CASE NUMBER:

99-218

BELLSOUTH

BellSouth Telecommunications, Inc.
P. O. Box 32410
Louisville, Kentucky 40232
or
BellSouth Telecommunications, Inc.
601 West Chestnut Street, Room 407
Louisville, Kentucky 40203

502 582-8219
Fax 502 582-1573
Internet
Creighton.E.Mershon@bridge.bellsouth.com

Creighton E. Mershon, Sr.
General Counsel – Kentucky

October 21, 1999

RECEIVED
OCT 21 1999
PUBLIC SERVICE COMMISSION

Helen C. Helton
Executive Director
Public Service Commission
730 Schenkel Lane
P. O. Box 615
Frankfort, KY 40602

Re: Petition by ICG Telecom Group, Inc. for Arbitration of an Interconnection Agreement with BellSouth Telecommunications, Inc. pursuant to Section 252(b) of the Telecommunications Act of 1996
PSC 99-218

Dear Helen:

Enclosed for filing in above-captioned case are the original and ten (10) copies of BellSouth Telecommunications, Inc.'s testimony. Appearing on behalf of BellSouth are: D. Daonne Caldwell, Jerry Hendrix, and Dr. William E. Taylor. The relevant cost studies, including workpapers, are provided as an exhibit (DDC-1) to Caldwell's testimony. A portion of Exhibit DDC-1 contains confidential, commercial, or proprietary information and, pursuant to 807 KAR 5:001, Section 7, enclosed is BellSouth Telecommunications' Petition for Confidentiality.

One copy of the proprietary information, along with a CD ROM containing the proprietary information, is provided to the Commission. A copy of each is provided to ICG and its counsel pursuant to a previously-executed Protective Agreement in this case. The original and ten (10) redacted copies of the confidential information is provided for the Commission.

Sincerely

Creighton Mershon

Creighton E. Mershon, Sr.

Enclosures

cc: Parties of Record

182695

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was served on the individuals on the attached Service List by mailing a copy thereof, this 21st day of October 1999.

Creighton Mershon

Creighton E. Mershon, Sr.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

PETITION BY ICG TELECOM GROUP, INC. FOR ARBITRATION OF AN INTERCONNECTION AGREEMENT WITH BELLSOUTH TELECOMMUNICATIONS, INC. PURSUANT TO SECTION 252(B) OF THE TELECOMMUNICATIONS ACT OF 1996	)	CASE NO. 99-218

CONFIDENTIALITY PETITION
PURSUANT TO 807 KAR 5:001, SECTION 7

Petitioner, BellSouth Telecommunications, Inc., ("BellSouth" or the "Company"), by counsel, hereby moves the Public Service Commission of the Commonwealth of Kentucky (the "Commission"), pursuant to 807 KAR 5:001, Section 7, to treat that portion of the exhibit, Exhibit DDC-1, to Caldwell's testimony, filed October 21, 1999, and highlighted in green, as confidential in accordance with the Commission's regulations.

The Kentucky Open Records Act exempts certain commercial information from the public disclosure requirements of the Act. KRS 61.878(1)(b). To qualify for this commercial information exemption and, therefore, keep the information confidential, a party must establish that disclosure of the commercial information would permit an unfair advantage to competitors of the party seeking confidentiality if openly discussed. KRS 61.878(1)(b); 807 KAR 5:001, § 7. The Commission has taken the position that the statute and rules require the party to demonstrate actual competition and a likelihood of competitive injury if the information is disclosed.

The material which BellSouth seeks to protect contains vendor-specific pricing information and confidential business information that is considered proprietary to BellSouth. Public disclosure of this information would provide BellSouth's competitors with an advantage. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing and overall business strategies. This information relates to the competitive interests of BellSouth and disclosure would impair the competitive business of BellSouth as well as the third party vendors. This information has been held confidential by the Commission in previous dockets. For these reasons, the information is considered proprietary.

Several of BellSouth's current competitors, including Petitioner, AT&T, and MCI, have publicly announced their intention to enter, or in fact have entered, the local exchange market. Additionally, several potential competitors have likewise indicated their intention to enter the local exchange market to compete with BellSouth. Cost information such as that requested here would be extremely valuable to competitors in developing competitive business strategies, networks and operations, designing their service offerings and, marketing plans for those services. In addition, BellSouth is not able to obtain its competitor's cost to provide service assigned to various business units and, therefore, it is inequitable and unfair for BellSouth's competitors to have access to the Company's cost information. The Company's present and potential competitors for its local exchange services include cable television companies, cellular service providers, personal communications service providers, customer-owned coin operated telephone providers and others.

Public disclosure of any of the proprietary confidential information contained in the cost studies cited in this petition will be harmful to BellSouth by adversely affecting the market, revenue potential and competitive position of its services.

As further grounds for this Petition, BellSouth states as follows:

(1) The information as to which BellSouth is requesting confidential treatment is not known outside of BellSouth;

(2) The information is not disseminated within BellSouth and is known only by those BellSouth's employees who have a legitimate business need to know and act upon the information;

(3) BellSouth seeks to preserve the confidentiality of this information through all appropriate means, including the maintenance of appropriate security at its offices;

(4) The disclosure of this information would cause competitive injury to BellSouth in that it would provide BellSouth's competitors with sensitive financial data with respect to certain of BellSouth's services; and

(5) By granting BellSouth's Petition there would be no damage to any public interest in disclosure. In fact, the public would be best served by non-disclosure because competition would thereby be promoted.

For the foregoing reasons, BellSouth asks that its petition for confidential treatment of that portion of the exhibit, Exhibit DDC-1, to Caldwell's testimony, filed October 21, 1999, and highlighted in green, be granted.

Respectfully submitted,

Creighton Mershon

Creighton E. Mershon, Sr.
General Counsel-Kentucky
601 W. Chestnut Street, Room 407
P. O. Box 32410
Louisville, KY 40232

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183421

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Caldwell

KENTUCKY DOCKET NO. 99-218

ICG ARBITRATION

PUBLIC VERSION

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OCT 1 3 1999

PUBLIC SERVICE COMMISSION

BELLSOUTH

BellSouth Telecommunications, Inc.
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Creighton E. Mershon, Sr.
General Counsel – Kentucky

October 12, 1999

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OCT 1 3 1999

PUBLIC SERVICE COMMISSION

Helen C. Helton
Executive Director
Public Service Commission
730 Schenkel Lane
P. O. Box 615
Frankfort, KY 40602

Re: Petition by ICG Telecom Group, Inc. for Arbitration of an Interconnection Agreement with BellSouth Telecommunications, Inc. pursuant to Section 252(b) of the Telecommunications Act of 1996
PSC 99-218

Dear Helen:

Enclosed for filing in the above-captioned case are the original and ten (10) copies of BellSouth Telecommunications, Inc.'s Responses to ICG Telecom Group, Inc.'s Data Requests to BellSouth Telecommunications, Inc. filed September 29, 1999.

Sincerely,

Creighton Mershon

Creighton E. Mershon, Sr.

Enclosures

cc: Parties of Record

182157

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was served on the individuals on the attached Service List by mailing a copy thereof, this 12th day of October 1999.

Creighton Mershon

Creighton E. Mershon, Sr.

SERVICE LIST - PSC 99-218

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Bruce Holdridge
ICG Communications, Inc.
180 Grand Avenue
Suite 1000
Oakland, CA 94612

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, who being by me first duly sworn, deposed and said that:

She is appearing as a witness before the Kentucky Public Service Commission in Case No. 99-218 on behalf of BellSouth Telecommunications, Inc., and if present before the Commission and duly sworn, her rebuttal testimony would be as set forth in the annexed testimony consisting of 7 pages and 1 exhibit (s).

D. Daonne Caldwell

D. Daonne Caldwell

SWORN TO AND
SUBSCRIBED BEFORE ME
this the 19th day
of October, 1999.

Micheale F. Holcomb

NOTARY PUBLIC

My Commission expires:

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

BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF D. DAONNE CALDWELL

BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION

CASE NO. 99-218

OCTOBER 21, 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"). 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. Additionally, 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, 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, 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 present the cost study results for the network capabilities requested in the ICG Telecom Group, Inc. ("ICG") Petition for Arbitration for which rates have not already been established by the Kentucky Public Service Commission ("Commission"). Additionally, I describe the underlying cost methodology used in this study. Attached to this testimony, as Exhibit DDC-1 is BellSouth's cost study which includes an executive overview, a summary of results, element descriptions, factor development, TELRIC Calculator©[1] input and outputs, and investment development work papers. Below is a summary of the cost study results:

	Cost Element	Recurring	Nonrecurring
N.1	UNBUNDLED PACKET SWITCHING FRAME RELAY		
N.1.1	UPS - UNI/NNI FRS 56 KBPS	$27.85	$236.39
N.1.2	UPS - UNI/NNI FRS 64 KBPS	$27.85	$236.39
N.1.3	UPS - UNI/NNI FRS 1.536 MBPS	$96.82	$254.97
N.1.4	UPS - UNI/NNI FRS 44.210 MBPS	$670.72	$371.95
N.1.5	UPS - UNI/NNI FRS - DLCI Additional		$82.52
N.1.6	UPS - UNI/NNI FRS CIR - 0 BPS	$0.1071	
N.1.7	UPS - UNI/NNI FRS CIR - 1 – 32 KBPS	$0.5354	
N.1.8	UPS - UNI/NNI FRS CIR - 32 – 56 KBPS	$0.9369	
N.1.9	UPS - UNI/NNI FRS CIR - 56 – 64 KBPS	$1.07	
N.1.10	UPS - UNI/NNI FRS CIR - 64 – 128 KBPS	$2.14	
N.1.11	UPS - UNI/NNI FRS CIR - 128 - 256 KBPS	$4.28	
N.1.12	UPS - UNI/NNI FRS CIR - 256 - 384 KBPS	$6.42	
N.1.13	UPS - UNI/NNI FRS CIR - 384 - 512 KBPS	$8.57	
N.1.14	UPS - UNI/NNI FRS CIR - 512 - 768 KBPS	$12.85	
N.1.15	UPS - UNI/NNI FRS CIR - 768 - 1.536 MBPS	$25.70	
N.1.16	UPS - UNI/NNI FRS CIR - 1.536 - 4 MBPS	$64.25	
N.1.17	UPS - UNI/NNI FRS CIR - 4 – 10 MBPS	$162.76	
N.1.18	UPS - UNI/NNI FRS CIR - 10 – 16 MBPS	$260.20	
N.1.19	UPS - UNI/NNI FRS CIR - 16 – 34 MBPS	$553.39	
N.1.20	UPS - UNI/NNI FRS CIR - 34 – 44.210 MBPS	$719.57	
N.1.21	UPS – UNI/NNI FRS CIR – Feature Change		$31.16
N.1.22	UPS – UNI/NNI FRS CIR – Transfer of Service		$13.27

BellSouth witness, Mr. Jerry Hendrix, addresses the rates BellSouth is proposing that are based upon these costs.

Q. WHAT ARBITRATION ISSUE DOES THE COST STUDY ADDRESS?

A. Issue #3, which states: "Should BellSouth be required to make available as UNEs packet-switching capabilities?" The cost study conducted for this arbitration determines the Total Element Long Run Incremental Cost ("TELRIC") for packet-switching capabilities based on a frame relay architecture.

Q. WHAT TYPES OF COSTS ARE REFLECTED IN THE 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 include five major categories of activity: service inquiry, service order, engineering, connect and test, and technician travel time.

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

A. Yes. BellSouth's cost methodology is not only compliant with the Act, but also with the FCC's First Report and Order. BellSouth utilized the FCC's published TELRIC methodology as a guideline in producing cost support for unbundled network elements. Thus, the costs are forward-looking and reflect an efficient network design based on existing wire center locations.

Specifically, 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 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.

Q. WHAT COST METHODOLOGY IS USED IN THE COST STUDY?

A. The cost study is based on the study methodology accepted by this Commission in its Orders in Case Nos. 96-431 (MCI arbitration) and 96-482 (AT&T arbitration). These orders established rates for numerous network capabilities, ranging from 2-Wire Analog Loop to Physical Collocation. In its Order in Case No. 96-482, the Commission stated that "BellSouth's TELRIC studies use engineering process models and certain accounting data to estimate its forward-looking TELRIC costs." (Order at Page 18) BellSouth adhered to the TELRIC methodology in the studies submitted in this case.

Q. PLEASE PROVIDE SOME BACKGROUND TO CASE NOS. 96-431 AND 96-482.

A. BellSouth filed cost studies to support permanent prices for unbundled network elements in these cases. Subsequent to these studies, BellSouth introduced a new cost model, the TELRIC Calculator©. As I mentioned previously, the TELRIC Calculator© was used to develop the costs presented in this case. The TELRIC Calculator© is the mechanism that performs the mathematical exercises, previously performed on spreadsheets (as in Case Nos. 96-431 and 96-482), that appropriately applies the correct inflation factors, loadings, annual cost factors, labor rates, tax factors, and shared and common factors to the inputs. However, the TELRIC Calculator© goes beyond merely applying factors and labor rates. It allows the user to change inputs and run and store different scenarios. Also, as part of the model, the user can change the economic parameters (such as the cost of debt, cost of equity, and debt/equity ratio) that are used to determine the annual cost factors. Additionally, to ensure consistency between studies, the TELRIC Calculator© serves as the warehouse for the default annual cost factors, labor rates, loading factors, and inflation factors.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. The cost study filed in this proceeding determines Kentucky-specific TELRIC economic costs for the network capabilities requested by ICG. The costs were developed using the basic study methodology and approved input values previously authorized by this Commission in Case Nos. 96-431 and 96-482.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

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SECTION 1
EXECUTIVE SUMMARY

STATEMENT OF PURPOSE

ICG Telecom Group, Inc. filed a Petition for Arbitration with the Kentucky Public Service Commission (KPSC). The petition requested the settlement of rates for some network capabilities for which the KPSC 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 BellSouth's Total Element Long Run Incremental Cost (TELRIC) studies, including common costs, for the requested network capabilities.

BellSouth TELRIC Calculator
Unbundled Network Cost Elements Summary Report
Kentucky
Base Case

9/29/99

	Cost Element	Recurring	Non Recurring	First	Non-Recurring Additional	Initial	Subsequent
N.0	UNBUNDLED PACKET SWITCHING						
N.1	UNBUNDLED PACKET SWITCHING FRAME RELAY						
N.1.1	UPS - UNI/NNI FRS 56 KBPS	$27.85	$236.39				
N.1.2	UPS - UNI/NNI FRS 64 KBPS	$27.85	$236.39				
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N.1.21	UPS - UNI/NNI FRS CIR - Feature Change		$31.16				
N.1.22	UPS - UNI/NNI FRS CIR - Transfer of Service		$13.27				

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.

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.

KENTUCKY DOCKET NO 99-218
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.

KENTUCKY DOCKET NO 99-218
SECTION 3
INPUTS - LOADINGS AND FACTORS

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.

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.

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 is 11.25%.

The capital structure is:

Percent equity	60.0%
Percent debt	40.0%

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Cost of debt	6.5%
Cost of equity	14.4167%
Overall Cost of Money	11.25%

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 = .3872

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:

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

$$\Phi = \frac{.3872}{1 - .3872} \times \left(1 - \frac{.40(.0650)}{.1125}\right)$$

$\Phi = .485825$

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 .485825

Income Tax Factor = .033685

7) Summary of Capital Cost Factors:

Depreciation Expense Factor	.090000
Cost of Money Factor	.069335
Income Tax Factor	.033685
Total Capital Cost Factors	.193020

3. Shared and Common Cost Model

Process Overview

In order to develop factors that reflect a distribution of a) shared costs to distinct network elements or facilities and b) common costs which span the activities of the business, BellSouth designed a process, in compliance with FCC pronouncements, that employed cost assignments based on the Cost Separation System (CSS) methodology. This methodology permitted the utilization of the cost attribution principles underlying the Cost Allocation Manual (CAM) approved by the FCC. These principles provide a structural "cost causative" basis for assigning costs to network related plant or to non-network related groupings (Common, Non-Recurring Costs, Retail, etc.).

