THE ISP ACCESS CHARGE EXEMPTION?

A. No. The FCC concluded in its Declaratory Ruling that its determination that ISP-bound traffic is interstate does not alter the current ISP exemption. ISPs continue to be permitted to access the public switched telecommunications network by paying basic business local exchange rates rather than by paying interstate switched access tariff rates. The FCC's decision to exempt ISPs from paying access charges for policy and political reasons in no way alters the fact that ISP-bound traffic is access traffic, not local traffic. The access charge exemption merely affects the price that an ISP pays for the access service. If the FCC had indeed concluded that ISP-bound traffic were local, there would be no need for the FCC to exempt that traffic from the access charge regime.

Likewise, no decision regarding reciprocal compensation would affect this exemption.

Exhibit AJV-3 attached to my testimony consists of two diagrams. Diagram C illustrates a typical interstate call originating on a LEC's network and delivered to an IXC's Point of Presence. As shown by this illustration, the LEC receives access charges from the IXC as compensation for use of the LEC's facilities to deliver the traffic to the IXC. The IXC bills the end user.

Diagram D is different from Diagram C in only one respect. The IXC has been replaced by an ISP. The network used to transport ISP-bound traffic is exactly the same network used to deliver traffic to IXCs. However, rather than through receipt of normal switched access charges, the LEC is compensated for the access service it provides to the ISP by the business rates it charges the ISP. The important point is that both IXCs and ISPs receive the same service and, although they are charged different prices, the prices they pay are designed to cover the same costs. That cost is the full cost of providing service to them.

Exhibit AJV-4 to my testimony consists of two diagrams illustrating the consistency of compensating carriers for access traffic based on the revenue that is derived from the jointly provided service. Diagram E illustrates a call that originates on a LEC's network and is delivered to an IXC/ISP, and shows that the IXC/ISP pays the LEC for access services to cover the cost of getting the traffic to the IXC/ISP. Diagram F illustrates an IXC/ISP-bound call that

originates on a LEC's network and interconnects with another carrier's network (ICO/CLEC) for routing of the call to the IXC/ISP. In this situation, the IXC/ISP is the other carrier's customer. The revenue this other carrier receives from the IXC/ISP for access services covers the cost of delivering the traffic to the IXC/ISP.

Q. PLEASE DESCRIBE HOW ITC^DELTACOM REQUESTS THAT IT BE COMPENSATED FOR ISP-BOUND TRAFFIC.

A. Exhibit AJV-5 to my testimony consists of a Diagram G which illustrates ITC^DeltaCom's request that BellSouth pay reciprocal compensation for ISP-bound traffic where the ISP is ITC^DeltaCom's customer. It is obvious from this diagram that ITC^DeltaCom is simply attempting to augment the revenues it receives from its ISP customer at the expense of BellSouth's end user customers. In other words, paying ITC^DeltaCom reciprocal compensation for ISP-bound traffic would result in BellSouth's end user customers subsidizing ITC^DeltaCom's operations. Indeed, the FCC has recognized that the source of revenue for transporting ISP-bound traffic is the access service charges that ISPs pay. ITC^DeltaCom receives this payment from its ISP customers. There is no legal or policy basis for ISPs to be subsidized simply because they choose a different carrier to provide their access service.

Q DOESN'T BELLSOUTH COVER THE COST OF ORIGINATING TRAFFIC TO ISPs FROM ITS OWN END USERS?

A. No, nor would it be appropriate to do so. Again, ISPs purchase access services, albeit at local business exchange rates. The local exchange rates paid by end user customers were never intended to recover costs associated with providing access service and were established long before the Internet became popular.

Q. IS BELLSOUTH ECONOMICALLY INDIFFERENT TO PAYING RECIPROCAL COMPENSATION ON ISP-BOUND TRAFFIC?

A. No. Diagram F (on Exhibit AJV-5) and Diagram G (on Exhibit AJV-6) described above should make clear that BellSouth is not economically indifferent to paying reciprocal compensation on ISP calls for the following reasons:

1) BellSouth is still incurring the cost to transport the call to the point of interconnection with the CLEC,
2) The CLEC wants BellSouth to pay reciprocal compensation to cover the CLEC's cost from the point of interconnection to the CLEC's switch, and
3) the ISP, which is the only source of revenue to cover the costs in 1) and 2) above, only pays the CLEC for access.

The CLEC receives the revenues from its ISP customer, yet DeltaCom apparently believes it is appropriate for BellSouth to incur a portion of the costs for providing the service without any reimbursement. This is exactly the

opposite of the situation depicted in Diagram B, which illustrates when reciprocal compensation should apply. The CLEC should reimburse the originating carrier (BellSouth) for its cost of transporting the ISP-bound call to the CLEC point of interconnection. Instead, the CLEC wants the LEC to incur even more of the costs without any compensation. This is inappropriate given the entire access charge system. There is no reason for the Authority to sanction this economic legerdemain and reward CLECs by subsidizing ISPs at the expense of the LEC's end users.

Q. IF RECIPROCAL COMPENSATION IS NOT AUTHORIZED, WILL CLECs BE UNCOMPENSATED FOR THE COSTS THEY INCUR TO PROVIDE SERVICES TO ISPs?

A. No. The CLECs' ISP customers compensate the CLECs for services that are provided just like an ILEC's ISP customer compensates the ILEC. The CLECs' request for reciprocal compensation on ISP-bound traffic simply provides CLECs with unearned windfall revenues and further increases the unreimbursed cost of the ILEC.

Q. ITC^DELTACOM CLAIMS THAT IT CANNOT RECOVER ITS COSTS OF HANDLING ISP-BOUND TRAFFIC WITHOUT RECIPROCAL COMPENSATION. DO YOU AGREE?

A. No. If DeltaCom truly believes it is unable to recover its cost of providing service to ISPs, Deltacom could have submitted cost studies to the Authority

proving its case. However, DeltaCom has not done so. The reason is simple; DeltaCom does not incur costs for ISP-bound traffic on a per minute of use basis. DeltaCom bills its ISP customers on a flat-rated basis and recovers its costs in that manner. DeltaCom would be unable to demonstrate per minute of use costs that it is unable to recover. Further, DeltaCom could not use BellSouth's per minute of use cost for reciprocal compensation because that cost is based on local traffic, and ISP-bound traffic is not local.

Q. DOES LACK OF RECIPROCAL COMPENSATION ON ISP-BOUND TRAFFIC DISTORT THE ATTRACTIVENESS OF ISPs AS CLEC CUSTOMERS?

A. No. Payment of reciprocal compensation would create the distortion. The table below provides an illustrative example of this distortion.

	SERVING AN ISP AND RECEIVING RECIPROCAL COMPENSATION	***SERVING AN ISP WITHOUT RECEIVING RECIPROCAL COMPENSATION***
REVENUE FROM ISP FOR SERVICE	$600	$900
RECIPROCAL COMPENSATION REVENUE PAID	$300	$0
COST OF PROVIDING SERVICE TO ISP	($600)	($600)
NET MARGIN	$300	$300

This illustration shows that reciprocal compensation allows the CLEC to offer lower prices to ISPs without reducing their net margins. Reciprocal compensation, thus, subsidizes the prices the CLEC charges the ISP. When

reciprocal compensation is not paid on ISP-bound traffic, all parties are competing on an equal footing for ISP customers. Hence, reciprocal compensation should not be used to subsidize the service provided to the ISP.

Q. IS BELLSOUTH ATTEMPTING TO AVOID PAYING RECIPROCAL COMPENSATION ON UNBALANCED TRAFFIC?

A. No. First, let me point out that BellSouth does not dispute payment of reciprocal compensation on unbalanced traffic. Rather, BellSouth disputes payment of reciprocal compensation on access traffic – i.e., ISP-bound traffic. Second, I would point out that BellSouth has an obligation to serve any customer, not simply to compete for the business of customers that generate more inbound than outbound calling as DeltaCom does.

Issue 3(2): What should be the rate for reciprocal compensation per minute of use, and how should it be applied?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. The Authority should find that the appropriate rates for reciprocal compensation on local traffic are the elemental rates for end office switching, tandem switching, and common transport. The existing elemental rates in the current DeltaCom agreement should continue in effect until the Authority issues a final order in Docket 97-01262.

Q. WHAT IS BELLSOUTH'S POSITION ON THE APPROPRIATE RATES FOR RECIPROCAL COMPENSATION?

A. As stated earlier, reciprocal compensation only applies to local traffic. BellSouth's position is that the appropriate rates for reciprocal compensation are the elemental rates for end office switching, tandem switching, and common transport that are used to transport and terminate the local traffic. DeltaCom proposes that a composite rate be calculated and applied in every instance, regardless of which actual elements are used to terminate and transport the local traffic. However, BellSouth's position is that elemental rates are the appropriate rates to use because they more closely represent the costs incurred to transport and terminate such local traffic. Once the Authority has entered a final order in Docket 97-01262, those rates should apply retroactively to the expiration date of the previous agreement. Once such an order has been issued, BellSouth will true-up those existing rates consistent with the parties' interconnection agreement.