Base Period Data

In order to gather base period cost profile data, regulated 1995 expenses and mid-year 1995 investment amounts were extracted from CSS. In addition, the related salary and wage amounts were retrieved from files maintained by CSS for use in the apportionment processes. The data was retrieved by Account, Field Reporting Code/Subsidiary Record Category (FRC/SRC), Cost Pool, Cost Sub-Pool, Expense Matrix Indicator (EMI), and Account Type as appropriate.

Planning Period Data

Factors were applied to the base period data at a cost pool/sub-pool level to develop average annual costs for the 1997-1999 period. As a first step in this part of the process, the 1995 expenses and salary and wage amounts were multiplied by the 1997-1999 Expense/Salary & Wage Development Factors to develop the related average annual expenses and salary and wage amounts for the 1997-1999 period. Next, mid-year 1995 investment amounts were multiplied by the 1997-1999 Investment Development Factors to develop the average 1997-1999 investment levels. Finally, the 1997-1999 average investment levels were converted to average annual capital related costs when the Capital Cost and Ad Valorem Factors were applied.

Cost Attribution Process

For those accounts where there were direct, cost causative relationships between expense accounts and related investment accounts, a reclassification process was performed to combine the expenses and capital costs of the related accounts. As an example, Account 6112 Motor Vehicle maintenance expense was combined with Account 2112 Motor Vehicle capital related costs. Most of the plant specific expenses have a direct, cost-causative relationship with either a general support or network investment account. This occurs on the "Reclass - Step One" worksheet of the S&CMOD.XLW workbook.

After the above-referenced reclassifications, the remaining expenses and support asset costs (Accounts 61XX, 65XX, 66XX, 67XX, 1220, 21XX, and 26XX) were assigned by applying factors based on the cost attribution principles underlying the CAM. Apportionment factors were developed on a cost pool/sub-pool basis reflecting salary and wage relationships, investment relationships, or expense relationships. This occurs on the "Attribution Factors - Step Two" worksheet of the S&CMOD.XLW workbook.

Following the first iteration of cost assignments, a reclassification of assigned costs was made to associate costs which, by their nature, were assignable to related accounts or to final non-network related groupings. This reclassification was made to facilitate analysis and understanding prior to the next iteration of cost assignments. This occurs on the "Reclass - Step Three" worksheet of the S&CMOD.XLW workbook.

During the first iteration of cost assignments, some apportionments were made to support type accounts; and therefore, a second iteration of cost assignment was required to appropriately distribute support type costs on a cost causative basis. The second iteration of cost assignment included computer costs (Account 6124) (occurring on the "Reclass - Step Three" worksheet), provisioning expenses (Account 6512) (occurring on the "Attribution Factors - Step Four" worksheet), and network operations expenses (Accounts 653X) (also on "Attribution Factors - Step Four").

Shared Factor Development

After the second iteration of cost assignment, a final reclassification was required to associate the remaining costs with either a network related account or with a non-network related grouping. The cost assignments that were associated with network related accounts were then divided by the related 1997-1999 investment amounts in order to develop the shared factors. Each shared factor was subsequently used in the Total Element Long Range Incremental Cost (TELRIC) studies to develop the shared cost associated with a specific network related investment.

Shared labor factors were developed from the costs that were attributed exclusively on the basis of salary and wage apportionments. The salary and wage based attributed costs were summarized by work force group and divided by the total salary and wage amounts for that work force group to develop the shared labor factor for the work force group. The shared labor factors were subsequently applied to direct labor rates for each work force group to develop a TELRIC labor rate.

Common Cost Factor Development

In the steps of the process outlined above, some costs, though common in nature, have wholesale/retail attributions that facilitate an assignment to the wholesale or retail category. These costs are sometimes referred to as directly assigned common costs. Other common costs, having no reasonable cost causation basis, were allocated to the wholesale and retail categories on the basis of the relationship between total wholesale costs and total retail costs.

Total wholesale common costs were developed by summing the directly assigned wholesale common costs and the allocated wholesale common costs. The common cost factor was developed by dividing the total wholesale common costs by the total wholesale costs excluding the common portion. The TELRIC cost for each Unbundled Network Element (UNE) was subsequently multiplied by the common cost factor in order to complete the development of a forward looking economic cost as defined by the FCC.

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.

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.

POLE AND CONDUIT LOADINGS

Pole and conduit loadings are translators used to determine the amount of investment in poles and conduit that is to be associated with aerial and underground cable investment in the cost studies. When the aerial cable investment is multiplied by the pole loading, the investment is loaded for the amount of pole investment associated with aerial cable. When the underground cable investment is multiplied by the conduit loading, the investment is loaded for the amount of conduit investment associated with underground cable.

The pole loading is developed by comparing the investment in poles to the investment in aerial cable. A ratio is then developed that allows each dollar of aerial cable investment to include a fraction of the pole investment. The conduit loading is developed by comparing the investment in conduit to the investment in underground cable. A ratio is then developed that allows each dollar of underground cable investment to include a fraction of the conduit investment.

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). 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 pole loading is developed by dividing the average pole investment by the average aerial cable investment. The conduit loading is developed by dividing the average conduit investment by the average underground cable investment.

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A worksheet showing the Pole and Conduit Loadings development is 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.

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.

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. The cost of money utilized in these studies is 11.25%.

INCOME TAX - the composite of income taxes paid to the Federal and Kentucky 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:

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

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. The overall cost of money used in this study is 11.25%.

Income tax expense reflects the federal and Kentucky 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:

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

Capital Cost Calculator Model 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 ad valorem and other tax factor is an effective tax factor furnished by the BellSouth Tax Department. The BellSouth Tax Department develops the factor by calculating the ratio of certain tax expense to the telephone plant in service, as follows:

$$\frac{\text{Accounts } 7240.1000 + 7240.3000 + 7240.9000}{\text{Telephone Plant In Service}}$$

Account 7240.1000 includes taxes levied upon the assessed value of property.

Account 7240.3000 includes taxes levied upon the value or number of shares of outstanding capital stock, upon invested capital, upon rate of dividends paid, etc.

Account 7240.9000 includes other non-income, non-revenue taxes such as municipal license taxes, state privilege taxes, state self-insurer's tax, etc.

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.

SHARED AND COMMON COST ALLOCATION FACTORS

See the discussion of the Shared and Common Model in Section 3.

KENTUCKY DOCKET NO 99-218
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 study included in this filing is 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 is a narrative describing the elements, study technique, and specific study assumptions. After the narrative are the TELRIC Calculator© outputs. Following the TELRIC Calculator© outputs, are Microsoft Excel spreadsheets containing the inputs and associated work papers.

Kentucky TELRIC Summary

		Filename
A.0	**UNBUNDLED LOCAL LOOP**	
N.0	**UNBUNDLED PACKET SWITCHING**	
N.1	***UNBUNDLED PACKET SWITCHING FRAME RELAY***	
N.1.1	UPS - UNI/NNI FRS 56 KBPS	kyfrsune.xls
N.1.2	UPS - UNI/NNI FRS 64 KBPS	kyfrsune.xls
N.1.3	UPS - UNI/NNI FRS 1.536 MBPS	kyfrsune.xls
N.1.4	UPS - UNI/NNI FRS 44.210 MBPS	kyfrsune.xls
N.1.5	UPS - UNI/NNI FRS - DLCI Additional	kyfrsune.xls
N.1.6	UPS - UNI/NNI FRS CIR - 0 BPS	kyfrsune.xls
N.1.7	UPS - UNI/NNI FRS CIR - 1 - 32 KBPS	kyfrsune.xls
N.1.8	UPS - UNI/NNI FRS CIR - 32 - 56 KBPS	kyfrsune.xls
N.1.9	UPS - UNI/NNI FRS CIR - 56 - 64 KBPS	kyfrsune.xls
N.1.10	UPS - UNI/NNI FRS CIR - 64 - 128 KBPS	kyfrsune.xls
N.1.11	UPS - UNI/NNI FRS CIR - 128 - 256 KBPS	kyfrsune.xls
N.1.12	UPS - UNI/NNI FRS CIR - 256 - 384 KBPS	kyfrsune.xls
N.1.13	UPS - UNI/NNI FRS CIR - 384 - 512 KBPS	kyfrsune.xls
N.1.14	UPS - UNI/NNI FRS CIR - 512 - 768 KBPS	kyfrsune.xls
N.1.15	UPS - UNI/NNI FRS CIR - 768 - 1.536 MBPS	kyfrsune.xls
N.1.16	UPS - UNI/NNI FRS CIR - 1.536 - 4 MBPS	kyfrsune.xls
N.1.17	UPS - UNI/NNI FRS CIR - 4 - 10 MBPS	kyfrsune.xls
N.1.18	UPS - UNI/NNI FRS CIR - 10 - 16 MBPS	kyfrsune.xls
N.1.19	UPS - UNI/NNI FRS CIR - 16 - 34 MBPS	kyfrsune.xls
N.1.20	UPS - UNI/NNI FRS CIR - 34 - 44.210 MBPS	kyfrsune.xls
N.1.21	UPS - UNI/NNI FRS CIR - Feature Change	kyfrsune.xls
N.1.22	UPS - UNI/NNI FRS CIR - Transfer of Service	kyfrsune.xls

N.0	UNBUNDLED PACKET SWITCHING
N.1	UNBUNDLED PACKET SWITCHING FRAME RELAY
N.1.1	UPS – UNI/NNI FRS 56 KBPS
N.1.2	UPS – UNI/NNI FRS 64 KBPS
N.1.3	UPS – UNI/NNI FRS 1.536 MBPS
N.1.4	UPS – UNI/NNI FRS 44.210 MBPS
N.1.5	UPS – UNI/NNI FRS – DLCI ADDITIONAL
N.1.6	UPS – UNI/NNI FRS CIR – 0 BPS
N.1.7	UPS – UNI/NNI FRS CIR – 1-32 KBPS
N.1.8	UPS – UNI/NNI FRS CIR – 32-56 KBPS
N.1.9	UPS – UNI/NNI FRS CIR – 56-64 KBPS
N.1.10	UPS – UNI/NNI FRS CIR – 64-128 KBPS
N.1.11	UPS – UNI/NNI FRS CIR – 128-256 KBPS
N.1.12	UPS – UNI/NNI FRS CIR – 256-384 KBPS
N.1.13	UPS – UNI/NNI FRS CIR – 384-512 KBPS
N.1.14	UPS – UNI/NNI FRS CIR – 512-768 KBPS
N.1.15	UPS – UNI/NNI FRS CIR – 768-1.536 MBPS
N.1.16	UPS – UNI/NNI FRS CIR – 1.536-4 MBPS
N.1.17	UPS – UNI/NNI FRS CIR – 4-10 MBPS
N.1.18	UPS – UNI/NNI FRS CIR – 10-16 MBPS
N.1.19	UPS – UNI/NNI FRS CIR – 16-34 MBPS
N.1.20	UPS – UNI/NNI FRS CIR –34-44.210 MBPS
N.1.21	UPS – UNI/NNI FRS – FEATURE CHANGE
N.1.22	UPS – UNI/NNI FRS - TRANSFER OF SERVICE

Element Description

In general, Frame Relay is a connection-oriented packet mode technology based on X.25 standards. With Frame Relay, data is taken from the end-device terminal, packaged into variable length frames, and transported through the network on predefined logical channels. Frame Relay currently offers one version, Permanent Virtual Circuits (PVC) that allows the user to set-up a series of point-to-point virtual circuits through the network.

One of the basic components of Unbundled Packet Switching for Frame Relay is the user network interface, or port, that provides the end user (the ALEC) connection to the Fast Packet switched network. These ports are available at line rates of 56Kbps, 64Kbkps, 1.536Mbps, and 44.210Mbps. Elements N.1.1 through N.1.4 correspond to these various port speeds.

Data Link Connection Identifier (DLCI) (element number N.1.5) provides an address by which Frame Relay data links can be identified and mapped together to provide an end-to-end permanent virtual circuit.

Committed Information Rate (CIR) is a feature that allows the ALEC to select a sustained throughput under normal conditions. CIR is offered at various rates as reflected in elements N.1.6 through N.1.20.

A Feature Change Charge (element N.1.21) applies whenever a change is made (at the ALEC's request) to a single optional feature within a single network configuration on a single switch.

Service may be transferred to a new customer at the same location upon prior written concurrence by the new customer. This does not constitute a disconnect of service or a discontinuance of an existing arrangement. (Element N.1.22)

Study Technique

Microsoft Excel spreadsheets were used to develop the UNE material prices and/or investments for these UNEs. To develop recurring costs, each element was analyzed to determine the required components, the utilization levels, and the appropriate quantities. These items were used to develop the utilized unit material prices. To develop nonrecurring costs, network personnel familiar with the provisioning of the elements, provided time estimates by job function code.

Specific Study Assumptions

- Costs of the card are allocated between the port and the CIR (80%/20%).
- The right-to-use fees (RTU) are developed on a per port basis and are amortized over five years.

Recurring Cost Summary

Kentucky
N.1.1 - UPS - UNI/NNI FRS 56 KBPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Recurring Cost Devel. Sheets Cols L, N, & O	$22.6304	$2.4831	$25.1135			$0.0000
Other Expenses						
Software Cost per Port per Month	$1.2655	$0.0000	$1.2655	$0.0000	$0.0000	$0.0000
Total Monthly Cost	$23.8958	$2.4831	$26.3789	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0026			X 1.0026
Cost (including Gross Receipts Tax)			$26.4485			$0.0000
Common Cost Factor			X 1.0530			X 1.0530
Monthly Economic Cost			$27.8503			$0.0000

Total Monthly Economic Cost : $27.8503

000032

KENTUCKY DOCKET NO 99-218
SECTION 5
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

KENTUCKY DOCKET NO 99-218
SECTION 5
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

N.0	UNBUNDLED PACKET SWITCHING
N.1	UNBUNDLED PACKET SWITCHING FRAME RELAY
N.1.1	UPS – UNI/NNI FRS 56 KBPS
N.1.2	UPS – UNI/NNI FRS 64 KBPS
N.1.3	UPS – UNI/NNI FRS 1.536 MBPS
N.1.4	UPS – UNI/NNI FRS 44.210 MBPS
N.1.5	UPS – UNI/NNI FRS – DLCI ADDITIONAL
N.1.6	UPS – UNI/NNI FRS CIR – 0 BPS
N.1.7	UPS – UNI/NNI FRS CIR – 1-32 KBPS
N.1.8	UPS – UNI/NNI FRS CIR – 32-56 KBPS
N.1.9	UPS – UNI/NNI FRS CIR – 56-64 KBPS
N.1.10	UPS – UNI/NNI FRS CIR – 64-128 KBPS
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N.1.17	UPS – UNI/NNI FRS CIR – 4-10 MBPS
N.1.18	UPS – UNI/NNI FRS CIR – 10-16 MBPS
N.1.19	UPS – UNI/NNI FRS CIR – 16-34 MBPS
N.1.20	UPS – UNI/NNI FRS CIR –34-44.210 MBPS
N.1.21	UPS – UNI/NNI FRS – FEATURE CHANGE
N.1.22	UPS – UNI/NNI FRS - TRANSFER OF SERVICE

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Service may be transferred to a new customer at the same location upon prior written concurrence by the new customer. This does not constitute a disconnect of service or a discontinuance of an existing arrangement. (Element N.1.22)

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Specific Study Assumptions

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- The right-to-use fees (RTU) are developed on a per port basis and are amortized over five years.