Issue 5: Should the parties continue operating under existing local interconnection arrangements?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The parties should continue to negotiate a new agreement to incorporate new situations, governing law, processes, and technologies. There is no need for the Authority to take action on this issue.

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. Negotiations take place in order to incorporate new language and terms into an interconnection agreement based on new situations, governing law, processes, and technologies. As stated in DeltaCom's position on this issue, the current arrangement has "worked well" for the past two years. However, DeltaCom's Petition seems to infer otherwise. In order to ensure that DeltaCom and BellSouth have the most beneficial agreement for both parties, a new agreement needs to be implemented and approved. To the extent that DeltaCom has concerns with "existing local interconnection arrangements", it is required to clearly state any areas of dispute in its Petition so that BellSouth can reasonably respond. DeltaCom has provided no real indication as to what it is seeking by adding this issue in its Petition. Furthermore, DeltaCom did not even provide any proposed contract language in connection with this issue.

Issue 6(b): What are the appropriate recurring and non-recurring rates and charges for: (1) two-wire ADSL/HDSL compatible loops, (2) four wire ADSL/HDSL compatible loops, (3) two-wire SL1 loops, (4) two-wire SL2 loops, or (5) two-wire SL2 loop Order Coordination for Specified Conversion Time?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY FOR THIS ISSUE?

A. The Authority should affirm that applicable rates for the elements requested should be those currently in the ITC^DeltaCom agreement, to be adjusted

retroactively upon issuance of the Authority's final order in Docket 97-01262.

Q WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. Until the Authority issues a final order in Docket 97-01262, applicable recurring and nonrecurring rates should be those currently in effect under the DeltaCom agreement. The current agreement includes rates for two-wire ADSL-compatible loops, two-wire HDSL-compatible loops and four-wire HDSL-compatible loops. ADSL functionality is not applicable to four-wire loops. ADSL service is a technology which allows the use of one existing twisted-pair (wire pair) local loop to provide high-bandwidth data and/or video services. Therefore, ADSL is based on one pair, or two wires. In contrast, HDSL is available in two versions, either on one pair or on two pairs. Once the Authority has entered a final order in Docket 97-01262, the existing rates would be trued-up, consistent with the parties' interconnection agreement.

Rates included in the final order in Docket 97-01262, which are not included in the current agreement (items (3), (4) and (5) of this issue), would be trued-up retroactive to the expiration date of the current agreement.

Issue 6(c): Should BellSouth be permitted to charge DeltaCom a disconnection charge when BellSouth does not incur any costs associated with such disconnection?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. The Authority should allow BellSouth to charge for disconnecting service, consistent with and upon the Authority's final order in Docket 97-01262.

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. BellSouth disagrees with the underlying assumption of this issue, since BellSouth does incur costs in disconnecting service. BellSouth is entitled to recover its costs incurred to disconnect the service. In its January 25, 1999 Order, the Authority ruled under Issue 18, at page 41, "Disconnect costs shall be separated from installation costs and assessed at the time of disconnection. BST shall calculate and charge separate nonrecurring rates for installation and physical disconnection. In a soft dial tone environment, there shall be no physical disconnection charges." Further, at the April 20, 1999 Directors' Conference, the Directors voted, "BellSouth must develop two separate disconnection rates; one, a disconnection price to apply in instances where BellSouth incurs physical disconnection cost and, two, a disconnection price to apply in instances where a soft dial tone environment exists and no physical disconnection costs are incurred by BellSouth." BellSouth will develop separate rates upon receipt of the Authority's final order on the Motion for Reconsideration and Clarification. BellSouth proposes that such rates be applied retroactive to the effective date of the new agreement.

Issue 6(d): What should be the appropriate recurring and non-recurring charges for cageless and shared collocation in light of the recent FCC Advanced Services

Order No. FCC 99-48, issued March 31, 1999, in Docket No. CC 98-147?

Q. WHAT IS BELLSOUTH'S PROPSED REMEDY TO THIS ISSUE?

A. The Authority should approve the rates supported by BellSouth's cost study filed in this proceeding, and subsequent cost study to be filed supporting the interim rate for Security Access System.

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. In Docket 97-01262, the Authority will establish rates for many collocation offerings that will apply to cageless and shared collocation. Until the Authority issues a final order in Docket 97-01262, applicable recurring and nonrecurring rates should be those currently in effect under the DeltaCom agreement. Once the Authority has entered a final order in Docket 97-01262, the existing rates would be trued-up, consistent with the parties' interconnection agreement. In addition, in this proceeding, BellSouth is filing its cost study and proposed rates for several additional collocation elements (Cost Ref.# H.1.31, H.1.3199, H.1.32, H.1.3299, H.1.33, H.1.34, H.2.16, H.2.1699, H.2.17, H.2.1799) that DeltaCom may request in connection with a cageless or shared collocation arrangement. Specifically, these are rates for fiber cross-connects and fiber point of termination ("POT") bays. While BellSouth no longer requires the use of a POT Bay pursuant to the FCC's recent collocation order (Docket 99-48), the fiber POT Bay rate elements are included so that they will be made available to those collocators who already have a POT Bay in place and wish

to use these elements, or to those CLECs which may want to use these elements in the future. BellSouth witness, Ms. Daonne Caldwell, presents and supports this cost study that is consistent with the Authority's Phase I order in Docket 97-01262. In addition, these rates are contained in Exhibit AJV-1 attached to my testimony.

In order for BellSouth to meet the requirements of the FCC's recent Advanced Services Order as it relates to the provision of collocation, it is necessary for BellSouth to offer an interim rate for Security Access System. Until a Commission-compliant cost study can be completed, BellSouth proposes an interim rate equal to the rate approved by the Florida Public Service Commission on April 29, 1998, for Physical Collocation – Security Access System. As previously explained, BellSouth proposes an interim rate, subject to true-up, as shown on Exhibit AJV-1.

Issue 6(e): Should BellSouth be permitted to charge ITC^DeltaCom for conversions of customers from resale to unbundled network elements? If so, what is the appropriate charge?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. The Authority should obligate BellSouth to offer currently combined UNE combinations to the extent required by the FCC's 319 order when it becomes effective. Any further decision in the interim is unnecessary, nor are the requirements sufficiently clear for the Authority to make another decision.

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. A CLEC cannot convert resale service to unbundled network elements; resale would have to be converted to a combination of UNEs. By definition, this combination of UNEs replicates a retail service, since the service was previously resold. As previously discussed, BellSouth is not obligated to combine UNEs and will only be obligated to offer currently combined UNE combinations to the extent required by the FCC's revised Rule 319.

Issue 7(b)(iv): Which party should be required to pay for the Percent Local Usage (PLU) and Percent Interstate Usage (PIU) audit, in the event such audit reveals that either party was found to have overstated the PLU or PIU by 20 percentage points or more?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. The Authority should affirm BellSouth's position that either party found to have overstated the PLU or PIU by 20 percentage points should pay for the costs of conducting the audit.

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. Generally, BellSouth's position is that the party requesting an audit pays for it if no substantial irregularities are identified. If BellSouth requests an audit and

the audit reveals that the CLEC has accurately reflected PLU/PIU percentages, BellSouth will pay for the audit. However, if an audit requested by BellSouth reveals that a CLEC has overstated PLU/PIU percentages by 20 percentage points or more, BellSouth's position is that the CLEC should pay for the audit. BellSouth's position on this issue is backed by BellSouth's standard agreement and industry practice and custom. Clearly, this is not akin to a penalty or liquidated damages provision in that there are real costs incurred in conducting the audit, and the basis for the recovery is a part of an audit function.

Issue 8(b): Should the losing party to an enforcement proceeding or proceeding for breach of the interconnection agreement be required to pay the costs of such litigation?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. The Authority should affirm that a "losing party pays" provision is not appropriate for inclusion in an interconnection agreement.

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. BellSouth's position is that the inclusion of a "loser pays" provision would have a chilling effect on both parties to the extent that even meritorious claims would not be filed. The Act is not yet four years old and clearly represents an evolving area of law and regulation. Complaints to regulatory commissions will naturally be brought by various parties seeking clarification as issues

emerge. Often there is no clear "winner" or "loser", thus further complicating the use of a "loser pays" clause. A negative provision like "loser pays" should not be included in the Agreement. BellSouth will agree to appropriate language regarding jurisdictional issues that would allow the parties to seek damages under the Agreement from the courts since that would be a matter outside the Authority's jurisdiction. The parties should determine at the time they enter the interconnection agreement where disputes will be resolved. This is standard contract language and for good reason. It gives certainty as to how and where disputes will be resolved and it helps prevent the potential for "forum shopping" as well as the potential for inconsistent decisions under the agreement.

Issue 8(e): Should language covering tax liability be included in the interconnection agreement, and if so, should that language simply state that each Party is responsible for its own tax liability?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. The Authority should affirm that BellSouth's proposed language covering tax liability be included in the interconnection agreement, in order to clearly define the respective rights and duties for each party in the handling of various tax issues.

Q. WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?

A. BellSouth has proposed language for the interconnection agreement based upon BellSouth's experiences with tax matters and liability issues in connection with the parties' obligations under interconnection agreements. A variety of taxes are imposed upon telecommunications carriers, both directly and indirectly (collected from end-users and other carriers). As would be expected, problems and disputes over the application and validity of these taxes will and do occur. The interconnection agreement should clearly define the respective rights and duties for each party in the handling of such tax issues so that they can be resolved fairly and quickly.

Issue 8(f): Should BellSouth be required to compensate ITC^DeltaCom for breach of material terms of the contract?

Q. WHAT IS BELLSOUTH'S PROPOSED REMEDY TO THIS ISSUE?

A. The Authority should affirm that the issue of compenation for breach of contract, penalties or liquidated damages is not appropriate for arbitration.

Q. WHAT IS BELLSOUTH'S POSITION REGARDING COMPENSATION FOR BREACH OF MATERIAL TERMS OF THE CONTRACT?

A. The issue of compensation for breach of contract, penalties or liquidated damages is not appropriate for arbitration. As discussed in BellSouth's response to Issue 1(a), the Authority has already ruled that it would not require a system of "penalties" in the context of an arbitration of an interconnection

agreement. Even if a "penalty"or liquidated damage award could be arbitrated, it is completely unnecessary. Tennessee law and Federal and State Commission procedures are available, and perfectly adequate, to address any breach of contract situation should it arise.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

AFFIDAVIT

STATE OF: Georgia
COUNTY OF: Fulton

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Alphonso J. Varner-Senior Director-State Regulatory, BellSouth Telecommunications, Inc., who, being by me first duly sworn deposed and said that:

He is appearing as a witness before the Tennessee Regulatory Authority in Docket No. 99-00430 on behalf of BellSouth Telecommunications, Inc., and if present before the Authority and duly sworn, his testimony would be set forth in the annexed testimony consisting of 72 pages and 8 exhibit(s).

Alphonso J. Varner

Sworn to and subscribed
before me this 15th
day of October, 1999

NOTARY PUBLIC

MICHEALE F. HOLCOMB
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2001

Tennessee Rate and Cost Analysis

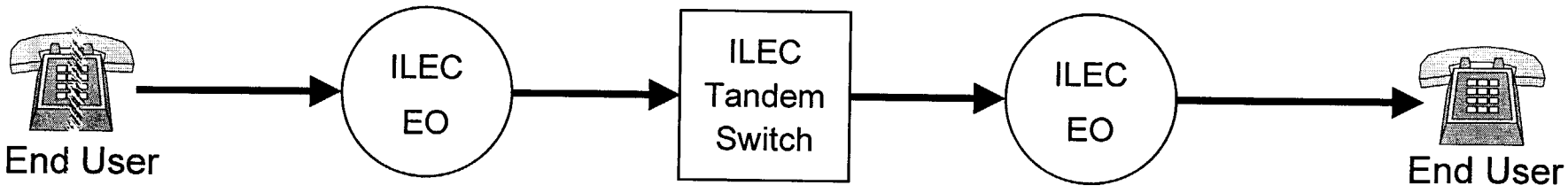
Cost Ref. #	Rate Element	Cost			Rate			Source
		Recurring	Non-recurring Electronic	Non-recurring Manual	Recurring	Non-recurring Electronic	Non-recurring Manual	
H.1	*Physical Collocation*							
H.1.31	Physical Collocation – 2-fiber Cross Connect	15.64	41.56 29.82	44.25 32.51	15.64	41.56 29.82	44.25 32.51	Cost Study
H.1.3199	Physical Collocation – 2-fiber Cross Connect – Disconnect		12.96 10.34	14.52 11.90		12.96 10.34	14.52 11.90	Cost Study
H.1.32	Physical Collocation – 4-fiber Cross Connect	28.11	50.53 38.78	53.22 41.47	28.11	50.53 38.78	53.22 41.47	Cost Study
H.1.3299	Physical Collocation – 4-fiber Cross Connect – Disconnect		16.97 14.35	18.53 15.91		16.97 14.35	18.53 15.91	Cost Study
H.1.33	Physical Collocation – 2-fiber POT Bay	38.79			38.79			Cost Study
H.1.34	Physical Collocation – 4-fiber POT Bay	52.31			52.31			Cost Study
H.2	*Virtual Collocation*							
H.2.16	Virtual Collocation – 2-fiber Cross Connects	3.03	41.56 29.82	44.25 32.51	3.03	41.56 29.82	44.25 32.51	Cost Study
H.2.17	Virtual Collocation – 4-fiber Cross Connects	6.06	50.53 38.78	53.22 41.47	6.06	50.53 38.78	53.22 41.47	Cost Study
H.2.1699	Virtual Collocation – 2-Fiber Cross Connects – Disconnect		12.96 10.34	14.52 11.90		12.96 10.34	14.52 11.90	Cost Study
H.2.1799	Virtual Collocation – 4-Fiber Cross Connects – Disconnect		16.97 14.35	18.53 15.91		16.97 14.35	18.53 15.91	Cost Study

Under the non-recurring column, where there are two entries, the first entry is for the first unit installed, and the second entry is for each additional unit installed.

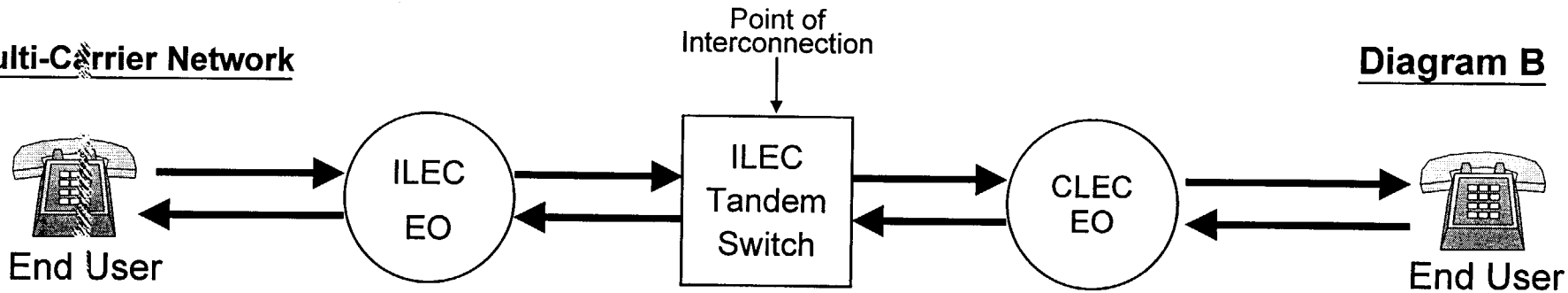
Reciprocal Compensation

- **ILEC receives monthly fee from its end user to apply towards the cost of terminating local calls**

Single Carrier Network **Diagram A**



Multi-Carrier Network **Diagram B**



Call Flow

ILEC pays CLEC
Reciprocal Compensation

Call Flow

CLEC pays ILEC
Reciprocal Compensation

Access Service for IXC-Bound and ISP-Bound Traffic Involving Single Carrier Network