Recurring Cost Summary

Kentucky
N.1.1 - UPS - UNI/NNI FRS 56 KBPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$22.6304	$2.4831	$25.1135			$0.0000
Other Expenses						
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Total Monthly Cost	$23.8958	$2.4831	$26.3789	$0.0000	$0.0000	$0.0000
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Cost (including Gross Receipts Tax)			$26.4485			$0.0000
Common Cost Factor			X 1.0530			X 1.0530
Monthly Economic Cost			$27.8503			$0.0000

Total Monthly Economic Cost : $27.8503

000032

9/29/99

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

Kentucky
N.1.1 - UPS - UNI/NNI FRS 56 KBPS

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	E=Cx(D_1xD_2 x...xD_5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Hardwired - SE&P	377C	07	$4.9381	0.9833	$4.8555	1.0000	1.0000	1.0000	1.0000	2.7775	$13.4860	1.1291	$15.2271
Digital Elec Switch - C.O. Com. Plug-In - SE&P	377C	08	$109.9647	0.9833	$108.1247	1.0000	1.0000	1.0000	1.0600	1.0000	$114.6122	1.1291	$129.4086
Digital Elec Switch - C.O. Combined - SE&P	377C	09	$24.9920	0.9833	$24.5738	1.0000	1.3719	1.0000	1.0000	1.0000	$33.7128	1.1291	$38.0651
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$192.7575	0.9833	$189.5320	1.0930	1.0000	1.0000	1.0600	1.0000	$219.5880	1.1291	$247.9369
Digtl Circ - Other - C.O. - Hardwired - MCEP	357C	03	$85.3228	0.9635	$82.2113	1.0000	1.0000	1.0000	1.0000	3.2096	$263.8621	1.0833	$285.8418
Digtl Circ - Other - C.O. - Com. Plug-in - MCEP	357C	06	$34.4099	0.9635	$33.1551	1.0000	1.0000	1.0000	1.0600	1.0000	$35.1444	1.0833	$38.0719
Digtl Circ - Other - C.O. - Def. Plug-in - MCEP With Sp. Stock	357C	09	$88.6239	0.9635	$85.3921	1.0930	1.0000	1.0000	1.0600	1.0000	$98.9336	1.0833	$107.1747
Digtl Circ - Other - C.O. - Combined - MCEP	357C	15	$81.7031	0.9635	$78.7236	1.0000	1.2562	1.0000	1.0000	1.0000	$98.8926	1.0833	$107.1304
Aerial Ca - Fiber	822C	00	$0.8382	0.9849	$0.8256	1.0000	3.3359	1.0000	1.0000	1.0000	$2.7541	1.0000	$2.7541
Buried Ca - Fiber	845C	00	$0.2354	1.0100	$0.2378	1.0000	4.7348	1.0000	1.0000	1.0000	$1.1258	1.0000	$1.1258
Underground Ca - Fiber	85C	00	$0.7326	0.9700	$0.7106	1.0000	2.3710	1.0000	1.0000	1.0000	$1.6849	1.0000	$1.6849

000033

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

Kentucky
N.1.1 - UPS - UNI/NNI FRS 56 KBPS

	FRC	Investment	
Land - COE	20C	$11.1322	= Sum of Col C
Buildings - COE	10C	$169.1236	= Sum of Col E
Poles	1C	$1.0281	= Sum of Col G
Conduit Systems	4C	$1.5228	= Sum of Col I

9/29/99			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Hardwired - SE&P	377C	07	$15.2271	0.0115	$0.1750	0.1746	$2.6580	0.0000	$0.0000	0.0000	$0.0000
Digital Elec Switch - C.O. Com. Plug-In - SE&P	377C	08	$129.4086	0.0115	$1.4869	0.1746	$22.5896	0.0000	$0.0000	0.0000	$0.0000
Digital Elec Switch - C.O. Combined - SE&P	377C	09	$38.0651	0.0115	$0.4374	0.1746	$6.6446	0.0000	$0.0000	0.0000	$0.0000
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$247.9369	0.0115	$2.8488	0.1746	$43.2799	0.0000	$0.0000	0.0000	$0.0000
Digtl Circ - Other - C.O. - Hardwired - MCEP	357C	03	$285.8418	0.0115	$3.2843	0.1746	$49.8965	0.0000	$0.0000	0.0000	$0.0000
Digtl Circ - Other - C.O. - Com. Plug-in - MCEP	357C	06	$38.0719	0.0115	$0.4374	0.1746	$6.6458	0.0000	$0.0000	0.0000	$0.0000
Digtl Circ - Other - C.O. - Def. Plug-in - MCEP With Sp. Stock	357C	09	$107.1747	0.0115	$1.2314	0.1746	$18.7084	0.0000	$0.0000	0.0000	$0.0000
Digtl Circ - Other - C.O. - Combined - MCEP	357C	15	$107.1304	0.0115	$1.2309	0.1746	$18.7007	0.0000	$0.0000	0.0000	$0.0000
Aerial Ca - Fiber	822C	00	$2.7541	0.0000	$0.0000	0.0000	$0.0000	0.3733	$1.0281	0.0000	$0.0000
Buried Ca - Fiber	845C	00	$1.1258	0.0000	$0.0000	0.0000	$0.0000	0.0000	$0.0000	0.0000	$0.0000
Underground Ca - Fiber	85C	00	$1.6849	0.0000	$0.0000	0.0000	$0.0000	0.0000	$0.0000	0.9038	$1.5228
					$11.1322		$169.1236		$1.0281		$1.5228

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9/29/99

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.1 - UPS - UNI/NNI FRS 56 KBPS

		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	$11.1322	0.0000	$0.0000	0.1125	$1.2524	0.0547	$0.6084	0.0000	$0.0000	0.0058	$0.0646	$1.9254	0.0000	$0.0000	$1.9254
Buildings - COE	10C	$169.1236	0.0222	$3.7583	0.0912	$15.4264	0.0443	$7.4945	0.0386	$6.5312	0.0058	$0.9809	$34.1914	0.0006	$0.1015	$34.2928
Digital Elec Switch	377C	$430.6376	0.1000	$43.0638	0.0716	$30.8274	0.0348	$14.9767	0.0325	$13.9862	0.0058	$2.4977	$105.3518	0.0330	$14.2110	$119.5[illegible]
Digtl Circ - Other	357C	$538.2188	0.1111	$59.8021	0.0712	$38.3476	0.0346	$18.6302	0.0164	$8.8069	0.0058	$3.1217	$128.7085	0.0285	$15.3392	$144.0477
Poles	1C	$1.0281	0.0471	$0.0484	0.0704	$0.0723	0.0342	$0.0351	0.0102	$0.0104	0.0058	$0.0060	$0.1723	0.0157	$0.0161	$0.1884
Aerial Ca - Fiber	822C	$2.7541	0.0570	$0.1570	0.0728	$0.2004	0.0353	$0.0973	0.0033	$0.0090	0.0058	$0.0161	$0.4798	0.0225	$0.0620	$0.5418
Buried Ca - Fiber	845C	$1.1258	0.0535	$0.0602	0.0752	$0.0847	0.0365	$0.0411	0.0010	$0.0012	0.0058	$0.0066	$0.1937	0.0179	$0.0202	$0.2139
Underground Ca - Fiber	85C	$1.6849	0.0540	$0.0910	0.0748	$0.1261	0.0364	$0.0613	0.0010	$0.0017	0.0058	$0.0098	$0.2899	0.0170	$0.0286	$0.3186
Conduit Systems	4C	$1.5228	0.0200	$0.0305	0.0929	$0.1414	0.0451	$0.0687	0.0014	$0.0022	0.0058	$0.0089	$0.2516	0.0122	$0.0186	$0.2702
Annual Total		$1,157.2279											$271.5643		$29.7972	$301.3615
Monthly Total (Annual Total / 12)													$22.6304		$2.4831	$25.1135

000035

Nonrecurring Cost Summary

Kentucky
N.1.1 - UPS - UNI/NNI FRS 56 KBPS

9/29/99

Nonrecurring Cost

	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$171.5418	$52.3606		$223.9024
Total Cost	$171.5418	$52.3606		$223.9024
Gross Receipts Tax Factor			X	1.0026
Cost (including Gross Receipts Tax)				$224.4931
Common Cost Factor			X	1.0530
Nonrecurring Economic Cost				**$236.3912**

000036

Nonrecurring Cost Development

Kentucky
N.1.1 - UPS - UNI/NNI FRS 56 KBPS

9/29/99

			A	B	C	D=AxC	E=BxC	F	G=ExF	H=D+G
Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	Direct Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	Direct Cost
Service Order	2850	Bus Ofc Svc Rep - Business	0.4167	0.1667	$37.39	$15.5804	$6.2329	0.8545	$5.3263	$20.9067
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	1.0000	0.5000	$38.31	$38.3100	$19.1550	0.8545	$16.3689	$54.6789
Service Order	4WXX	Work Management Center (WMC)	0.0500	0.0500	$34.37	$1.7185	$1.7185	0.8545	$1.4685	$3.1870
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.4167	0.3333	$42.88	$17.8681	$14.2919	0.8545	$12.2131	$30.0812
Engineering	470X	Circuit Provisioning Group (CPG)	0.0167	0.0083	$37.06	$0.6189	$0.3076	0.8545	$0.2629	$0.8818
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	1.4595	0.1800	$38.31	$55.9134	$6.8958	0.8545	$5.8928	$61.8062
									Total	171.5418126

Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	TELRIC Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	TELRIC
Service Order	2850	Bus Ofc Svc Rep - Business	0.4167	0.1667	$50.29	$20.9558	$8.3833	0.8545	$7.1640	$28.1198
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	1.0000	0.5000	$50.84	$50.8400	$25.4200	0.8545	$21.7226	$72.5626
Service Order	4WXX	Work Management Center (WMC)	0.0500	0.0500	$45.51	$2.2755	$2.2755	0.8545	$1.9445	$4.2200
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.4167	0.3333	$51.21	$21.3392	$17.0683	0.8545	$14.5857	$35.9249
Engineering	470X	Circuit Provisioning Group (CPG)	0.0167	0.0083	$44.30	$0.7398	$0.3677	0.8545	$0.3142	$1.0540
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	1.4595	0.1800	$50.84	$74.2010	$9.1512	0.8545	$7.8201	$82.0211
									Total	223.9024134

000037

Recurring Cost Summary

Kentucky
N.1.2 - UPS - UNI/NNI FRS 64 KBPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$22.6304	$2.4831	$25.1135			$0.0000
Other Expenses						
Software Cost per Port per Month	$1.2655	$0.0000	$1.2655	$0.0000	$0.0000	$0.0000
Total Monthly Cost	$23.8958	$2.4831	$26.3789	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0026			X 1.0026
Cost (including Gross Receipts Tax)			$26.4485			$0.0000
Common Cost Factor			X 1.0530			X 1.0530
Monthly Economic Cost			$27.8503			$0.0000

Total Monthly Economic Cost : $27.8503

000038

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

Kentucky
N.1.2 - UPS - UNI/NNI FRS 64 KBPS

9/29/99

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	E=Cx(D_1xD_2 x...xD_5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Hardwired - SE&P	377C	07	$4.9381	0.9833	$4.8555	1.0000	1.0000	1.0000	1.0000	2.7775	$13.4860	1.1291	$15.2271
Digital Elec Switch - C.O. Com. Plug-In - SE&P	377C	08	$109.9647	0.9833	$108.1247	1.0000	1.0000	1.0000	1.0600	1.0000	$114.6122	1.1291	$129.4086
Digital Elec Switch - C.O. Combined - SE&P	377C	09	$24.9920	0.9833	$24.5738	1.0000	1.3719	1.0000	1.0000	1.0000	$33.7128	1.1291	$38.0651
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$192.7575	0.9833	$189.5320	1.0930	1.0000	1.0000	1.0600	1.0000	$219.5880	1.1291	$247.9369
Digtl Circ - Other - C.O. - Hardwired - MCEP	357C	03	$85.3228	0.9635	$82.2113	1.0000	1.0000	1.0000	1.0000	3.2096	$263.8621	1.0833	$285.8418
Digtl Circ - Other - C.O. - Com. Plug-in - MCEP	357C	06	$34.4099	0.9635	$33.1551	1.0000	1.0000	1.0000	1.0600	1.0000	$35.1444	1.0833	$38.0719
Digtl Circ - Other - C.O. - Def. Plug-in - MCEP With Sp. Stock	357C	09	$88.6239	0.9635	$85.3921	1.0930	1.0000	1.0000	1.0600	1.0000	$98.9336	1.0833	$107.1747
Digtl Circ - Other - C.O. - Combined - MCEP	357C	15	$81.7031	0.9635	$78.7236	1.0000	1.2562	1.0000	1.0000	1.0000	$98.8926	1.0833	$107.1304
Aerial Ca - Fiber	822C	00	$0.8382	0.9849	$0.8256	1.0000	3.3359	1.0000	1.0000	1.0000	$2.7541	1.0000	$2.7541
Buried Ca - Fiber	845C	00	$0.2354	1.0100	$0.2378	1.0000	4.7348	1.0000	1.0000	1.0000	$1.1258	1.0000	$1.1258
Underground Ca - Fiber	85C	00	$0.7326	0.9700	$0.7106	1.0000	2.3710	1.0000	1.0000	1.0000	$1.6849	1.0000	$1.6849

000039

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

Kentucky
N.1.2 - UPS - UNI/NNI FRS 64 KBPS

	FRC	Investment	
Land - COE	20C	$11.1322	= Sum of Col C
Buildings - COE	10C	$169.1236	= Sum of Col E
Poles	1C	$1.0281	= Sum of Col G
Conduit Systems	4C	$1.5228	= Sum of Col I

9/29/99			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit. Investment
Digital Elec Switch - C.O. Hardwired - SE&P	377C	07	$15.2271	0.0115	$0.1750	0.1746	$2.6580	0.0000	$0.0000	0.0000	$0.0000
Digital Elec Switch - C.O. Com. Plug-In - SE&P	377C	08	$129.4086	0.0115	$1.4869	0.1746	$22.5896	0.0000	$0.0000	0.0000	$0.0000
Digital Elec Switch - C.O. Combined - SE&P	377C	09	$38.0651	0.0115	$0.4374	0.1746	$6.6446	0.0000	$0.0000	0.0000	$0.0000
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$247.9369	0.0115	$2.8488	0.1746	$43.2799	0.0000	$0.0000	0.0000	$0.0000
Digtl Circ - Other - C.O. - Hardwired - MCEP	357C	03	$285.8418	0.0115	$3.2843	0.1746	$49.8965	0.0000	$0.0000	0.0000	$0.0000
Digtl Circ - Other - C.O. - Com. Plug-in - MCEP	357C	06	$38.0719	0.0115	$0.4374	0.1746	$6.6458	0.0000	$0.0000	0.0000	$0.0000
Digtl Circ - Other - C.O. - Def. Plug-in - MCEP With Sp. Stock	357C	09	$107.1747	0.0115	$1.2314	0.1746	$18.7084	0.0000	$0.0000	0.0000	$0.0000
Digtl Circ - Other - C.O. - Combined - MCEP	357C	15	$107.1304	0.0115	$1.2309	0.1746	$18.7007	0.0000	$0.0000	0.0000	$0.0000
Aerial Ca - Fiber	822C	00	$2.7541	0.0000	$0.0000	0.0000	$0.0000	0.3733	$1.0281	0.0000	$0.0000
Buried Ca - Fiber	845C	00	$1.1258	0.0000	$0.0000	0.0000	$0.0000	0.0000	$0.0000	0.0000	$0.0000
Underground Ca - Fiber	85C	00	$1.6849	0.0000	$0.0000	0.0000	$0.0000	0.0000	$0.0000	0.9038	$1.5228
					$11.1322		$169.1236		$1.0281		$1.5228

000040

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.2 - UPS - UNI/NNI FRS 64 KBPS