Diagram C

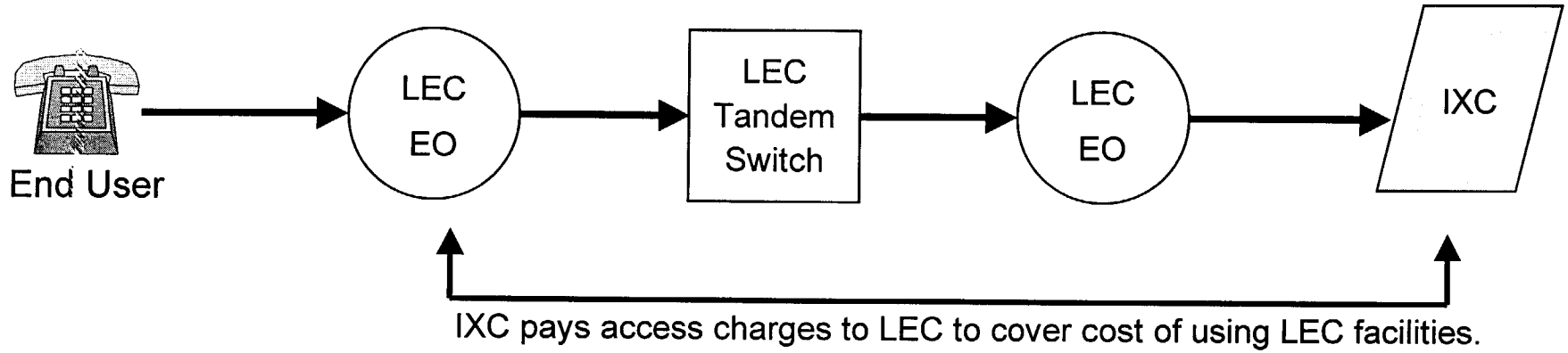
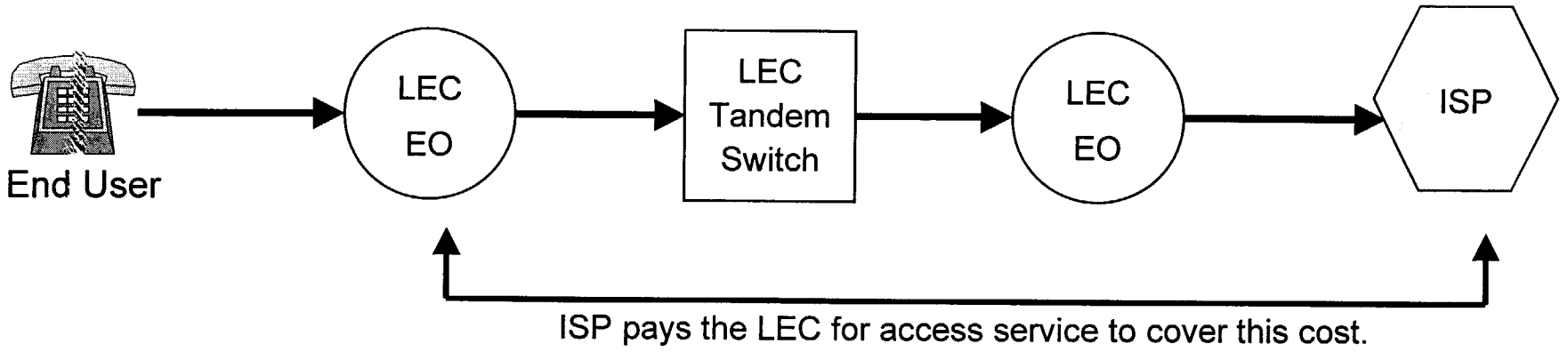


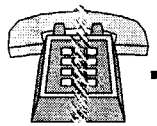
Diagram D



Single Network and Multi-Network Provision of Access Service

Diagram E

Single Carrier Network



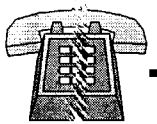
End User

LEC EO → LEC Tandem Switch → LEC EO → ISP or IXC

ISP pays the LEC for access service to cover this cost.

Diagram F

Multi-Carrier Network



End User

Point of Interconnection

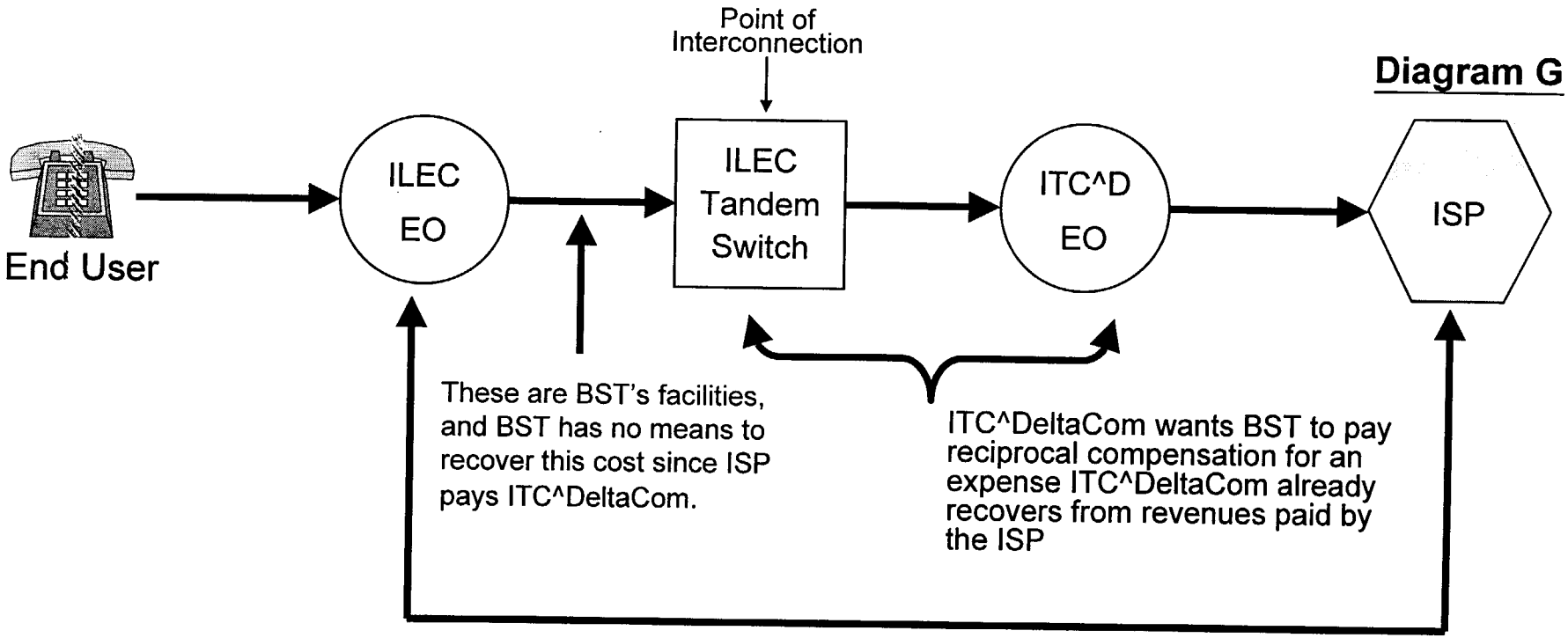
LEC EO → Tandem Switch → ICO/ CLEC EO → ISP or IXC

CLEC/ICO should reimburse LEC for this cost.

ISP pays the CLEC/ICO, for access service to cover this cost

ITC^DeltaCom's Position

- **ITC^DeltaCom's position ignores the fact that ISPs purchase access service**
- **Paying ITC^DeltaCom reciprocal compensation for ISP-bound traffic would result in ILEC end users subsidizing ITC^DeltaCom's operations.**





FILED ELECTRONICALLY 4/12/99

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Inter-Carrier Compensation for ISP-Bound Traffic	)	CC Docket No. 99-68
	)	

COMMENTS

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Date: April 12, 1999

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SUMMARY

The purpose of the *NPRM* is to consider the adoption of a rule "regarding the compensation for ISP-bound traffic.

BellSouth suggests that the Commission should adopt an inter-carrier compensation approach that: (1) recognizes that ISP traffic is interstate; (2) calls for negotiations between the carriers jointly providing the Internet access service; (3) is based on revenue sharing with the primary carrier sharing revenue with the secondary carrier; and (4) uses negotiation to determine the amount of inter-carrier compensation. Such an inter-carrier compensation approach promotes the Commission's goals and objectives.

Further, the Commission should find that ISP-bound traffic cannot be separated into its interstate and intrastate components. Any single Internet session can result in an Internet user accessing information in his/her own state, another state, or another country. The same user could "chat" online with people across the street or on the other side of the world. The inability to distinguish the jurisdictional nature of each communication that travels across the Internet leads to the conclusion that Internet traffic is inserverable and must be considered jurisdictionally interstate.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Inter-Carrier Compensation	)	CC Docket No. 99-68
for ISP-Bound Traffic	)	

COMMENTS

BellSouth Corporation and BellSouth Telecommunications, Inc. ("BellSouth") hereby submit the following comments on the *Notice of Proposed Rulemaking*, released on February 26, 1999,[1] regarding inter-carrier compensation for ISP-bound traffic.

I. INTRODUCTION

In its *Declaratory Ruling*, the Commission found that Internet-bound communications do not terminate at an Internet Service Provider's ("ISP") local server but "continue to the ultimate destination or destinations, specifically at an Internet website that is often located in another state."[2] The Commission also concluded that a substantial portion of Internet traffic involves accessing interstate or foreign websites and hence is jurisdictionally interstate.[3] The purpose of

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1 *In the Matter of Inter-Carrier Compensation for ISP-Bound Traffic*, CC Docket No. 99-68, *Notice of Proposed Rulemaking*, FCC 99-38, released February 26, 1999 ("*NPRM*").

2 *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, *Declaratory Ruling*, FCC 99-38, released February 26, 1999 at ¶ 12 ("*Declaratory Ruling*").

3 *Id.* at ¶¶ 18 and 20.

the *NPRM* is to consider the adoption of a rule governing inter-carrier compensation for ISP-bound traffic.[4]

As a preliminary matter, it is necessary to establish the framework within which the issue of inter-carrier compensation should be considered. The interstate connection that permits an ISP to communicate with its subscribers falls within the scope of exchange access and, accordingly, constitutes an access service as defined by the Commission:

> *Access Service* includes services and facilities provided for the origination or termination of any interstate or foreign telecommunication.[5] (emphasis added)

The fact that the Commission has exempted enhanced service providers, including ISPs, from paying interstate access charges does not alter the fact that the connection an ISP obtains is an access connection. Instead, the exemption limits the compensation that a local exchange carrier ("LEC") in providing such a connection can obtain from an ISP.[6] Further, under the access charge exemption, the compensation derived by a LEC providing the service to an ISP has been limited to the rates and charges associated with business exchange services. Nevertheless, the ISP's service involves interstate communications. The ISP obtains a service that enables a communications path to be established by its subscriber. The ISP, in turn, recovers the cost of the telecommunications services it uses to deliver its service through charges it assesses on the subscribers of the ISP's service.

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4 *NPRM* at ¶ 28.

5 47 C.F.R. § 69.2(b).

6 The access charge exemption only applies to LECs that are subject to the Commission's access charge rules (47 C.F.R. § 69.1 *et. seq.*).

Where two or more carriers are involved in establishing the communications path between the ISP and the ISP's subscriber, the access service to the ISP is jointly provided. Such jointly provided access arrangements are not new or unique nor are the associated mechanisms to handle inter-carrier compensation. The services ISPs obtain for access to their subscribers are technically similar to the line side connections available under Feature Group A. For such line side arrangements, the Commission has relied on revenue sharing agreements for the purpose of inter-carrier compensation. The long history and precedent regarding inter-carrier compensation for interstate services are instructive and relevant to the Commission's determinations in this proceeding.

II. INTER-CARRIER COMPENSATION FOR ISP-BOUND INTERSTATE TRAFFIC

The *NPRM* expresses the Commission's preference that any rule pertaining to inter-carrier compensation be based upon negotiations entered into by the respective carriers.[7] BellSouth supports a federal rule that calls for negotiation between the carriers to determine inter-carrier compensation for jointly provided interstate-services. Negotiation has long been a mechanism employed by the Commission with regard to other jointly provided access arrangements that involved potential revenue sharing. Relying on the negotiation process enables agreements to reflect the differing circumstances that arise and permits carriers to craft agreements that are particular to those circumstances.

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[7] *NPRM* at ¶ 28.

The *NPRM* presents an approach to inter-carrier compensation based on the negotiation process established in Sections 251 and 252 of the Communications Act.[8] As explained more fully below, such an approach is not acceptable because the Commission does not have the statutory authority to adopt it. In response to the *NPRM*'s invitation, BellSouth submits an alternative approach that is consistent with the revenue sharing approaches followed by the Commission in connection with jointly provided access service.

A. The Commission Should Not Adopt The Alternative Set Forth In The *NPRM*

The approach for interstate inter-carrier compensation set forth in the *NPRM* would make the negotiations for such compensation subject to the negotiation process established by Sections 251 and 252 of the Communications Act. The proposal contemplates that a failure on the part of the parties to reach an agreement would be subject to the arbitration procedures set forth in Section 252 of the Communications Act, wherein state commissions would have the responsibility of arbitrating any unresolved issues. Under this proposal, the Commission would have no oversight role unless the state commission failed to act in accordance with the provisions of Section 252. This proposal is fundamentally flawed.

Neither Section 251 nor Section 252 governs interstate inter-carrier compensation arrangements. The duty to negotiate under Section 251 pertains only to fulfilling the duties set forth in subsections (b) and (c) of Section 251. Section 251(b) relates to local exchange carriers' obligations regarding resale, number portability, dialing parity, access to rights-of-way, and reciprocal compensation. Inter-carrier compensation for jointly provided interstate services is

[8] 47 U.S.C. §§ 251 and 252.

unrelated to any of these Section 251(b) obligations.[9] Likewise, there is no nexus between Section 251(c) and interstate inter-carrier compensation. The duty to negotiate under Section 251(c) pertains to the terms and conditions that relate to interconnection, access to unbundled network elements, resale, and collocation. There is nothing in Section 251(c) that would govern interstate inter-carrier compensation.

A state commission's arbitration authority under Section 252 extends only to agreements negotiated pursuant to the requirements of Section 251. Because inter-carrier compensation for interstate services is not governed by Section 251, state commissions are without the statutory authority to arbitrate disputes over such matters. Further, the Commission does not have the authority to rewrite the Communications Act and vest the state commissions with the power to regulate matters relating to interstate communications that, under the Act, are specifically reserved to the Commission.[10]

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[9] Indeed, of the five obligations enumerated in Section 251(b), only reciprocal compensation could be remotely relevant. The Commission's *Declaratory Ruling*, however, is dispositive:

> As noted, section 251(b)(5) of the Act and our rules promulgated pursuant to that provision concern inter-carrier compensation for interconnected *local* telecommunications traffic. We conclude in this Declaratory Ruling, however, that ISP-bound traffic is non-local interstate traffic. Thus, the reciprocal compensation requirements of section 251(b)(5) of the Act and Section 251, Subpart H (Reciprocal Compensation for Transport and Termination of Local Telecommunications Traffic) of the Commission's rules do not govern inter-carrier compensations for this traffic.

Declaratory Ruling at n. 87.

[10] *See* 47 U.S.C. §§ 151 and 152(a). Similarly, the Commission does not have the statutory authority to vest federal district courts with the authority to review decisions regarding inter-carrier compensation for interstate communications. Under Section 252, federal district courts only have jurisdiction to review state commission actions "to determine whether the agreement

As an alternative to relying on Sections 251 and 252, the *NPRM* proposes that the Commission adopt "a set of federal rules governing inter-carrier compensation for ISP-bound traffic pursuant to which parties would engage in negotiations concerning rates, terms and conditions applicable to delivery of interstate ISP-bound traffic."[11] Without question, the only type of mechanism that can govern inter-carrier compensation for interstate services must be one over which the Commission has oversight. Federal rules that bind interstate inter-carrier compensation obligations would be appropriate.

The *NPRM*, however, assumes that for federal rules to operate properly, an arbitration-like process needs to be in-place. Arbitration is not an essential element for effective negotiation of interstate inter-carrier compensation agreements. Further, while the Commission has considerable latitude in managing its proceedings, it must be mindful that in conducting its affairs, it must do so in a manner that is consistent with the Administrative Procedures Act and the Communications Act. Thus, the Commission cannot divest the courts of appeal of jurisdiction to review final Commission orders or to force carriers to engage in binding arbitration. To the extent disputes arise during the inter-carrier compensation negotiations, the statutory complaint process and the Commission's implementing rules already provide an effective dispute resolution mechanism.

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or statement meets the requirements of section 251 and this section." 47 U.S.C. § 252(e)(6). Inter-carrier compensation for interstate services is unrelated to the requirements of Sections 251 or 252.

[11] *NPRM* at ¶ 31.

B. The Parameters Of A Properly Crafted Inter-Carrier Compensation Mechanism

At the outset, the Commission must recognize that any interstate inter-carrier compensation mechanism adopted in this proceeding gives rise to interstate costs that must be recovered through interstate rates. As obvious as this principle is, nothing in the *NPRM* indicates that the Commission has given any consideration to this basic concept. Yet, Commission precedent regarding inter-carrier compensation, *i.e.*, primary/secondary carrier agreements, revenue sharing agreements and meet point billing, firmly establishes that compensation between one carrier and another is for the purpose of recovering costs of jointly provided services and the cost of such compensation is borne by the subscriber of the jointly provided service.

For ISP-bound traffic, the ISP is purchasing an access service to receive communications from its subscribers. It uses the telecommunications service to provide its enhanced services and recovers its costs through fees charged to its subscribers. For dial-up connections, the ISP is obtaining a service that is analogous to a Feature Group A access service in that it obtains a dial tone service that has a 7/10 digit local number associated with it. The primary difference between Feature Group A and the ISP dial-up connection is that Feature Group A is based on two-way usage sensitive prices, whereas the Commission has limited the price for an ISP dial-up connection to the equivalent business exchange service rate.[12] Notwithstanding the pricing differences, the Feature Group A and the ISP dial-up services provide the customers of these services with the ability to communicate with their subscribers, and the fees paid by these

[12] For BellSouth, exchange rates are generally flat-rated.

customers (*e.g.*, Interexchange carriers or ISPs) are supposed to compensate the LEC(s) for providing this service.[13]

Further, the Commission has correctly found that the preponderance of ISP communications is jurisdictionally interstate. As discussed below, there is no practical means of distinguishing intrastate and interstate components of ISP communications. For this reason the dial-up connection obtained by the ISP should be considered jurisdictionally interstate.[14] Such jurisdictional assignment does not implicate the access charge exemption for enhanced service providers. An interstate dial-up access connection for ISPs can be provided by simply adding a regulation for ISP dial-up connections to the interstate access tariff that cross-references the applicable business exchange rates that ISPs obtain from intrastate tariffs. Thus, ISPs would retain the current rate treatment of paying a rate that is no higher than a business exchange rate, but the service revenues and costs would properly be assigned to the interstate jurisdiction. Use of a cross-reference would have the further beneficial effect of making the jurisdictional alignment of service, revenues and costs transparent to the ISPs.