9/29/99

		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	$11.1322	0.0000	$0.0000	0.1125	$1.2524	0.0547	$0.6084	0.0000	$0.0000	0.0058	$0.0646	$1.9254	0.0000	$0.0000	$1.9254
Buildings - COE	10C	$169.1236	0.0222	$3.7583	0.0912	$15.4264	0.0443	$7.4945	0.0386	$6.5312	0.0058	$0.9809	$34.1914	0.0006	$0.1015	$34.2928
Digital Elec Switch	377C	$430.6376	0.1000	$43.0638	0.0716	$30.8274	0.0348	$14.9767	0.0325	$13.9862	0.0058	$2.4977	$105.3518	0.0330	$14.2110	$119.5628
Digtl Circ - Other	357C	$538.2188	0.1111	$59.8021	0.0712	$38.3476	0.0346	$18.6302	0.0164	$8.8069	0.0058	$3.1217	$128.7085	0.0285	$15.3392	$144.0477
Poles	1C	$1.0281	0.0471	$0.0484	0.0704	$0.0723	0.0342	$0.0351	0.0102	$0.0104	0.0058	$0.0060	$0.1723	0.0157	$0.0161	$0.1884
Aerial Ca - Fiber	822C	$2.7541	0.0570	$0.1570	0.0728	$0.2004	0.0353	$0.0973	0.0033	$0.0090	0.0058	$0.0161	$0.4798	0.0225	$0.0620	$0.5418
Buried Ca - Fiber	845C	$1.1258	0.0535	$0.0602	0.0752	$0.0847	0.0365	$0.0411	0.0010	$0.0012	0.0058	$0.0066	$0.1937	0.0179	$0.0202	$0.2139
Underground Ca - Fiber	85C	$1.6849	0.0540	$0.0910	0.0748	$0.1261	0.0364	$0.0613	0.0010	$0.0017	0.0058	$0.0098	$0.2899	0.0170	$0.0286	$0.3186
Conduit Systems	4C	$1.5228	0.0200	$0.0305	0.0929	$0.1414	0.0451	$0.0687	0.0014	$0.0022	0.0058	$0.0089	$0.2516	0.0122	$0.0186	$0.2702
Annual Total		$1,157.2279											$271.5643		$29.7972	$301.3615
Monthly Total (Annual Total / 12)													$22.6304		$2.4831	$25.1135

000041

Nonrecurring Cost Summary

Kentucky
N.1.2 - UPS - UNI/NNI FRS 64 KBPS

9/29/99

Nonrecurring Cost

	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$171.5418	$52.3606		$223.9024
Total Cost	$171.5418	$52.3606		$223.9024
Gross Receipts Tax Factor			X	1.0026
Cost (including Gross Receipts Tax)				$224.4931
Common Cost Factor			X	1.0530
Nonrecurring Economic Cost				**$236.3912**

000042

Nonrecurring Cost Development

Kentucky
N.1.2 - UPS - UNI/NNI FRS 64 KBPS

9/29/99

Function	JFC/ Payband	JFC/Payband Description	A Installation Worktime	B Disconnect Worktime	C Direct Labor Rate	D=AxC Install Cost	E=BxC Disconnect Cost	F Disconnect Discount Factor	G=ExF Discounted Disconnect Cost	H=D+G Direct Cost
Service Order	2850	Bus Ofc Svc Rep - Business	0.4167	0.1667	$37.39	$15.5804	$6.2329	0.8545	$5.3263	$20.9067
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	1.0000	0.5000	$38.31	$38.3100	$19.1550	0.8545	$16.3689	$54.6789
Service Order	4WXX	Work Management Center (WMC)	0.0500	0.0500	$34.37	$1.7185	$1.7185	0.8545	$1.4685	$3.1870
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.4167	0.3333	$42.88	$17.8681	$14.2919	0.8545	$12.2131	$30.0812
Engineering	470X	Circuit Provisioning Group (CPG)	0.0167	0.0083	$37.06	$0.6189	$0.3076	0.8545	$0.2629	$0.8818
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	1.4595	0.1800	$38.31	$55.9134	$6.8958	0.8545	$5.8928	$61.8062
									Total	171.5418126

Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	TELRIC Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	TELRIC
Service Order	2850	Bus Ofc Svc Rep - Business	0.4167	0.1667	$50.29	$20.9558	$8.3833	0.8545	$7.1640	$28.1198
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	1.0000	0.5000	$50.84	$50.8400	$25.4200	0.8545	$21.7226	$72.5626
Service Order	4WXX	Work Management Center (WMC)	0.0500	0.0500	$45.51	$2.2755	$2.2755	0.8545	$1.9445	$4.2200
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.4167	0.3333	$51.21	$21.3392	$17.0683	0.8545	$14.5857	$35.9249
Engineering	470X	Circuit Provisioning Group (CPG)	0.0167	0.0083	$44.30	$0.7398	$0.3677	0.8545	$0.3142	$1.0540
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	1.4595	0.1800	$50.84	$74.2010	$9.1512	0.8545	$7.8201	$82.0211
									Total	223.9024134

000043

Recurring Cost Summary

Kentucky
N.1.3 - UPS - UNI/NNI FRS 1.536 MBPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Recurring Cost Devel. Sheets Cols L, N, & O	$80.9563	$9.4867	$90.4430			$0.0000
Other Expenses						
Software Cost per Port per Month	$1.2655	$0.0000	$1.2655	$0.0000	$0.0000	$0.0000
Total Monthly Cost	$82.2218	$9.4867	$91.7085	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0026			X 1.0026
Cost (including Gross Receipts Tax)			$91.9504			$0.0000
Common Cost Factor			X 1.0530			X 1.0530
Monthly Economic Cost			$96.8238			$0.0000

Total Monthly Economic Cost : $96.8238

000044

9/29/99

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

Kentucky
N.1.3 - UPS - UNI/NNI FRS 1.536 MBPS

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	E=Cx(D_1xD_2 x...xD_5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Hardwired - SE&P	377C	07	$61.8895	0.9833	$60.8539	1.0000	1.0000	1.0000	1.0000	2.7775	$169.0198	1.1291	$190.8403
Digital Elec Switch - C.O. Com. Plug-In - SE&P	377C	08	$737.8590	0.9833	$725.5124	1.0000	1.0000	1.0000	1.0600	1.0000	$769.0431	1.1291	$868.3266
Digital Elec Switch - C.O. Combined - SE&P	377C	09	$167.6952	0.9833	$164.8892	1.0000	1.3719	1.0000	1.0000	1.0000	$226.2115	1.1291	$255.4154
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$1,609.8596	0.9833	$1,582.9218	1.0930	1.0000	1.0000	1.0600	1.0000	$1,833.9416	1.1291	$2,070.7034
Digtl Circ - Other - C.O. - Hardwired - MCEP	357C	03	$15.8938	0.9635	$15.3142	1.0000	1.0000	1.0000	1.0000	3.2096	$49.1517	1.0833	$53.2460
Digtl Circ - Other - C.O. - Com. Plug-in - MCEP	357C	06	$2.6452	0.9635	$2.5488	1.0000	1.0000	1.0000	1.0600	1.0000	$2.7017	1.0833	$2.9267
Digtl Circ - Other - C.O. - Def. Plug-in - MCEP With Sp. Stock	357C	09	$0.5439	0.9635	$0.5241	1.0930	1.0000	1.0000	1.0600	1.0000	$0.6072	1.0833	$0.6578
Digtl Circ - Other - C.O. - Combined - MCEP	357C	15	$0.0089	0.9635	$0.0085	1.0000	1.2562	1.0000	1.0000	1.0000	$0.0107	1.0833	$0.0116
Aerial Ca - Fiber	822C	00	$0.8382	0.9849	$0.8256	1.0000	3.3359	1.0000	1.0000	1.0000	$2.7541	1.0000	$2.7541
Buried Ca - Fiber	845C	00	$0.2354	1.0100	$0.2378	1.0000	4.7348	1.0000	1.0000	1.0000	$1.1258	1.0000	$1.1258
Underground Ca - Fiber	85C	00	$0.7326	0.9700	$0.7106	1.0000	2.3710	1.0000	1.0000	1.0000	$1.6849	1.0000	$1.6849

000045

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

Kentucky
N.1.3 - UPS - UNI/NNI FRS 1.536 MBPS

	FRC	Investment	
Land - COE	20C	$39.5500	= Sum of Col C
Buildings - COE	10C	$600.8578	= Sum of Col E
Poles	1C	$1.0281	= Sum of Col G
Conduit Systems	4C	$1.5228	= Sum of Col I

9/29/99			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Hardwired - SE&P	377C	07	$190.8403	0.0115	$2.1928	0.1746	$33.3131	0.0000	$0.0000	0.0000	$0.0000
Digital Elec Switch - C.O. Com. Plug-In - SE&P	377C	08	$868.3266	0.0115	$9.9771	0.1746	$151.5751	0.0000	$0.0000	0.0000	$0.0000
Digital Elec Switch - C.O. Combined - SE&P	377C	09	$255.4154	0.0115	$2.9347	0.1746	$44.5853	0.0000	$0.0000	0.0000	$0.0000
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$2,070.7034	0.0115	$23.7924	0.1746	$361.4620	0.0000	$0.0000	0.0000	$0.0000
Digtl Circ - Other - C.O. - Hardwired - MCEP	357C	03	$53.2460	0.0115	$0.6118	0.1746	$9.2946	0.0000	$0.0000	0.0000	$0.0000
Digtl Circ - Other - C.O. - Com. Plug-in - MCEP	357C	06	$2.9267	0.0115	$0.0336	0.1746	$0.5109	0.0000	$0.0000	0.0000	$0.0000
Digtl Circ - Other - C.O. - Def. Plug-in - MCEP With Sp. Stock	357C	09	$0.6578	0.0115	$0.0076	0.1746	$0.1148	0.0000	$0.0000	0.0000	$0.0000
Digtl Circ - Other - C.O. - Combined - MCEP	357C	15	$0.0116	0.0115	$0.0001	0.1746	$0.0020	0.0000	$0.0000	0.0000	$0.0000
Aerial Ca - Fiber	822C	00	$2.7541	0.0000	$0.0000	0.0000	$0.0000	0.3733	$1.0281	0.0000	$0.0000
Buried Ca - Fiber	845C	00	$1.1258	0.0000	$0.0000	0.0000	$0.0000	0.0000	$0.0000	0.0000	$0.0000
Underground Ca - Fiber	85C	00	$1.6849	0.0000	$0.0000	0.0000	$0.0000	0.0000	$0.0000	0.9038	$1.5228
					$39.5500		$600.8578		$1.0281		$1.5228

000046

9/29/99

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.3 - UPS - UNI/NNI FRS 1.536 MBPS

		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	$39.5500	0.0000	$0.0000	0.1125	$4.4494	0.0547	$2.1616	0.0000	$0.0000	0.0058	$0.2294	$6.8404	0.0000	$0.0000	$6.8404
Buildings - COE	10C	$600.8578	0.0222	$13.3524	0.0912	$54.8065	0.0443	$26.6264	0.0386	$23.2039	0.0058	$3.4850	$121.4742	0.0006	$0.3605	$121.83[illegible]
Digital Elec Swtch	377C	$3,385.2856	0.1000	$338.5286	0.0716	$242.3370	0.0348	$117.7335	0.0325	$109.9473	0.0058	$19.6347	$828.1810	0.0330	$111.7144	$939.895[illegible]
Digtl Circ - Other	357C	$56.8422	0.1111	$6.3158	0.0712	$4.0500	0.0346	$1.9676	0.0164	$0.9301	0.0058	$0.3297	$13.5931	0.0285	$1.6200	$15.2131
Poles	1C	$1.0281	0.0471	$0.0484	0.0704	$0.0723	0.0342	$0.0351	0.0102	$0.0104	0.0058	$0.0060	$0.1723	0.0157	$0.0161	$0.1884
Aerial Ca - Fiber	822C	$2.7541	0.0570	$0.1570	0.0728	$0.2004	0.0353	$0.0973	0.0033	$0.0090	0.0058	$0.0161	$0.4798	0.0225	$0.0620	$0.5418
Buried Ca - Fiber	845C	$1.1258	0.0535	$0.0602	0.0752	$0.0847	0.0365	$0.0411	0.0010	$0.0012	0.0058	$0.0066	$0.1937	0.0179	$0.0202	$0.2139
Underground Ca - Fiber	85C	$1.6849	0.0540	$0.0910	0.0748	$0.1261	0.0364	$0.0613	0.0010	$0.0017	0.0058	$0.0098	$0.2899	0.0170	$0.0286	$0.3186
Conduit Systems	4C	$1.5228	0.0200	$0.0305	0.0929	$0.1414	0.0451	$0.0687	0.0014	$0.0022	0.0058	$0.0089	$0.2516	0.0122	$0.0186	$0.2702
Annual Total		$4,090.6514											$971.4760		$113.8404	$1,085.3164
Monthly Total (Annual Total / 12)													$80.9563		$9.4867	$90.4430

000047

Nonrecurring Cost Summary

Kentucky
N.1.3 - UPS - UNI/NNI FRS 1.536 MBPS

9/29/99

Nonrecurring Cost

	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$184.8040	$56.6983		$241.5023
Total Cost	$184.8040	$56.6983		$241.5023
Gross Receipts Tax Factor			X	1.0026
Cost (including Gross Receipts Tax)				$242.1394
Common Cost Factor			X	1.0530
Nonrecurring Economic Cost				**$254.9728**

000048

Nonrecurring Cost Development

Kentucky
N.1.3 - UPS - UNI/NNI FRS 1.536 MBPS

			A	B	C	D=AxC	E=BxC	F	G=ExF	H=D+G
Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	Direct Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	Direct Cost
Service Order	2850	Bus Ofc Svc Rep - Business	0.4167	0.1667	$37.39	$15.5804	$6.2329	0.8545	$5.3263	$20.9067
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	1.0000	0.5000	$38.31	$38.3100	$19.1550	0.8545	$16.3689	$54.6789
Service Order	4WXX	Work Management Center (WMC)	0.0500	0.0500	$34.37	$1.7185	$1.7185	0.8545	$1.4685	$3.1870
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.4167	0.3333	$42.88	$17.8681	$14.2919	0.8545	$12.2131	$30.0812
Engineering	470X	Circuit Provisioning Group (CPG)	0.0167	0.0083	$37.06	$0.6189	$0.3076	0.8545	$0.2629	$0.8818
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	1.9595	0.0000	$38.31	$75.0684	$0.0000	0.8545	$0.0000	$75.0684
									Total	184.8040264

Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	TELRIC Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	TELRIC
Service Order	2850	Bus Ofc Svc Rep - Business	0.4167	0.1667	$50.29	$20.9558	$8.3833	0.8545	$7.1640	$28.1198
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	1.0000	0.5000	$50.84	$50.8400	$25.4200	0.8545	$21.7226	$72.5626
Service Order	4WXX	Work Management Center (WMC)	0.0500	0.0500	$45.51	$2.2755	$2.2755	0.8545	$1.9445	$4.2200
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.4167	0.3333	$51.21	$21.3392	$17.0683	0.8545	$14.5857	$35.9249
Engineering	470X	Circuit Provisioning Group (CPG)	0.0167	0.0083	$44.30	$0.7398	$0.3677	0.8545	$0.3142	$1.0540
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	1.9595	0.0000	$50.84	$99.6210	$0.0000	0.8545	$0.0000	$99.6210
									Total	241.5022816

000049

Recurring Cost Summary

Kentucky
N.1.4 - UPS - UNI/NNI FRS 44.210 MBPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Recurring Cost Devel. Sheets Cols L, N, & O	$567.6017	$66.4189	$634.0206			$0.0000
Other Expenses						
Software Cost per Port per Month	$1.2655	$0.0000	$1.2655	$0.0000	$0.0000	$0.0000
Total Monthly Cost	$568.8672	$66.4189	$635.2861	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor		X	1.0026		X	1.0026
Cost (including Gross Receipts Tax)			$636.9619			$0.0000
Common Cost Factor		X	1.0530		X	1.0530
Monthly Economic Cost			$670.7209			$0.0000