With regard to inter-carrier compensation for jointly-provided Internet access service, the LEC providing dial-tone to the ISP is the primary LEC and receives the interstate equivalent of a business exchange rate. The non-dial-tone LEC, or secondary LEC, receives no interstate revenues other than the subscriber line charge. Nevertheless, the secondary LEC incurs

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[13] The interstate cost components of the service include the subscriber's common line, the subscriber's switch, interoffice transport, the customer's dial-tone switch and the transport to the customer's location.

[14] At a minimum, a substantial portion of the dial-up connection must be considered jurisdictionally interstate in light of the Commission's finding in the *Declaratory Ruling*.

switching and trunking costs associated with the provision of this interstate service. Consistent with Commission precedent, the primary LEC, which has the relationship with the ISP, should compensate or share revenues with the secondary LEC.[15]

The Commission, accordingly, should adopt an inter-carrier compensation approach that: (1) recognizes that ISP traffic is interstate; (2) calls for negotiations between the carriers jointly providing the Internet access service; (3) is based on revenue sharing with the primary carrier sharing revenue with the secondary carrier; and (4) uses negotiation to determine the amount of inter-carrier compensation. Such an inter-carrier compensation approach promotes Commission goals and objectives. First and foremost, the approach does not disrupt the enhanced service providers access charge exemption. Next, while the enhanced service provider exemption remains intact, the mechanism crafted by BellSouth follows the same path that the Commission has unwaveringly pursued over the last fifteen years when it addressed LEC inter-carrier compensation matters. Finally, but equally important, the approach is procompetitive. It avoids creating regulatory incentives that artificially reward carriers that only serve selected customers. It promotes efficient networks and encourages carriers to compete across a broad range of services and customers because it ensures that carriers are compensated fairly.[16]

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[15] Prior to revenue sharing for Feature Group A, the Commission had established guidelines applicable to primary carrier/secondary carrier agreements.

[16] For example, the mechanism proposed by BellSouth would share the revenues derived from the services provided to ISPs. If such services are flat-rated, then the inter-carrier compensation would not be usage based.

C. ISP-Bound Traffic Cannot Practically Be Separated Into Its Interstate and Intrastate Components

In the *Declaratory Ruling*, the Commission determined that ISP-bound traffic was substantially interstate in nature. The Commission, however, reserved until this proceeding any determination regarding the severability of such traffic into intrastate and interstate components. It is beyond dispute that no carrier involved in delivering ISP-bound traffic has any way of determining how an ISP's subscriber is using the connection established between himself and the ISP. The only party that could theoretically track the jurisdictional use of the connection is the ISP itself. In BellSouth's opinion the tools to transform a theoretical possibility into a practical reality do not exist.

Hosts that are connected to the Internet can be located anywhere. Indeed, the fact that they are not tied to a particular geographic location represents one of the fundamental values of the Internet. Neither the IP address of the host nor its domain name links the host to a specific geographical location. Hence, there is no practical means to identify where the host is physically located. Neither the ISP's subscriber nor the ISP has any technical or operational tools that would enable them to determine which communications initiated by the subscriber or received by the subscriber are related to hosts that are located within the same local area as the ISP's local server or in another state or in another country. The dispersion of servers world-wide and the lack of duplication attests to the fact that use of the Internet will invariably involve substantial interstate communications.[17]

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[17] The WWW Consortium has compiled an extensive list of servers by geographic locations. The list is available at http://vlib.stanford.edu/Servers.html.

In addition, an ISP's subscriber typically communicates with more than one destination point on (or beyond) the Internet during a single Internet session and may do so either sequentially or simultaneously. For example, an ISP's subscriber in a single Internet session may access websites that reside on servers located in various states or in foreign countries; communicate directly with another Internet user; and "chat" online, in real time, with a group of Internet users located around the corner or around the world. Standard Internet "browsers" enable an ISP's subscriber to do all of these things simultaneously. In another example, an ISP's subscriber may download incoming e-mail from the ISP's server (which may or may not be located in the same state as the user), while accessing his stockbroker's website in another state, and listen to an audio feed that originates from a radio station in another country.[18] The dynamic capabilities of the Internet render it impossible to segregate intrastate from interstate communications.[19]

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[18] Indeed, one website, www.broadcast.com, offers an Internet user access to 984 different radio and television stations. With real-time audio and video streaming capabilities, which are available for most web browsers, Internet users can listen to radio stations and watch TV broadcasts from around the world.

[19] In a working paper, the FCC Office of Plans and Policy explained that:

> [B]ecause the Internet is a dynamically routed, packet-switched network, only the origination point of an Internet connection can be identified with clarity. Users generally do not open Internet connections to "call" a discreet recipient, but access various Internet sites during the course of a single conversation.... One Internet "call" may connect the user to information both across the street and on the other side of the world.

The paper concludes that Internet traffic "has no built-in jurisdictional divisions." Kevin Werbach, *Digital Tornado: The Internet and Telecommunications Policy*, FCC, OPP Working Paper No. 29 (March 1997) at 45.

The inability to distinguish the jurisdictional nature of each communication that traverses an Internet connection coupled with the predominant interstate nature of Internet communications lead to the inescapable conclusion that Internet traffic is inseverable and must be considered jurisdictionally interstate.

III. CONCLUSION

ISP-bound traffic is inherently and inseverably interstate traffic. As such, it requires an interstate inter-carrier compensation mechanism over which the Commission maintains oversight authority. BellSouth has provided an approach to address inter-carrier compensation for ISP-

bound traffic that recognizes the interstate character of such traffic and is consistent with Commission policies and goals.

Respectfully submitted

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Date: April 12, 1999

CERTIFICATE OF SERVICE

I do hereby certify that I have this 12th day of April 1999 served the following parties to this action with a copy of the foregoing COMMENTS by hand delivery or by placing a true and correct copy of the same in the United States Mail, postage prepaid, addressed to the parties listed below.

*Magalie Roman Salas
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*ITS
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Washington, DC 20036

/s/
Juanita H. Lee

* VIA HAND DELIVERY

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Inter-Carrier Compensation	)	CC Docket No. 99-68
For ISP-Bound Traffic	)	

REPLY COMMENTS

BellSouth Corporation and BellSouth Telecommunications, Inc. ("BellSouth") hereby submit their Reply Comments in the above referenced proceeding.

I. INTRODUCTION

In this proceeding the Commission is considering adopting rules to govern inter-carrier compensation for interstate ISP-bound traffic. For some commenters, this proceeding is an opportunity for the Commission to "show me the money" and make inter-carrier compensation a euphemism for corporate welfare. Inter-carrier compensation becomes an excuse for transfer payments from ILECs to CLECs.

Inter-carrier compensation is more complex. The underlying concept is one in which all carriers participating in the provision of a jointly provided service are compensated for the jointly provided service. Thus, inter-carrier compensation necessarily involves consideration of the revenues associated with the jointly provided service because it is from such revenues that inter-carrier compensation is derived. In the case of ISP-bound traffic, the issue is more difficult because the Commission's access charge exemption policy constrains the prices that can be charged for ISP-bound traffic.

Calls for the Commission to emulate local reciprocal compensation schemes simply ignore the realities surrounding ISP-bound traffic. The decision the Commission must make in

this proceeding requires a more thoughtful and analytical approach if the Commission is going to foster fair competition and encourage the development of advanced services and technologies.

II. THE PARADIGM FOR INTER-CARRIER COMPENSATION

The CLECs and some enhanced service providers portray the Commission's decision here to be one of simply adopting an approach that mirrors the reciprocal compensation mechanisms reflected in local interconnection agreements.[1] All of these comments share the same fundamental shortcoming. These parties apparently believe that the only task before the Commission is simply to establish an interstate payment mechanism between carriers. None of these parties consider the interstate revenue sources from which such payments must come. It is the height of folly to suggest, as these parties do, that a usage-based compensation scheme that is not accompanied by a usage sensitive charge that would be assessed on either the ISP or the ISP's subscriber could be imposed by the Commission.

Interstate compensation and interstate revenue sources are two sides of the same coin. The revenue sources for interstate ISP-bound traffic are two: (1) the subscriber line charge assessed to the ISP's subscriber and (2) the service charge assessed to the ISP.[2] The subscriber line charge, however, does not even cover of the full interstate nontraffic sensitive costs associated with facilities between the subscriber's premises and the serving central office of that subscriber. The remaining interstate nontraffic sensitive costs, as well as the switching and

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[1] *See e.g.*, RCN at 6; CompTel at 2-5; Choice Communications 2-3; Focal at 14; AOL at 10; AT&T at 8.

[2] As further discussed below, the comments in this proceeding make clear that all ISP traffic should be treated as interstate. Even if there is some jurisdictionally intrastate components of ISP traffic, such components cannot be severed from interstate communications that predominate ISP traffic. Accordingly, the services used by ISPs should be treated as interstate with the revenues associated with such services considered interstate revenues.

trunking costs associated with the communications path to the ISP, in the interstate jurisdiction, would typically be recovered from the ISP. Indeed, the Commission has recognized that the main source of revenue for LECs transporting ISP-bound traffic are from the service charges that ISPs pay to use local exchange facilities. [3]

In light of these facts, it is remarkable that CLECs that serve ISPs contend that the Commission should implement an inter-carrier compensation scheme that would result in usage-based payments being made to the carrier that provides service to the ISP. In an arrangement where two carriers are providing service to establish the connection between the ISP and its subscriber, the carrier serving the ISP's subscriber currently receives no interstate revenue for its switching and trunking facilities that are used in making the connection to the ISP. It is patently absurd to impose a compensation obligation on the carrier that serves the ISP's subscriber unless the Commission concomitantly creates a new mechanism for that carrier to recover these additional costs.

In stark contrast to the proposals that call for the Commission to mimic local reciprocal compensation is BellSouth's revenue sharing approach. BellSouth's proposal is guided by and consistent with Commission precedent regarding inter-carrier compensation for jointly provided interstate services.[4] It recognizes, as the Commission does, that the primary revenue source for ISP-bound traffic is derived from the service provided to the ISP. Equally important, BellSouth's proposal ties the level of inter-carrier compensation directly to the level of

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[3] *See* In the Matter of Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Transport Rate Structure and Pricing and End User Common Line Charges, CC Docket Nos. 96-262, 94-1, 91-213 and 95-72, *First Report and Order*, 12 FCC Rcd 15982, 16133-16134 (1997).

[4] Numerous commenters urge the Commission to use the compensation mechanisms established for jointly provided access services.

compensation that carriers derive from the jointly provided service. The link between revenue and compensation has always been fundamental to the Commission's determinations regarding inter-carrier compensation for jointly provided access. This link is of no less importance to the ultimate resolution of the issue of inter-carrier compensation for ISP-bound traffic. Indeed, given the Commission's policies that surround enhanced services, the revenue/compensation link is a paramount consideration that cannot be ignored by the Commission.

A. The Commission Should Establish Guidelines Regarding Inter-Carrier Compensation

The comments reveal a consensus across a broad spectrum of parties participating in this proceeding that it is the Commission's responsibility to oversee inter-carrier compensation for interstate traffic and to adopt rules governing such compensation.[5] While there is a diversity of opinion regarding the specific content of the Commission's rules, most parties agree that the rules should provide guidelines including general principles governing such inter-carrier compensation and the procedures to be followed to establish compensation agreements.

Among the general principles to which most parties agree is that inter-carrier compensation agreements for ISP-bound traffic should be a product of negotiations. Negotiations have the benefit of enabling parties to recognize differing circumstances. With properly structured guidelines promulgated by the Commission, the concerns of some parties that negotiations would not be effective or fair are removed.[6] In its comments, BellSouth's proposed

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5 *See e.g.*, Focal at 8; RCN at 5; GSA at 12; CIX at 4; GST Telecom at 13.

6 *See e.g.*, Cox at 3; CT Cube and Leaco at 2; GST Telecom at 11-13.

a revenue sharing plan. The revenue sharing plan provides the foundation for the Commission to use in promulgating inter-carrier compensation guidelines. It would provide the parameters to be considered in the negotiation process, and, thus, provide a structured base upon which negotiations could take place.

B. Sections 251 And 252 Have No Applicability

One of the most significant differences among the parties arises in the context of the applicability of the negotiation and arbitration process set forth in Sections 251and 252 of the Communications Act. Many CLECs argue that inter-carrier compensation agreements regarding interstate ISP-bound traffic should be governed by the same process as local interconnection agreements.[7] Most just assert that the local interconnection agreements form the appropriate foundation for interstate ISP-bound traffic, and, thus, believe that the same process, including state commission arbitration of disputes, should apply.[8] A few attempt to rationalize having the state commissions oversee the negotiation and arbitration of inter-carrier compensation agreements because of a perceived inability of the Commission to fulfill its statutory obligations.[9] None of these parties, however, provide any legal basis that would support the application of Sections 251 and 252 to interstate ISP-bound traffic.

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7 There are some parties, such as MCIWorldCom, that dispute the Commission's jurisdictional determination regarding the interstate nature of ISP-bound traffic. They presume the traffic to be local and view the process regarding inter-carrier compensation to be no different than that for reciprocal compensation.

8 *See e.g.*, KMC Telecom at 2-5; CTSI at 11-13.

9 *See e.g.*, Focal at 7-8; ALTS at 8.

In its Comments, BellSouth demonstrated that neither Section 251 nor Section 252 govern interstate inter-carrier compensation.[10] The Act simply does not provide state commissions with any authority regarding interstate inter-carrier compensation. Nor can the Commission rewrite the Communications Act and vest state commissions with the power to regulate matters relating to interstate communications that, under the Act, are specifically reserved to the Commission.

The Commission has the responsibility to regulate interstate communications. It cannot delegate that responsibility to state commissions. Even if the Commission had the statutory authority to do so, which it does not, delegation to the state commissions would constitute poor public policy. ISP-bound traffic falls within the Commission's access charge exemption, a federal policy. The access charge exemption creates an interstate subsidy that clearly can be impacted by inter-carrier compensation. Accordingly, these matters require a cohesive, singular administration of policy. Such administration can and should only take place at the federal level.

C. Interstate Inter-carrier Compensation Should Not Mirror Local Reciprocal Compensation

Many of the CLECs urge the Commission to follow the local reciprocal compensation model, claiming that there is no difference between the transport and termination of local calls and jointly providing interstate service for ISP-bound traffic.[11] In these parties' view, a minute is a minute and there should be symmetry between these types of calls.

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[10] BellSouth at 4-5. Many parties share BellSouth's view. *See e.g.*, Frontier at 5-6; ICG at 3-5; SBC at 4-7.

[11] *See e.g.*, ALTS at 12-18; AT&T at 8; AOL at 10; CTSI at 5-7; Time Warner at 3-8; CompTel at 2.

These arguments are makeweight. There are minutes associated with local traffic, with access traffic and with toll traffic. These minutes are treated differently by regulators for policy reasons and more importantly, they are treated differently in interconnection agreements. To suggest that ISP-bound traffic should be treated as local traffic amounts to little more than an argument of convenience for the CLECs.

It would be the epitome of absurdity to contend that local exchange rates take into account and fully compensate the originating LEC for ISP-bound traffic. Despite the arguments by some that ISP-bound traffic has always been considered local, the fact remains that ISP-bound traffic characteristics were never considered when local rates were established. Further, the comments show that ISP-bound traffic bears little resemblance to local traffic.[12] Indeed, for BellSouth the typical call duration for a local call is between 3 and 4 minutes. On the other hand, an Internet session, on average, is between 20 and 25 minutes. There is simply no similarity between local exchange traffic and ISP-bound traffic.

A companion argument asserted by CLECs is that, like local exchange traffic, CLECs save incumbent LECs the costs for the portion of ISP-bound communication that they handle.[13] The fallacy in this argument is two-fold. First, the CLECs ignore the fact that they displace the primary revenue source for ISP-bound traffic. Next, they omit any mention of the additional costs that originating LECs have been incurring as a result of ISP-bound traffic. TANE, for example, pointed out the additional trunking costs the LECs are incurring because of the increase in ISP-bound traffic.[14] This proceeding is not the first time that the Commission was made

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12 *See e.g.*, NTCA at 3; TANE at 2.

13 *See e.g.*, RCN at 11.

14 TANE at 2.

aware that ISP-bound traffic was increasing public switched network costs and increasing network congestion. Three years ago the Commission was advised during its review of the access charge exemption that ISP-bound traffic was causing network congestion and that the exemption would continue to cause ISP use of the public switched network to grow and would require additional network investment if network quality was to be maintained.[15] The comments in this proceeding confirm prior LEC predictions. There is nothing that CLECs have done to lessen the additional cost burden associated with ISP-bound traffic. There is no substance to claims that incumbent LECs have experienced cost savings because CLECs serve ISPs. To the contrary their network costs are increasing because of the exponential growth of ISP-bound traffic with its peculiar traffic characteristics and these too are costs to be considered for compensation purposes.

The symmetry that CLECs want the Commission to establish is achieved, not by treating ISP-bound traffic like local, but rather by recognizing that interstate ISP-bound traffic is no different than any other interstate traffic that uses local exchange facilities. When ISP-bound traffic is considered in its proper context, it becomes evident that compensation is not an issue that is reserved to the carrier serving the ISP. It pertains to the entire connection between the ISP subscriber and the ISP. An inter-carrier compensation mechanism must consider not only costs but also the revenue sources for such compensation. This is precisely how BellSouth's revenue sharing proposal operates.