Total Monthly Economic Cost : $670.7209

000050

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

Kentucky
N.1.4 - UPS - UNI/NNI FRS 44.210 MBPS

9/29/99

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	E=Cx(D_1xD_2 x...xD_5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Hardwired - SE&P	377C	07	$12.6574	0.9833	$12.4456	1.0000	1.0000	1.0000	1.0000	2.7775	$34.5674	1.1291	$39.0301
Digital Elec Switch - C.O. Com. Plug-In - SE&P	377C	08	$9,111.8770	0.9833	$8,959.4080	1.0000	1.0000	1.0000	1.0600	1.0000	$9,496.9725	1.1291	$10,723.0316
Digital Elec Switch - C.O. Combined - SE&P	377C	09	$1,300.4266	0.9833	$1,278.6666	1.0000	1.3719	1.0000	1.0000	1.0000	$1,754.2027	1.1291	$1,980.6702
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$8,324.0953	0.9833	$8,184.8082	1.0930	1.0000	1.0000	1.0600	1.0000	$9,482.7551	1.1291	$10,706.9788
Digtl Circ - Other - C.O. - Hardwired - MCEP	357C	03	$213.7290	0.9635	$205.9350	1.0000	1.0000	1.0000	1.0000	3.2096	$660.9607	1.0833	$716.0187
Digtl Circ - Other - C.O. - Com. Plug-in - MCEP	357C	06	$2.6452	0.9635	$2.5488	1.0000	1.0000	1.0000	1.0600	1.0000	$2.7017	1.0833	$2.9267
Digtl Circ - Other - C.O. - Def. Plug-in - MCEP With Sp. Stock	357C	09	$0.5439	0.9635	$0.5241	1.0930	1.0000	1.0000	1.0600	1.0000	$0.6072	1.0833	$0.6578
Digtl Circ - Other - C.O. - Combined - MCEP	357C	15	$0.0089	0.9635	$0.0085	1.0000	1.2562	1.0000	1.0000	1.0000	$0.0107	1.0833	$0.0116
Aerial Ca - Fiber	822C	00	$0.8382	0.9849	$0.8256	1.0000	3.3359	1.0000	1.0000	1.0000	$2.7541	1.0000	$2.7541
Buried Ca - Fiber	845C	00	$0.2354	1.0100	$0.2378	1.0000	4.7348	1.0000	1.0000	1.0000	$1.1258	1.0000	$1.1258
Underground Ca - Fiber	85C	00	$0.7326	0.9700	$0.7106	1.0000	2.3710	1.0000	1.0000	1.0000	$1.6849	1.0000	$1.6849

000051

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

Kentucky
N.1.4 - UPS - UNI/NNI FRS 44.210 MBPS

	FRC	Investment	
Land - COE	20C	$277.7056	= Sum of Col C
Buildings - COE	10C	$4,218.9975	= Sum of Col E
Poles	1C	$1.0281	= Sum of Col G
Conduit Systems	4C	$1.5228	= Sum of Col I

9/29/99			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Hardwired - SE&P	377C	07	$39.0301	0.0115	$0.4485	0.1746	$6.8131	0.0000	$0.0000	0.0000	$0.0000
Digital Elec Switch - C.O. Com. Plug-In - SE&P	377C	08	$10,723.0316	0.0115	$123.2076	0.1746	$1,871.8124	0.0000	$0.0000	0.0000	$0.0000
Digital Elec Switch - C.O. Combined - SE&P	377C	09	$1,980.6702	0.0115	$22.7579	0.1746	$345.7458	0.0000	$0.0000	0.0000	$0.0000
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$10,706.9788	0.0115	$123.0232	0.1746	$1,869.0102	0.0000	$0.0000	0.0000	$0.0000
Digtl Circ - Other - C.O. - Hardwired - MCEP	357C	03	$716.0187	0.0115	$8.2271	0.1746	$124.9882	0.0000	$0.0000	0.0000	$0.0000
Digtl Circ - Other - C.O. - Com. Plug-in - MCEP	357C	06	$2.9267	0.0115	$0.0336	0.1746	$0.5109	0.0000	$0.0000	0.0000	$0.0000
Digtl Circ - Other - C.O. - Def. Plug-in - MCEP With Sp. Stock	357C	09	$0.6578	0.0115	$0.0076	0.1746	$0.1148	0.0000	$0.0000	0.0000	$0.0000
Digtl Circ - Other - C.O. - Combined - MCEP	357C	15	$0.0116	0.0115	$0.0001	0.1746	$0.0020	0.0000	$0.0000	0.0000	$0.0000
Aerial Ca - Fiber	822C	00	$2.7541	0.0000	$0.0000	0.0000	$0.0000	0.3733	$1.0281	0.0000	$0.0000
Buried Ca - Fiber	845C	00	$1.1258	0.0000	$0.0000	0.0000	$0.0000	0.0000	$0.0000	0.0000	$0.0000
Underground Ca - Fiber	85C	00	$1.6849	0.0000	$0.0000	0.0000	$0.0000	0.0000	$0.0000	0.9038	$1.5228
					$277.7056		$4,218.9975		$1.0281		$1.5228

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Recurring Cost Development
Volume Sensitive

Kentucky
N.1.4 - UPS - UNI/NNI FRS 44.210 MBPS

9/29/99		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	$277.7056	0.0000	$0.0000	0.1125	$31 2419	0.0547	$15.1781	0.0000	$0.0000	0.0058	$1.6107	$48.0307	0.0000	$0.0000	$48.0307
Buildings - COE	10C	$4,218.9975	0.0222	$93.7555	0 0912	$384.8305	0 0443	$186.9604	0.0386	$162.9292	0.0058	$24.4702	$852.9458	0.0006	$2 5314	$855.47[illegible]
Digital Elec Switch	377C	$23,449.7107	0.1000	$2,344.9711	0 0716	$1,678.6567	0.0348	$815 5340	0.0325	$761.5997	0.0058	$136.0083	$5,736.7698	0.0330	$773.8405	$6,510.61[illegible]
Digtl Circ - Other	357C	$719.6149	0.1111	$79.9572	0.0712	$51.2719	0.0346	$24.9092	0.0164	$11.7751	0.0058	$4.1738	$172.0871	0.0285	$20.5090	$192.5962
Poles	1C	$1.0281	0.0471	$0.0484	0.0704	$0.0723	0.0342	$0.0351	0.0102	$0.0104	0.0058	$0.0060	$0.1723	0.0157	$0.0161	$0.1884
Aerial Ca - Fiber	822C	$2.7541	0.0570	$0.1570	0.0728	$0.2004	0 0353	$0.0973	0.0033	$0 0090	0.0058	$0.0161	$0.4798	0.0225	$0.0620	$0.5418
Buried Ca - Fiber	845C	$1.1258	0.0535	$0.0602	0.0752	$0.0847	0.0365	$0 0411	0.0010	$0.0012	0.0058	$0.0066	$0.1937	0.0179	$0.0202	$0.2139
Underground Ca - Fiber	85C	$1.6849	0.0540	$0.0910	0 0748	$0.1261	0 0364	$0 0613	0 0010	$0.0017	0.0058	$0.0098	$0.2899	0.0170	$0.0286	$0.3186
Conduit Systems	4C	$1.5228	0.0200	$0.0305	0.0929	$0.1414	0.0451	$0.0687	0 0014	$0 0022	0.0058	$0.0089	$0.2516	0.0122	$0.0186	$0 2702
Annual Total		$28,674.1443											$6,811.2207		$797.0264	$7,608.2470
Monthly Total (Annual Total / 12)													$567.6017		$66.4189	$634.0206

000053

Nonrecurring Cost Summary

Kentucky
N.1.4 - UPS - UNI/NNI FRS 44.210 MBPS

9/29/99

Nonrecurring Cost

	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$268.3435	$83.9601		$352.3036
Total Cost	$268.3435	$83.9601		$352.3036
Gross Receipts Tax Factor			X	1.0026
Cost (including Gross Receipts Tax)				$353.2330
Common Cost Factor			X	1.0530
Nonrecurring Economic Cost				**$371.9543**

000054

Nonrecurring Cost Development

Kentucky
N.1.4 - UPS - UNI/NNI FRS 44.210 MBPS

9/29/99

			A	B	C	D=AxC	E=BxC	F	G=ExF	H=D+G
Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	Direct Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	Direct Cost
Service Order	2850	Bus Ofc Svc Rep - Business	0.4167	0.1667	$37.39	$15.5804	$6.2329	0.8545	$5.3263	$20.9067
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	1.5000	0.7500	$38.31	$57.4650	$28.7325	0.8545	$24.5533	$82.0183
Service Order	4WXX	Work Management Center (WMC)	0.0500	0.0500	$34.37	$1.7185	$1.7185	0.8545	$1.4685	$3.1870
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.4167	0.3333	$42.88	$17.8681	$14.2919	0.8545	$12.2131	$30.0812
Engineering	470X	Circuit Provisioning Group (CPG)	0.0167	0.0083	$37.06	$0.6189	$0.3076	0.8545	$0.2629	$0.8818
Service Inquiry	31XX	Ntwk & Eng Planning (FG20)	1.0000	0.0000	$56.20	$56.2000	$0.0000	0.8545	$0.0000	$56.2000
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	1.9595	0.0000	$38.31	$75.0684	$0.0000	0.8545	$0.0000	$75.0684
									Total	268.3434517

Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	TELRIC Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	TELRIC
Service Order	2850	Bus Ofc Svc Rep - Business	0.4167	0.1667	$50.29	$20.9558	$8.3833	0.8545	$7.1640	$28.1198
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	1.5000	0.7500	$50.84	$76.2600	$38.1300	0.8545	$32.5839	$108.8439
Service Order	4WXX	Work Management Center (WMC)	0.0500	0.0500	$45.51	$2.2755	$2.2755	0.8545	$1.9445	$4.2200
Connect & Test	431X	CO Install & Mtce Field - Ckt & Fac	0.4167	0.3333	$51.21	$21.3392	$17.0683	0.8545	$14.5857	$35.9249
Engineering	470X	Circuit Provisioning Group (CPG)	0.0167	0.0083	$44.30	$0.7398	$0.3677	0.8545	$0.3142	$1.0540
Service Inquiry	31XX	Ntwk & Eng Planning (FG20)	1.0000	0.0000	$74.52	$74.5200	$0.0000	0.8545	$0.0000	$74.5200
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	1.9595	0.0000	$50.84	$99.6210	$0.0000	0.8545	$0.0000	$99.6210
									Total	352.3035757

000055

Nonrecurring Cost Summary

Kentucky
N.1.5 - UPS - UNI/NNI FRS - DLCI Additional

9/29/99

Nonrecurring Cost

	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$58.7734	$19.3907		$78.1641
Total Cost	$58.7734	$19.3907		$78.1641
Gross Receipts Tax Factor			X	1.0026
Cost (including Gross Receipts Tax)				$78.3703
Common Cost Factor			X	1.0530
Nonrecurring Economic Cost				**$82.5239**

000056

Nonrecurring Cost Development

Kentucky
N.1.5 - UPS - UNI/NNI FRS - DLCI Additional

9/29/99

			A	B	C	D=AxC	E=BxC	F	G=ExF	H=D+G
Function	**JFC/ Payband**	**JFC/Payband Description**	**Installation Worktime**	**Disconnect Worktime**	**Direct Labor Rate**	**Install Cost**	**Disconnect Cost**	**Disconnect Discount Factor**	**Discounted Disconnect Cost**	**Direct Cost**
Service Order	2850	Bus Ofc Svc Rep - Business	0.2500	0.0000	$37.39	$9.3475	$0.0000	0.8545	$0.0000	$9.3475
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.7917	0.5833	$38.31	$30.3300	$22.3462	0.8545	$19.0959	$49.4259
									Total	**58.77342799**

Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	TELRIC Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	TELRIC
Service Order	2850	Bus Ofc Svc Rep - Business	0.2500	0.0000	$50.29	$12.5725	$0.0000	0.8545	$0.0000	$12.5725
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.7917	0.5833	$50.84	$40.2500	$29.6550	0.8545	$25.3416	$65.5916
									Total	**78.16409955**

000057

Recurring Cost Summary

Kentucky
N.1.6 - UPS - UNI/NNI FRS CIR - 0 BPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$0.0908	$0.0107	$0.1014			$0.0000
Total Monthly Cost	$0.0908	$0.0107	$0.1014	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0026			X 1.0026
Cost (including Gross Receipts Tax)			$0.1017			$0.0000
Common Cost Factor			X 1.0530			X 1.0530
Monthly Economic Cost			$0.1071			$0.0000

Total Monthly Economic Cost : $0.1071

000058

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

Kentucky
N.1.6 - UPS - UNI/NNI FRS CIR - 0 BPS

9/29/99

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	E=Cx(D_1xD_2 x...xD_5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$3.0036	0.9833	$2.9533	1.0930	1.0000	1.0000	1.0600	1.0000	$3.4217	1.1291	$3.8634

000059

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

Kentucky
N.1.6 - UPS - UNI/NNI FRS CIR - 0 BPS

	FRC	Investment	
Land - COE	20C	$0.0444	= Sum of Col C
Buildings - COE	10C	$0.6744	= Sum of Col E

9/29/99

	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
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$3.8634	0.0115	$0.0444	0.1746	$0.6744	0.0000	$0.0000	0.0000	$0.0000
					$0.0444		$0.6744		$0.0000		$0.0000

000060

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.6 - UPS - UNI/NNI FRS CIR - 0 BPS

		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	$0.0444	0.0000	$0.0000	0.1125	$0.0050	0.0547	$0.0024	0.0000	$0.0000	0.0058	$0.0003	$0.0077	0.0000	$0.0000	$0.0077
Buildings - COE	10C	$0.6744	0.0222	$0.0150	0.0912	$0.0615	0.0443	$0.0299	0.0386	$0.0260	0.0058	$0.0039	$0.1363	0.0006	$0.0004	$0.1367
Digital Elec Switch	377C	$3.8634	0.1000	$0.3863	0.0716	$0.2766	0.0348	$0.1344	0.0325	$0.1255	0.0058	$0.0224	$0.9452	0.0330	$0.1275	$1.0726
Annual Total		$4.5822											$1.0892		$0.1279	$1.21[illegible]
Monthly Total (Annual Total / 12)													$0.0908		$0.0107	$0.1014

Recurring Cost Summary

Kentucky
N.1.7 - UPS - UNI/NNI FRS CIR - 1 - 32 KBPS

9/29/99

	Volume Sensitive				Volume Insensitive			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$0.4538	$0.0533		$0.5071				$0.0000
Total Monthly Cost	$0.4538	$0.0533		$0.5071	$0.0000	$0.0000		$0.0000
Gross Receipts Tax Factor			X	1.0026			X	1.0026
Cost (including Gross Receipts Tax)				$0.5084				$0.0000
Common Cost Factor			X	1.0530			X	1.0530
Monthly Economic Cost				$0.5354				$0.0000

Total Monthly Economic Cost : $0.5354

000062

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

Kentucky
N.1.7 - UPS - UNI/NNI FRS CIR - 1 - 32 KBPS

9/29/99

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	$E=Cx(D_1xD_2 x...xD_5)$	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$15.0180	0.9833	$14.7667	1.0930	1.0000	1.0000	1.0600	1.0000	$17.1084	1.1291	$19.3171

000063

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

Kentucky
N.1.7 - UPS - UNI/NNI FRS CIR - 1 - 32 KBPS

	FRC	Investment	
Land - COE	20C	$0.2220	= Sum of Col C
Buildings - COE	10C	$3.3720	= Sum of Col E

9/29/99

			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$19.3171	0.0115	$0.2220	0.1746	$3.3720	0.0000	$0.0000	0.0000	$0.0000
					$0.2220		$3.3720		$0.0000		$0.0000

000064

9/29/99

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.7 - UPS - UNI/NNI FRS CIR - 1 - 32 KBPS

		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	$0.2220	0.0000	$0.0000	0.1125	$0.0250	0.0547	$0.0121	0.0000	$0.0000	0.0058	$0.0013	$0.0384	0.0000	$0.0000	$0.0384
Buildings - COE	10C	$3.3720	0.0222	$0.0749	0.0912	$0.3076	0.0443	$0.1494	0.0386	$0.1302	0.0058	$0.0196	$0.6817	0.0006	$0.0020	$0.6837
Digital Elec Switch	377C	$19.3171	0.1000	$1.9317	0.0716	$1.3828	0.0348	$0.6718	0.0325	$0.6274	0.0058	$0.1120	$4.7258	0.0330	$0.6375	$5.3632
Annual Total		$22.9110											$5.4459		$0.6395	$6.085[illegible]
Monthly Total (Annual Total / 12)													$0.4538		$0.0533	$0.507[illegible]

000065

Recurring Cost Summary

Kentucky
N.1.8 - UPS - UNI/NNI FRS CIR - 32 - 56 KBPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Recurring Cost Devel. Sheets Cols L, N, & O	$0.7942	$0.0933	$0.8874			$0.0000
Total Monthly Cost	$0.7942	$0.0933	$0.8874	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0026			X 1.0026
Cost (including Gross Receipts Tax)			$0.8898			$0.0000
Common Cost Factor			X 1.0530			X 1.0530
Monthly Economic Cost			$0.9369			$0.0000

Total Monthly Economic Cost : $0.9369

000066

9/29/99

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

Kentucky
N.1.8 - UPS - UNI/NNI FRS CIR - 32 - 56 KBPS

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	$E=Cx(D_1xD_2 x...xD_5)$	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$26.2815	0.9833	$25.8417	1.0930	1.0000	1.0000	1.0600	1.0000	$29.9397	1.1291	$33.8049

000067

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

Kentucky
N.1.8 - UPS - UNI/NNI FRS CIR - 32 - 56 KBPS

	FRC	Investment	
Land - COE	20C	$0.3884	= Sum of Col C
Buildings - COE	10C	$5.9010	= Sum of Col E

9/29/99

			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$33.8049	0.0115	$0.3884	0.1746	$5.9010	0.0000	$0.0000	0.0000	$0.0000
					$0.3884		$5.9010		$0.0000		$0.0000

000068

9/29/99

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.8 - UPS - UNI/NNI FRS CIR - 32 - 56 KBPS

		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	$0.3884	0.0000	$0.0000	0.1125	$0.0437	0.0547	$0 0212	0.0000	$0.0000	0.0058	$0.0023	$0.0672	0.0000	$0.0000	$0.0672
Buildings - COE	10C	$5.9010	0.0222	$0.1311	0.0912	$0 5383	0 0443	$0 2615	0 0386	$0 2279	0 0058	$0.0342	$1.1930	0.0006	$0.0035	$1.1965
Digital Elec Switch	377C	$33.8049	0.1000	$3.3805	0.0716	$2.4199	0.0348	$1.1757	0.0325	$1.0979	0.0058	$0.1961	$8.2701	0.0330	$1.1156	$9 3856
Annual Total		$40.0943											$9.5302		$1.1191	$10 649
Monthly Total (Annual Total / 12)													$0.7942		$0.0933	$0 8874

000069

Recurring Cost Summary

Kentucky
N.1.9 - UPS - UNI/NNI FRS CIR - 56 - 64 KBPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$0.9076	$0.1066	$1.0142			$0.0000
Total Monthly Cost	$0.9076	$0.1066	$1.0142	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0026			X 1.0026
Cost (including Gross Receipts Tax)			$1.0169			$0.0000
Common Cost Factor			X 1.0530			X 1.0530
Monthly Economic Cost			$1.0708			$0.0000

Total Monthly Economic Cost : $1.0708

000070

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

Kentucky
N.1.9 - UPS - UNI/NNI FRS CIR - 56 - 64 KBPS

9/29/99

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	E=Cx(D_1xD_2 x...xD_5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$30.0360	0.9833	$29.5334	1.0930	1.0000	1.0000	1.0600	1.0000	$34.2168	1.1291	$38.6342

000071

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

Kentucky
N.1.9 - UPS - UNI/NNI FRS CIR - 56 - 64 KBPS

	FRC	Investment	
Land - COE	20C	$0.4439	= Sum of Col C
Buildings - COE	10C	$6.7440	= Sum of Col E

9/29/99

			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$38.6342	0.0115	$0.4439	0.1746	$6.7440	0.0000	$0.0000	0.0000	$0.0000
					$0.4439		$6.7440		$0.0000		$0.0000

000072

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.9 - UPS - UNI/NNI FRS CIR - 56 - 64 KBPS

9/29/99		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	$0 4439	0.0000	$0.0000	0.1125	$0.0499	0.0547	$0.0243	0.0000	$0.0000	0.0058	$0.0026	$0.0768	0.0000	$0.0000	$0.0768
Buildings - COE	10C	$6.7440	0.0222	$0.1499	0.0912	$0.6151	0.0443	$0.2989	0 0386	$0.2604	0.0058	$0.0391	$1.3634	0.0006	$0.0040	$1.36[illegible]
Digital Elec Switch	377C	$38.6342	0.1000	$3.8634	0.0716	$2.7656	0 0348	$1.3436	0 0325	$1.2548	0.0058	$0.2241	$9.4515	0.0330	$1.2749	$10.72[illegible]
Annual Total		$45 8221											$10.8917		$1.2790	$12.1707
Monthly Total (Annual Total / 12)													$0.9076		$0.1066	$1.0142

000073

Recurring Cost Summary

Kentucky
N.1.10 - UPS - UNI/NNI FRS CIR - 64 - 128 KBPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$1.8153	$0.2132	$2.0284			$0.0000
Total Monthly Cost	$1.8153	$0.2132	$2.0284	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0026			X 1.0026
Cost (including Gross Receipts Tax)			$2.0338			$0.0000
Common Cost Factor			X 1.0530			X 1.0530
Monthly Economic Cost			$2.1416			$0.0000

Total Monthly Economic Cost : $2.1416

000074

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

Kentucky
N.1.10 - UPS - UNI/NNI FRS CIR - 64 - 128 KBPS

9/29/99

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	E=Cx(D_1xD_2 x...xD_5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$60.0720	0.9833	$59.0668	1.0930	1.0000	1.0000	1.0600	1.0000	$68.4336	1.1291	$77.2684

000075

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

Kentucky
N.1.10 - UPS - UNI/NNI FRS CIR - 64 - 128 KBPS

	FRC	Investment	
Land - COE	20C	$0.8878	= Sum of Col C
Buildings - COE	10C	$13.4880	= Sum of Col E

9/29/99

			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$77.2684	0.0115	$0.8878	0.1746	$13.4880	0.0000	$0.0000	0.0000	$0.0000
					$0.8878		$13.4880		$0.0000		$0.0000

000076

9/29/99

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.10 - UPS - UNI/NNI FRS CIR - 64 - 128 KBPS

		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	$0.8878	0.0000	$0.0000	0.1125	$0.0999	0.0547	$0.0485	0.0000	$0.0000	0.0058	$0.0051	$0.1536	0.0000	$0.0000	$0.1536
Buildings - COE	10C	$13.4880	0.0222	$0.2997	0.0912	$1.2303	0.0443	$0.5977	0.0386	$0.5209	0.0058	$0.0782	$2.7268	0.0006	$0.0081	$2.7349
Digital Elec Swtch	377C	$77.2684	0.1000	$7.7268	0.0716	$5.5313	0.0348	$2.6872	0.0325	$2.5095	0.0058	$0.4482	$18.9030	0.0330	$2.5499	$21.4[illegible]
Annual Total		$91.6442											$21.7834		$2.5579	$24.3414
Monthly Total (Annual Total / 12)													$1.8153		$0.2132	$2.0284

000077

Recurring Cost Summary

Kentucky
N.1.11 - UPS - UNI/NNI FRS CIR - 128 - 256 KBPS

9/29/99

	Volume Sensitive				Volume Insensitive			
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$3.6306	$0.4263		$4.0569				$0.0000
Total Monthly Cost	$3.6306	$0.4263		$4.0569	$0.0000	$0.0000		$0.0000
Gross Receipts Tax Factor			X	1.0026			X	1.0026
Cost (including Gross Receipts Tax)				$4.0676				$0.0000
Common Cost Factor			X	1.0530			X	1.0530
Monthly Economic Cost				$4.2832				$0.0000

Total Monthly Economic Cost : $4.2832

000078

9/29/99

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

Kentucky
N.1.11 - UPS - UNI/NNI FRS CIR - 128 - 256 KBPS

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	E=Cx(D_1xD_2 x...xD_5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$120.1439	0.9833	$118.1336	1.0930	1.0000	1.0000	1.0600	1.0000	$136.8672	1.1291	$154.5367

000079

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

Kentucky
N.1.11 - UPS - UNI/NNI FRS CIR - 128 - 256 KBPS

	FRC	Investment	
Land - COE	20C	$1.7756	= Sum of Col C
Buildings - COE	10C	$26.9759	= Sum of Col E

9/29/99			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$154.5367	0.0115	$1.7756	0.1746	$26.9759	0.0000	$0.0000	0.0000	$0.0000
					$1.7756		$26.9759		$0.0000		$0.0000

000080

9/29/99

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.11 - UPS - UNI/NNI FRS CIR - 128 - 256 KBPS

		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	$1.7756	0.0000	$0.0000	0.1125	$0.1998	0.0547	$0.0970	0.0000	$0.0000	0.0058	$0.0103	$0.3071	0.0000	$0.0000	$0.3071
Buildings - COE	10C	$26.9759	0.0222	$0.5995	0.0912	$2.4606	0.0443	$1.1954	0.0386	$1.0418	0.0058	$0.1565	$5.4537	0.0006	$0.0162	$5.46[illegible]
Digital Elec Switch	377C	$154.5367	0.1000	$15.4537	0.0716	$11.0626	0.0348	$5.3745	0.0325	$5.0190	0.0058	$0.8963	$37.8061	0.0330	$5.0997	$42.9[illegible]
Annual Total		$183.2883											$43.5669		$5.1159	$48.6828
Monthly Total (Annual Total / 12)													$3.6306		$0.4263	$4.0569

000081

Recurring Cost Summary

Kentucky
N.1.12 - UPS - UNI/NNI FRS CIR - 256 - 384 KBPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$5.4459	$0.6395	$6.0853			$0.0000
Total Monthly Cost	$5.4459	$0.6395	$6.0853	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0026			X 1.0026
Cost (including Gross Receipts Tax)			$6.1014			$0.0000
Common Cost Factor			X 1.0530			X 1.0530
Monthly Economic Cost			$6.4248			$0.0000

Total Monthly Economic Cost : $6.4248

000082

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

Kentucky
N.1.12 - UPS - UNI/NNI FRS CIR - 256 - 384 KBPS

9/29/99

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	E=Cx(D_1xD_2 x...xD_5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$180.2159	0.9833	$177.2004	1.0930	1.0000	1.0000	1.0600	1.0000	$205.3008	1.1291	$231.8051

000083

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

Kentucky
N.1.12 - UPS - UNI/NNI FRS CIR - 256 - 384 KBPS

	FRC	Investment	
Land - COE	20C	$2.6634	= Sum of Col C
Buildings - COE	10C	$40.4639	= Sum of Col E

9/29/99			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$231.8051	0.0115	$2.6634	0.1746	$40.4639	0.0000	$0.0000	0.0000	$0.0000
					$2.6634		$40.4639		$0.0000		$0.0000

000084

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.12 - UPS - UNI/NNI FRS CIR - 256 - 384 KBPS

9/29/99

		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	$2.6634	0.0000	$0.0000	0.1125	$0.2996	0.0547	$0.1456	0.0000	$0.0000	0.0058	$0.0154	$0.4607	0.0000	$0.0000	$0.4607
Buildings - COE	10C	$40.4639	0.0222	$0.8992	0.0912	$3.6909	0.0443	$1.7931	0.0386	$1.5626	0.0058	$0.2347	$8.1805	0.0006	$0.0243	$8.2048
Digital Elec Swtch	377C	$231.8051	0.1000	$23.1805	0.0716	$16.5939	0.0348	$8.0617	0.0325	$7.5286	0.0058	$1.3445	$56.7091	0.0330	$7.6496	$64.3[illegible]
Annual Total		$274.9325											$65.3503		$7.6738	$73.0241
Monthly Total (Annual Total / 12)													$5.4459		$0.6395	$6.0853

000085

Recurring Cost Summary

Kentucky
N.1.13 - UPS - UNI/NNI FRS CIR - 384 - 512 KBPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$7.2611	$0.8526	$8.1138			$0.0000
Total Monthly Cost	$7.2611	$0.8526	$8.1138	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0026			X 1.0026
Cost (including Gross Receipts Tax)			$8.1352			$0.0000
Common Cost Factor			X 1.0530			X 1.0530
Monthly Economic Cost			$8.5664			$0.0000

Total Monthly Economic Cost : $8.5664

000086

9/29/99

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

Kentucky
N.1.13 - UPS - UNI/NNI FRS CIR - 384 - 512 KBPS

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	E=Cx(D_1xD_2 x...xD_5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$240.2879	0.9833	$236.2671	1.0930	1.0000	1.0000	1.0600	1.0000	$273.7344	1.1291	$309.0735

000087

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

Kentucky
N.1.13 - UPS - UNI/NNI FRS CIR - 384 - 512 KBPS

	FRC	Investment	
Land - COE	20C	$3.5513	= Sum of Col C
Buildings - COE	10C	$53.9519	= Sum of Col E

9/29/99

			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$309.0735	0.0115	$3.5513	0.1746	$53.9519	0.0000	$0.0000	0.0000	$0.0000
					$3.5513		$53.9519		$0.0000		$0.0000

000088

9/29/99

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.13 - UPS - UNI/NNI FRS CIR - 384 - 512 KBPS

		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	$3.5513	0.0000	$0.0000	0.1125	$0.3995	0.0547	$0.1941	0.0000	$0.0000	0.0058	$0.0206	$0.6142	0.0000	$0.0000	$0.6142
Buildings - COE	10C	$53.9519	0.0222	$1.1989	0.0912	$4.9212	0.0443	$2.3908	0.0386	$2.0835	0.0058	$0.3129	$10.9073	0.0006	$0.0324	$10.9[illegible]
Digital Elec Switch	377C	$309.0735	0.1000	$30.9073	0.0716	$22.1251	0.0348	$10.7490	0.0325	$10.0381	0.0058	$1.7926	$75.6122	0.0330	$10.1994	$85.8[illegible]
Annual Total		$366.5766											$87.1337		$10.2318	$97.3655
Monthly Total (Annual Total / 12)													$7.2611		$0.8526	$8.1138

000089

Recurring Cost Summary

Kentucky
N.1.14 - UPS - UNI/NNI FRS CIR - 512 - 768 KBPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	**Shared Cost**	**TELRIC**	**Direct Cost**	**Shared Cost**	**TELRIC**
Recurring Cost Devel. Sheets Cols L, N, & O	$10.8917	$1.2790	$12.1707			$0.0000
Total Monthly Cost	$10.8917	$1.2790	$12.1707	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0026			X 1.0026
Cost (including Gross Receipts Tax)			$12.2028			$0.0000
Common Cost Factor			X 1.0530			X 1.0530
Monthly Economic Cost			$12.8495			$0.0000

Total Monthly Economic Cost : $12.8495

000090

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

Kentucky
N.1.14 - UPS - UNI/NNI FRS CIR - 512 - 768 KBPS

9/29/99

			A	B	C=AxB	D1	D2	D3	D4	D5	E=Cx(D1xD2 x...xD5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$360.4318	0.9833	$354.4007	1.0930	1.0000	1.0000	1.0600	1.0000	$410.6016	1.1291	$463.6102

000091

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

Kentucky
N.1.14 - UPS - UNI/NNI FRS CIR - 512 - 768 KBPS

	FRC	Investment	
Land - COE	20C	$5.3269	= Sum of Col C
Buildings - COE	10C	$80.9278	= Sum of Col E