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[15] *See* Comments and Reply Comments filed in connection with the Commission's proceeding, In the Matter of Usage of the Public Switched Network by Information Service and Internet Access Providers, CC Docket No. 96-263, *Notice of Inquiry,* 11 FCC Rcd 21354 (1996).

D. ISP-Bound Traffic Is Jurisdictionally Inseverable

Some commenters use this proceeding to indirectly question the Commission's declaratory ruling that ISP-bound traffic is primarily interstate. Thus, often in arguing in favor of replicating the local reciprocal compensation model for ISP-bound traffic, some commenters describe the traffic as terminating at an ISP location. Others contend that an end-to-end analysis does not fit with Internet communications.

The Commission's declaratory ruling is not at issue here. Parties have adequate remedies, reconsideration or judicial review, to challenge the Commission's ruling. Nevertheless, it is clear that the Commission's jurisdictional determination is unassailable. The Commission's ruling reflects a consistent application of past Commission and judicial precedent. No party has shown otherwise.

What is clear from the comments, however, is that interstate and intrastate components of an Internet communication are inseverable.[16] No party's comments contradict the fact the ISP's do not track the jurisdictional nature of Internet traffic. Further, no commenter has shown that a practical mechanism with widespread availability exists for tracking the jurisdiction of Internet traffic. The inability to distinguish the jurisdictional nature of the communications that traverse Internet connections and the predominate interstate nature of Internet communications lead to the inescapable conclusion that Internet traffic is inseverable and must be considered jurisdictionally interstate.

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[16] ISP-bound traffic can be identified. Where two LECs jointly provide the ISP connection, the two LECs would have to cooperate and exchange information in order to identify ISP-bound traffic. For example, the LEC serving the ISP would have to provide the originating LEC with the ISP dial-up numbers. The Commission, in its order here, should unequivocally make clear that LECs jointly providing services must work cooperatively and share information that is necessary or required to properly identify ISP-bound traffic.

IV. CONCLUSION

The Commission must reject the call for inter-carrier compensation for interstate ISP-bound traffic to emulate local reciprocal compensation. Such an approach would be inconsistent with existing Commission policies such as the access charge exemption for enhanced services. To reconcile its access charge exemption and inter-carrier compensation for ISP-bound traffic, the Commission will have to consider not only the costs of providing interstate services, but also the revenues derived from providing such services. The revenue sharing approach presented by BellSouth in its comments takes these factors into account and, accordingly, should be adopted by the Commission.

Respectfully submitted,

BELLSOUTH CORPORATION
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Date: April 27, 1999

CERTIFICATE OF SERVICE

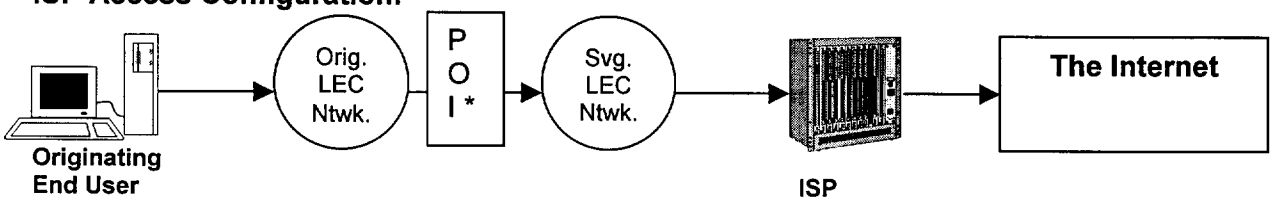
I do hereby certify that I have this 27th day of April 1999 served the following parties to this action with a copy of the foregoing REPLY COMMENTS by hand delivery or by placing a true and correct copy of the same in the United States Mail, postage prepaid, addressed to the parties listed on the attached service list.

/s/ Juanita H. Lee
Juanita H. Lee

BellSouth's Proposed Interim ISP Inter-carrier Access Service Compensation Plan

Plan Objective is to compensate the Originating LEC(s) for portion of cost incurred in transporting ISP-bound traffic to the Serving LEC. This plan would be in effect until the FCC establishes a usage-based compensation mechanism, at which time this plan would be re-evaluated and most likely revised.

ISP Access Configuration:



* Point Of Interface may be at the tandem or at the Serving LEC's premises

Summary of Proposed Interim Revenue Sharing Arrangement:

1) Each LEC that serves ISPs will be required to participate in this plan. Otherwise, only those parties that will benefit will participate – i.e., a LEC that originates more traffic to an ISP than it terminates to its own ISP will be a net receiver.

2) ISP pays Serving LEC the Serving LEC's business exchange service rate.

3) Each LEC that serves ISPs in a given LATA will be responsible for compensating LEC(s) that originate ISP traffic to the Serving LEC.

4) Facilities involved in carrying ISP-bound traffic to the ISP are as follows: Switching and Transport facilities are provided by both Originating LEC and Serving LEC and Loop facilities are provided by Serving LEC.

5) Serving LEC's PRI revenues will be shared by applying a "sharing percentage." Sharing percentage represents estimation of the proportion of its facilities that the Originating LEC uses to transport the ISP-bound MOUs to the Serving LEC. See Exhibit AJV-8 for BellSouth's calculation of its sharing percentage. BellSouth will apply the same sharing percentage to calculate the compensation due it when BellSouth is an Originating LEC as will be applied by the Originating LEC(s) when calculating compensation BellSouth owes when BellSouth is the Serving LEC.

6) Serving LEC shares its ISP revenues with Originating LECs as follows:

   a) Each Serving LEC will be responsible for identifying all minutes of use ("MOUs") which are ISP-bound that each Originating LEC delivers to the Serving LEC's network.

   b) Assume that, on average, each trunk (DS0 equivalent) carries 9000 MOUs per month (equates to 150 hours per trunk per month).

c) Based on ISP-bound MOUs identified by the Serving LEC and provided to the Originating LEC, the Originating LEC will calculate the quantity of DS1 facilities required to transport the Originating LEC's ISP-bound traffic to the Serving LEC as follows:
ISP-bound MOUs / 9000 avg MOUs per trunk / 24 trunks per DS1

d) Serving LEC will advise Originating LECs as to average PRI rate charged to ISPs.

e) Originating LEC calculates compensation due to it by the Serving LEC as follows:
Quantity of DS1s x Serving LEC's PRI rate x sharing percentage

f) Originating LEC bills Serving LEC on a quarterly basis.

g) The ISP-bound MOUs and the PRI rate as reported by the Serving LEC are subject to audit by the Originating LEC(s). The amount of compensation could be affected by results of an audit.

7) To the extent two parties have additional issues, contract negotiations between the parties can determine other terms and conditions. For example, due to technical capabilities, the two LECs may agree that the Originating LEC will identify the ISP-bound minutes of use.

The Serving LEC shares its revenues with the Originating LEC(s) via transport compensation

Illustrative Calculation with BellSouth as the Originating LEC and a CLEC as the Serving LEC

Assumptions:

Average MOUs per Trunk (DS0): 9,000
Serving LEC's PRI Rate: $850

COL. A	COL. B	COL.C	COL. D	COL. E	COL. F
Originating LEC	**Number of originating ISP minutes delivered to Serving LEC** **NOTE (1)**	**Number of Equivalent Transport DS1s** **NOTE (2)**	**Serving LEC's PRI Rate** **NOTE (3)**	**Sharing %** **NOTE (4)**	**Compensation due from Serving LEC to Originating LEC** **NOTE (5)**
BellSouth	55,000,000	254.63	$850.00	9.4%	$20,344.37

NOTES:
(1) ISP-bound MOUs identified/provided by Serving LEC & provided to Originating LEC
(2) Col. C calculated as follows: Col. B / 9000 MOUs per trunk / 24 trunks per DS1
(3) Col. D is the Serving LEC's PRI Rate
(4) Col. E is BellSouth's calculated sharing percentage from Exhibit AJV-8
(5) Col. F calculated as follows: Col. C * Col. D * Col. E

Calculation of Sharing Percentage

Sharing percentage is calculated by determining ratio of loop-related switching and transport facilities capital cost to total capital cost, then dividing by two since both Originating LEC and Serving LEC provide switching and transport facilities. BellSouth's sharing percentage is calculated as follows:

Loop Capital Cost	= $20.31
Associated Loop Switching Capital Cost	= $4.43
Associated Loop Transport Capital Cost	= $0.27
Total Capital Cost	= $25.01

(($4.43 + $.27) / $25.01) / 2 = .094

Therefore, BellSouth will apply a sharing percentage of 9.4% to calculate the compensation due it when BellSouth is an Originating LEC. Likewise, when BellSouth is the Serving LEC, BellSouth expects that the Originating LEC(s) will apply a sharing percentage of 9.4% when calculating compensation BellSouth owes.