9/29/99

			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$463.6102	0.0115	$5.3269	0.1746	$80.9278	0.0000	$0.0000	0.0000	$0.0000
					$5.3269		$80.9278		$0.0000		$0.0000

000092

9/29/99

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.14 - UPS - UNI/NNI FRS CIR - 512 - 768 KBPS

		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	$5.3269	0.0000	$0.0000	0.1125	$0.5993	0.0547	$0.2911	0.0000	$0.0000	0.0058	$0.0309	$0.9213	0.0000	$0.0000	$0.9213
Buildings - COE	10C	$80.9278	0.0222	$1.7984	0.0912	$7.3817	0.0443	$3.5862	0.0386	$3.1253	0.0058	$0.4694	$16.3610	0.0006	$0.0486	$16.4096
Digital Elec Switch	377C	$463.6102	0.1000	$46.3610	0.0716	$33.1877	0.0348	$16.1234	0.0325	$15.0571	0.0058	$2.6889	$113.4183	0.0330	$15.2991	$128.7[illegible]
Annual Total		$549.8649											$130.7006		$15.3477	$146.0483
Monthly Total (Annual Total / 12)													$10.8917		$1.2790	$12.1707

000093

Recurring Cost Summary

Kentucky
N.1.15 - UPS - UNI/NNI FRS CIR - 768 - 1.536 MBPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$21.7834	$2.5579	$24.3414			$0.0000
Total Monthly Cost	$21.7834	$2.5579	$24.3414	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0026			X 1.0026
Cost (including Gross Receipts Tax)			$24.4056			$0.0000
Common Cost Factor			X 1.0530			X 1.0530
Monthly Economic Cost			$25.6991			$0.0000

Total Monthly Economic Cost : $25.6991

000094

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

Kentucky
N.1.15 - UPS - UNI/NNI FRS CIR - 768 - 1.536 MBPS

9/29/99

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	E=Cx(D_1xD_2 x...xD_5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$720.8636	0.9833	$708.8014	1.0930	1.0000	1.0000	1.0600	1.0000	$821.2032	1.1291	$927.2205

000095

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

Kentucky
N.1.15 - UPS - UNI/NNI FRS CIR - 768 - 1.536 MBPS

	FRC	Investment	
Land - COE	20C	$10.6538	= Sum of Col C
Buildings - COE	10C	$161.8556	= Sum of Col E

9/29/99

			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$927.2205	0.0115	$10.6538	0.1746	$161.8556	0.0000	$0.0000	0.0000	$0.0000
					$10.6538		$161.8556		$0.0000		$0.0000

000096

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.15 - UPS - UNI/NNI FRS CIR - 768 - 1.536 MBPS

9/29/99

		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	$10.6538	0.0000	$0.0000	0.1125	$1.1985	0.0547	$0.5823	0.0000	$0.0000	0.0058	$0.0618	$1.8426	0.0000	$0.0000	$1.8426
Buildings - COE	10C	$161.8556	0.0222	$3.5968	0.0912	$14.7635	0.0443	$7.1725	0.0386	$6.2505	0.0058	$0.9388	$32.7220	0.0006	$0.0971	$32.8191
Digital Elec Switch	377C	$927.2205	0.1000	$92.7220	0.0716	$66.3754	0.0348	$32.2469	0.0325	$30.1143	0.0058	$5.3779	$226.8365	0.0330	$30.5983	$257.[illegible]
Annual Total		$1,099.7299											$261.4011		$30.6954	$292.0965
Monthly Total (Annual Total / 12)													$21.7834		$2.5579	$24.3414

000097

Recurring Cost Summary

Kentucky
N.1.16 - UPS - UNI/NNI FRS CIR - 1.536 - 4 MBPS

9/29/99

	Volume Sensitive				Volume Insensitive		
	Direct Cost	Shared Cost		TELRIC	Direct Cost	Shared Cost		TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$54.4586	$6.3949		$60.8534				$0.0000
Total Monthly Cost	$54.4586	$6.3949		$60.8534	$0.0000	$0.0000		$0.0000
Gross Receipts Tax Factor			X	1.0026			X	1.0026
Cost (including Gross Receipts Tax)				$61.0140				$0.0000
Common Cost Factor			X	1.0530			X	1.0530
Monthly Economic Cost				$64.2477				$0.0000

Total Monthly Economic Cost : $64.2477

000098

9/29/99

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

Kentucky
N.1.16 - UPS - UNI/NNI FRS CIR - 1.536 - 4 MBPS

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	E=Cx(D_1xD_2 x...xD_5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$1,802.1591	0.9833	$1,772.0036	1.0930	1.0000	1.0000	1.0600	1.0000	$2,053.0079	1.1291	$2,318.0512

000099

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

Kentucky
N.1.16 - UPS - UNI/NNI FRS CIR - 1.536 - 4 MBPS

	FRC	Investment	
Land - COE	20C	$26.6344	= Sum of Col C
Buildings - COE	10C	$404.6390	= Sum of Col E

9/29/99

			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$2,318.0512	0.0115	$26.6344	0.1746	$404.6390	0.0000	$0.0000	0.0000	$0.0000
					$26.6344		$404.6390		$0.0000		$0.0000

000100

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.16 - UPS - UNI/NNI FRS CIR - 1.536 - 4 MBPS

		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	$26.6344	0.0000	$0.0000	0.1125	$2 9964	0 0547	$1.4557	0.0000	$0.0000	0.0058	$0.1545	$4.6066	0.0000	$0.0000	$4 6066
Buildings - COE	10C	$404.6390	0.0222	$8.9920	0 0912	$36.9086	0.0443	$17.9311	0.0386	$15.6263	0.0058	$2.3469	$81 8050	0.0006	$0 2428	$82.0478
Digital Elec Switch	377C	$2,318.0512	0.1000	$231.8051	0.0716	$165 9386	0.0348	$80.6172	0.0325	$75.2857	0.0058	$13.4447	$567.0913	0.0330	$76.4957	$643.5[illegible]
Annual Total		$2,749.3246											$653.5028		$76.7385	$730.2413
Monthly Total (Annual Total / 12)													$54.4586		$6.3949	$60.8534

000101

Recurring Cost Summary

Kentucky
N.1.17 - UPS - UNI/NNI FRS CIR - 4 - 10 MBPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$137.9617	$16.2003	$154.1621			$0.0000
Total Monthly Cost	$137.9617	$16.2003	$154.1621	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0026			X 1.0026
Cost (including Gross Receipts Tax)			$154.5687			$0.0000
Common Cost Factor			X 1.0530			X 1.0530
Monthly Economic Cost			$162.7609			$0.0000

Total Monthly Economic Cost : $162.7609

000102

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

Kentucky
N.1.17 - UPS - UNI/NNI FRS CIR - 4 - 10 MBPS

9/29/99

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	E=Cx(D_1xD_2 x...xD_5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$4,565.4697	0.9833	$4,489.0757	1.0930	1.0000	1.0000	1.0600	1.0000	$5,200.9533	1.1291	$5,872.3964

000103

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

Kentucky
N.1.17 - UPS - UNI/NNI FRS CIR - 4 - 10 MBPS

	FRC	Investment	
Land - COE	20C	$67.4738	= Sum of Col C
Buildings - COE	10C	$1,025.0855	= Sum of Col E

9/29/99

			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$5,872.3964	0.0115	$67.4738	0.1746	$1,025.0855	0.0000	$0.0000	0.0000	$0.0000
					$67.4738		$1,025.0855		$0.0000		$0.0000

000104

9/29/99

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.17 - UPS - UNI/NNI FRS CIR - 4 - 10 MBPS

		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	$67.4738	0.0000	$0.0000	0.1125	$7.5908	0.0547	$3.6878	0.0000	$0.0000	0.0058	$0.3913	$11.6700	0.0000	$0.0000	$11.6700
Buildings - COE	10C	$1,025.0855	0.0222	$22.7797	0.0912	$93.5019	0.0443	$45.4256	0.0386	$39 5868	0.0058	$5.9455	$207.2394	0.0006	$0.6151	$207.8544
Digital Elec Switch	377C	$5,872.3964	0.1000	$587.2396	0.0716	$420.3778	0 0348	$204.2302	0.0325	$190.7237	0.0058	$34 0599	$1,436.6312	0.0330	$193.7891	$1,630.[illegible]
Annual Total		$6,964.9558											$1,655.5405		$194.4041	$1,849.9447
Monthly Total (Annual Total / 12)													$137.9617		$16.2003	$154.1621

000105

Recurring Cost Summary

Kentucky
N.1.18 - UPS - UNI/NNI FRS CIR - 10 - 16 MBPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$220.5572	$25.8992	$246.4564			$0.0000
Total Monthly Cost	$220.5572	$25.8992	$246.4564	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0026			X 1.0026
Cost (including Gross Receipts Tax)			$247.1066			$0.0000
Common Cost Factor			X 1.0530			X 1.0530
Monthly Economic Cost			$260.2032			$0.0000

Total Monthly Economic Cost : $260.2032

000106

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

Kentucky
N.1.18 - UPS - UNI/NNI FRS CIR - 10 - 16 MBPS

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	E=Cx(D_1xD_2 x...xD_5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$7,298.7444	0.9833	$7,176.6145	1.0930	1.0000	1.0000	1.0600	1.0000	$8,314.6820	1.1291	$9,388.1074

000107

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

Kentucky
N.1.18 - UPS - UNI/NNI FRS CIR - 10 - 16 MBPS

	FRC	Investment	
Land - COE	20C	$107.8694	= Sum of Col C
Buildings - COE	10C	$1,638.7880	= Sum of Col E

9/29/99

			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$9,388.1074	0.0115	$107.8694	0.1746	$1,638.7880	0.0000	$0.0000	0.0000	$0.0000
					$107.8694		$1,638.7880		$0.0000		$0.0000

000108

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.18 - UPS - UNI/NNI FRS CIR - 10 - 16 MBPS

9/29/99

		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	$107.8694	0.0000	$0.0000	0.1125	$12.1353	0.0547	$5.8956	0.0000	$0.0000	0.0058	$0.6256	$18.6566	0.0000	$0.0000	$18.6566
Buildings - COE	10C	$1,638.7880	0.0222	$36.4175	0.0912	$149.4800	0.0443	$72.6212	0.0386	$63.2867	0.0058	$9.5050	$331.3103	0.0006	$0.9833	$332.2936
Digital Elec Switch	377C	$9,388.1074	0.1000	$938.8107	0.0716	$672.0513	0.0348	$326.4996	0.0325	$304.9070	0.0058	$54.4510	$2,296.7196	0.0330	$309.8075	$2,606.5[illegible]
Annual Total		$11,134.7648											$2,646.6865		$310.7908	$2,957.4773
Monthly Total (Annual Total / 12)													$220.5572		$25.8992	$246.4564

000109

Recurring Cost Summary

Kentucky
N.1.19 - UPS - UNI/NNI FRS CIR - 16 - 34 MBPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$469.0698	$55.0812	$524.1510			$0.0000
Total Monthly Cost	$469.0698	$55.0812	$524.1510	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0026			X 1.0026
Cost (including Gross Receipts Tax)			$525.5337			$0.0000
Common Cost Factor			X 1.0530			X 1.0530
Monthly Economic Cost			$553.3870			$0.0000

Total Monthly Economic Cost : $553.3870

000110

9/29/99

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

Kentucky
N.1.19 - UPS - UNI/NNI FRS CIR - 16 - 34 MBPS

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	E=Cx(D_1xD_2 x...xD_5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$15,522.5970	0.9833	$15,262.8574	1.0930	1.0000	1.0000	1.0600	1.0000	$17,683.2414	1.1291	$19,966.1478

000111

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

Kentucky
N.1.19 - UPS - UNI/NNI FRS CIR - 16 - 34 MBPS

	FRC	Investment	
Land - COE	20C	$229.4110	= Sum of Col C
Buildings - COE	10C	$3,485.2908	= Sum of Col E

9/29/99

			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$19,966.1478	0.0115	$229.4110	0.1746	$3,485.2908	0.0000	$0.0000	0.0000	$0.0000
					$229.4110		$3,485.2908		$0.0000		$0.0000

000112

9/29/99

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.19 - UPS - UNI/NNI FRS CIR - 16 - 34 MBPS

		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	$229.4110	0.0000	$0.0000	0.1125	$25.8087	0.0547	$12.5385	0.0000	$0.0000	0.0058	$1.3306	$39.6779	0.0000	$0.0000	$39.6779
Buildings - COE	10C	$3,485.2908	0.0222	$77.4509	0.0912	$317.9063	0.0443	$154.4470	0.0386	$134.5950	0.0058	$20.2147	$704.6139	0.0006	$2.0912	$706.70[illegible]
Digital Elec Switch	377C	$19,966.1478	0.1000	$1,996.6148	0.0716	$1,429.2845	0.0348	$694.3826	0.0325	$648.4605	0.0058	$115.8037	$4,884.5461	0.0330	$658.8829	$5,543.4[illegible]
Annual Total		$23,680.8496											$5,628.8378		$660.9741	$6,289.8119
Monthly Total (Annual Total / 12)													$469.0698		$55.0812	$524.1510

000113

Recurring Cost Summary

Kentucky
N.1.20 - UPS - UNI/NNI FRS CIR - 34 - 44.210 MBPS

9/29/99

	Volume Sensitive			Volume Insensitive		
	Direct Cost	Shared Cost	TELRIC	Direct Cost	Shared Cost	TELRIC
Recurring Cost Devel. Sheets Cols L, N, & O	$609.9360	$71.6226	$681.5586			$0.0000
Total Monthly Cost	$609.9360	$71.6226	$681.5586	$0.0000	$0.0000	$0.0000
Gross Receipts Tax Factor			X 1.0026			X 1.0026
Cost (including Gross Receipts Tax)			$683.3565			$0.0000
Common Cost Factor			X 1.0530			X 1.0530
Monthly Economic Cost			$719.5744			$0.0000

Total Monthly Economic Cost : $719.5744

000114

9/29/99

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

Kentucky
N.1.20 - UPS - UNI/NNI FRS CIR - 34 - 44.210 MBPS

			A	B	C=AxB	D_1	D_2	D_3	D_4	D_5	E=Cx(D_1xD_2 x...xD_5)	F	G=ExF
						In-Plant Factors (Default = 1)							
	FRC	Sub FRC	Material	Inflation Factor	Adjusted Material	Plug-in Inventory Factor	Mat'l Factor	Telco Factor	Plug-in Factor	Hardwire Factor	In-Plant Investment	Supporting Equipment &/or Power Loading	Total Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$20,184.1819	0.9833	$19,846.4400	1.0930	1.0000	1.0000	1.0600	1.0000	$22,993.6885	1.1291	$25,962.1736

000115

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

Kentucky
N.1.20 - UPS - UNI/NNI FRS CIR - 34 - 44.210 MBPS

	FRC	Investment	
Land - COE	20C	$298.3054	= Sum of Col C
Buildings - COE	10C	$4,531.9570	= Sum of Col E

9/29/99

			A=Prev Page Col G	B	C=(AxB)	D	E=(AxD)	F	G=(AxF)	H	I=(AxH)
	FRC	Sub FRC	Investment	Land Factor	Land Investment	Building Factor	Building Investment	Pole Factor	Pole Investment	Conduit Factor	Conduit Investment
Digital Elec Switch - C.O. Def. Plug-In - SE&P w/Sp. Stock	377C	10	$25,962.1736	0.0115	$298.3054	0.1746	$4,531.9570	0.0000	$0.0000	0.0000	$0.0000
					$298.3054		$4,531.9570		$0.0000		$0.0000

000116

Recurring Cost Development
Volume Sensitive

Kentucky
N.1.20 - UPS - UNI/NNI FRS CIR - 34 - 44.210 MBPS

9/29/99

		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	$298.3054	0.0000	$0.0000	0.1125	$33.5594	0.0547	$16.3040	0.0000	$0.0000	0.0058	$1.7302	$51.5935	0.0000	$0.0000	$51.5935
Buildings - COE	10C	$4,531.9570	0.0222	$100.7102	0.0912	$413.3767	0.0443	$200.8289	0.0386	$175.0151	0.0058	$26.2854	$916.2162	0.0006	$2.7192	$918.[illegible]
Digital Elec Switch	377C	$25,962.1736	0.1000	$2,596.2174	0.0716	$1,858.5123	0.0348	$902.9124	0.0325	$843.1995	0.0058	$150.5806	$6,351.4222	0.0330	$856.7517	$7,208.1739
Annual Total		$30,792.4360											$7,319.2319		$859.4709	$8,178.7028
Monthly Total (Annual Total / 12)													$609.9360		$71.6226	$681 5586

000117

Nonrecurring Cost Summary

Kentucky
N.1.21 - UPS - UNI/NNI FRS CIR - Feature Change

9/29/99

Nonrecurring Cost

	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$22.1162	$7.4012		$29.5175
Total Cost	$22.1162	$7.4012		$29.5175
Gross Receipts Tax Factor			X	1.0026
Cost (including Gross Receipts Tax)				$29.5953
Common Cost Factor			X	1.0530
Nonrecurring Economic Cost				**$31.1639**

000118

Nonrecurring Cost Development

Kentucky
N.1.21 - UPS - UNI/NNI FRS CIR - Feature Change

9/29/99

Function	JFC/ Payband	JFC/Payband Description	A Installation Worktime	B Disconnect Worktime	C Direct Labor Rate	D=AxC Install Cost	E=BxC Disconnect Cost	F Disconnect Discount Factor	G=ExF Discounted Disconnect Cost	H=D+G Direct Cost
Service Order	2850	Bus Ofc Svc Rep - Business	0.2500	0.0000	$37.39	$9.3475	$0.0000	0.8545	$0.0000	$9.3475
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.3333	0.0000	$38.31	$12.7687	$0.0000	0.8545	$0.0000	$12.7687
									Total	**22.116223**

Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	TELRIC Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	TELRIC
Service Order	2850	Bus Ofc Svc Rep - Business	0.2500	0.0000	$50.29	$12.5725	$0.0000	0.8545	$0.0000	$12.5725
Connect & Test	471X	Acc Cust Advocate Cntr (ACAC)	0.3333	0.0000	$50.84	$16.9450	$0.0000	0.8545	$0.0000	$16.9450
									Total	**29.517472**

000119

Nonrecurring Cost Summary

Kentucky
N.1.22 - UPS - UNI/NNI FRS CIR - Transfer of Service

9/29/99

Nonrecurring Cost

	Direct Cost	Shared Cost		TELRIC
Nonrecurring Cost Development Sheet Col H	$9.3475	$3.2250		$12.5725
Total Cost	$9.3475	$3.2250		$12.5725
Gross Receipts Tax Factor			X	1.0026
Cost (including Gross Receipts Tax)				$12.6057
Common Cost Factor			X	1.0530
Nonrecurring Economic Cost				**$13.2738**

000120

9/29/99

Nonrecurring Cost Development

Kentucky
N.1.22 - UPS - UNI/NNI FRS CIR - Transfer of Service

			A	B	C	D=AxC	E=BxC	F	G=ExF	H=D+G
Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	Direct Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	Direct Cost
Service Order	2850	Bus Ofc Svc Rep - Business	0.2500	0.0000	$37.39	$9.3475	$0.0000	0.8545	$0.0000	$9.3475
									Total	9.3475

Function	JFC/ Payband	JFC/Payband Description	Installation Worktime	Disconnect Worktime	TELRIC Labor Rate	Install Cost	Disconnect Cost	Disconnect Discount Factor	Discounted Disconnect Cost	TELRIC
Service Order	2850	Bus Ofc Svc Rep - Business	0.2500	0.0000	$50.29	$12.5725	$0.0000	0.8545	$0.0000	$12.5725
									Total	12.5725

000121

	A	B	C	D	E	F	G	H
1		Cost					Sub	In-Plant
2	State	Element #	Cost Unit	Source	Inputs	FRC	FRC	Type
3	KY	N.1	**UNBUNDLED PACKET SWITCHING FRAME RELAY**					
4								
5	KY	N.1.1	**UPS - UNI/NNI FRS 56 KBPS**					
6			**Base System (e/w Pwr,Fan)**					
7			Material Price	Network Planning & Support	[redacted]	377C	09	C
8			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
9			Number of Usable Slots	Network Planning & Support	12			
10			DS0 Utilization on 4-Port Card	Network Planning & Support	[redacted]			
11			Number of DS0s per 4-port card	Network Planning & Support	96			
12			**Redundant Fan**					
13			Material Price	Network Planning & Support	[redacted]	377C	08	P
14			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
15			Number of Usable Slots	Network Planning & Support	12			
16			DS0 Utilization on 4-Port Card	Network Planning & Support	[redacted]			
17			Number of DS0s per 4-port card	Network Planning & Support	96			
18			**CPU (2)**					
19			Material Price	Network Planning & Support	[redacted]	377C	08	P
20			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
21			Number of Usable Slots	Network Planning & Support	12			
22			DS0 Utilization on 4-Port Card	Network Planning & Support	[redacted]			
23			Number of DS0s per 4-port card	Network Planning & Support	96			
24			**Redundant Power Supply**					
25			Material Price	Network Planning & Support	[redacted]	377C	08	P
26			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
27			Number of Usable Slots	Network Planning & Support	12			
28			DS0 Utilization on 4-Port Card	Network Planning & Support	[redacted]			
29			Number of DS0s per 4-port card	Network Planning & Support	96			
30			**23" Rack Mount Kit**					
31			Material Price	Network Planning & Support	[redacted]	377C	07	H
32			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
33			Number of Usable Slots	Network Planning & Support	12			
34			DS0 Utilization on 4-Port Card	Network Planning & Support	[redacted]			
35			Number of DS0s per 4-port card	Network Planning & Support	96			
36			**HSSI Card (Trunking)**					
37			Material Price	Network Planning & Support	[redacted]	377C	08	P
38			Projected Actual Utilization	Network Planning & Support	[redacted]			
39			Number of Usable Slots	Network Planning & Support	12			
40			DS0 Utilization on 4-Port Card	Network Planning & Support	[redacted]			
41			Number of DS0s per 4-port card	Network Planning & Support	96			
42			Number Required	Network Planning & Support	2			
43			**4-Port Bundled I/O Card**					
44			Material Price	Network Planning & Support	[redacted]	377C	10	P
45			DS0 Utilization on 4-Port Card	Network Planning & Support	[redacted]			
46			% Allocated to CIR	Network Planning & Support	20.00%			

000122

	A	B	C	D	E	F	G	H
1		Cost					Sub	In-Plant
2	State	Element #	Cost Unit	Source	Inputs	FRC	FRC	Type
47			Number of DS0s per 4-port card	Network Planning & Support	96			
48			**Panel**					
49			Material Price	Network Planning & Support	[redacted]	377C	07	H
50			DS1's per Panel	Network Planning & Support	120			
51			Projected Actual Util - Panel DS1	Network Planning & Support	[redacted]			
52			DS0 Utilization per DS1	Network Planning & Support	[redacted]			
53			Number of DS0s per DS1	Network Planning & Support	24			
54			**DSX-1 Termination**					
55			Material Price	Fundamental Group	[redacted]	357C	03	H
56			Projected Actual Utilization-DS0 C.O. Side	Fundamental Group	[redacted]			
57			Projected Actual Utilization-DS0 Field Side	Fundamental Group	[redacted]			
58			Number Required	Fundamental Group	2			
59			Number of DSO's per DS1Port	Fundamental Group	24			
60			**DCS Port - DS1**					
61			Material Price	Fundamental Group	[redacted]	357C	15	C
62			Projected Actual Utilization-DS0 C.O. Side	Fundamental Group	[redacted]			
63			Projected Actual Utilization-DS0 Field Side	Fundamental Group	[redacted]			
64			Number Required	Fundamental Group	1			
65			Number of DSO's per DS1Port	Fundamental Group	24			
66			**D4 Channel Bank Term. per DS0 Port-Hardwired**					
67			Material Price	Fundamental Group	[redacted]	357C	03	H
68			Projected Actual Utilization	Fundamental Group	[redacted]			
69			Number Required	Fundamental Group	1			
70			**D4 Channel Bank Term. per DS0 Port-Com Eqpt.-Plug**					
71			Material Price	Fundamental Group	[redacted]	357C	06	P
72			Projected Actual Utilization	Fundamental Group	[redacted]			
73			Number Required	Fundamental Group	1			
74			**D4 Channel Bank Term. per DS0 Port-OCU-DP Plug**					
75			Material Price	Fundamental Group	[redacted]	357C	09	P
76			Projected Actual Utilization	Fundamental Group	[redacted]			
77			Number Required	Fundamental Group	1			
78	KY	N.1.1	DS0 Utilization on DSX-1,DCS Port	Network Planning & Support	[redacted]			
79	KY	N.1.2	**UPS - UNI/NNI FRS 64 KBPS**					
80			**Base System(e/w Pwr,Fan)**					
81			Material Price	Network Planning & Support	[redacted]	377C	09	C
82			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
83			Number of Usable Slots	Network Planning & Support	12			
84			DS0 Utilization on 4-Port Card	Network Planning & Support	[redacted]			
85			Number of DS0s per 4-port card	Network Planning & Support	96			
86			**Redundant Fan**					
87			Material Price	Network Planning & Support	[redacted]	377C	08	P
88			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
89			Number of Usable Slots	Network Planning & Support	12			
90			DS0 Utilization on 4-Port Card	Network Planning & Support	[redacted]			

	A	B	C	D	E	F	G	H
1		Cost					Sub	In-Plant
2	State	Element #	Cost Unit	Source	Inputs	FRC	FRC	Type
91			Number of DS0s per 4-port card	Network Planning & Support	96			
92			**CPU (2)**					
93			Material Price	Network Planning & Support	[redacted]	377C	08	P
94			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
95			Number of Usable Slots	Network Planning & Support	12			
96			DS0 Utilization on 4-Port Card	Network Planning & Support	[redacted]			
97			Number of DS0s per 4-port card	Network Planning & Support	96			
98			**Redundant Power Supply**					
99			Material Price	Network Planning & Support	[redacted]	377C	08	P
100			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
101			Number of Usable Slots	Network Planning & Support	12			
102			DS0 Utilization on 4-Port Card	Network Planning & Support	[redacted]			
103			Number of DS0s per 4-port card	Network Planning & Support	96			
104			**23" Rack Mount Kit**					
105			Material Price	Network Planning & Support	[redacted]	377C	07	H
106			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
107			Number of Usable Slots	Network Planning & Support	12			
108			DS0 Utilization on 4-Port Card	Network Planning & Support	[redacted]			
109			Number of DS0s per 4-port card	Network Planning & Support	96			
110			**HSSI Card(Trunking)**					
111			Material Price	Network Planning & Support	[redacted]	377C	08	P
112			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
113			Number of Usable Slots	Network Planning & Support	12			
114			DS0 Utilization on 4-Port Card	Network Planning & Support	[redacted]			
115			Number of DS0s per 4-port card	Network Planning & Support	96			
116			Number Required	Network Planning & Support	2			
117			**4-Port Bundled I/O Card**					
118			Material Price	Network Planning & Support	[redacted]	377C	10	P
119			DS0 Utilization on 4-Port Card	Network Planning & Support	[redacted]			
120			% Allocated to CIR	Network Planning & Support	20.00%			
121			Number of DS0s per 4-port card	Network Planning & Support	96			
122			**Panel**					
123			Material Price	Network Planning & Support	[redacted]	377C	07	H
124			DS1's per Panel	Network Planning & Support	120			
125			Projected Actual Util - Panel DS1	Network Planning & Support	[redacted]			
126			DS0 Utilization per DS1	Network Planning & Support	[redacted]			
127			Number of DS0s per DS1	Network Planning & Support	24			
128			**DSX-1 Termination**					
129			Material Price	Fundamental Group	[redacted]	357C	03	H
130			Projected Actual Utilization-DS0 C.O. Side	Fundamental Group	[redacted]			
131			Projected Actual Utilization-DS0 Field Side	Fundamental Group	[redacted]			
132			Number Required	Fundamental Group	2			
133			Number of DSO's per DS1Port	Fundamental Group	24			
134			**DCS Port - DS1**					

000124

	A	B	C	D	E	F	G	H
1		Cost					Sub	In-Plant
2	State	Element #	Cost Unit	Source	Inputs	FRC	FRC	Type
135			Material Price	Fundamental Group	[redacted]	357C	15	C
136			Projected Actual Utilization-DS0 C.O. Side	Fundamental Group	[redacted]			
137			Projected Actual Utilization-DS0 Field Side	Fundamental Group	[redacted]			
138			Number Required	Fundamental Group	1			
139			Number of DSO's per DS1Port	Fundamental Group	24			
140			**D4 Channel Bank Term. per DS0 Port-Hardwired**					
141			Material Price	Fundamental Group	[redacted]	357C	03	H
142			Projected Actual Utilization	Fundamental Group	[redacted]			
143			Number Required	Fundamental Group	1			
144			**D4 Channel Bank Term. per DS0 Port-Com Eqpt.-Plug**					
145			Material Price	Fundamental Group	[redacted]	357C	06	P
146			Projected Actual Utilization	Fundamental Group	[redacted]			
147			Number Required	Fundamental Group	1			
148			**D4 Channel Bank Term. per DS0 Port-OCU-DP Plug**					
149			Material Price	Fundamental Group	[redacted]	357C	09	P
150			Projected Actual Utilization	Fundamental Group	[redacted]			
151			Number Required	Fundamental Group	1			
152	**KY**	**N.1.2**	DS0 Utilization on DSX-1,DCS Port	Network Planning & Support	[redacted]			
153	**KY**	**N.1.3**	**UPS - UNI/NNI FRS 1.536 MBPS**					
154			**Base System(e/w Pwr,Fan)**					
155			Material Price	Network Planning & Support	[redacted]	377C	09	C
156			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
157			Number of Usable Slots	Network Planning & Support	12			
158			DS1 Utilization on 10-Port Card	Network Planning & Support	[redacted]			
159			Number DS1Ports per 10-port Card	Network Planning & Support	10			
160			**Redundant Fan**					
161			Material Price	Network Planning & Support	[redacted]	377C	08	P
162			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
163			Number of Usable Slots	Network Planning & Support	12			
164			DS1 Utilization on 10-Port Card	Network Planning & Support	[redacted]			
165			Number DS1Ports per 10-port Card	Network Planning & Support	10			
166			**CPU (2)**					
167			Material Price	Network Planning & Support	[redacted]	377C	08	P
168			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
169			Number of Usable Slots	Network Planning & Support	12			
170			DS1 Utilization on 10-Port Card	Network Planning & Support	[redacted]			
171			Number DS1Ports per 10-port Card	Network Planning & Support	10			
172			**Redundant Power Supply**					
173			Material Price	Network Planning & Support	[redacted]	377C	08	P
174			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
175			Number of Usable Slots	Network Planning & Support	12			
176			DS1 Utilization on 10-Port Card	Network Planning & Support	[redacted]			
177			Number DS1Ports per 10-port Card	Network Planning & Support	10			
178			**23" Rack Mount Kit**					

000125

	A	B	C	D	E	F	G	H
1		Cost					Sub	In-Plant
2	State	Element #	Cost Unit	Source	Inputs	FRC	FRC	Type
179			Material Price	Network Planning & Support	[redacted]	377C	07	H
180			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
181			Number of Usable Slots	Network Planning & Support	12			
182			DS1 Utilization on 10-Port Card	Network Planning & Support	[redacted]			
183			Number Ports per Slot	Network Planning & Support	10			
184			**HSSI Card(Trunking)**					
185			Material Price	Network Planning & Support	[redacted]	377C	08	P
186			Projected Actual Utilization - Slot	Network Planning & Support	[redacted]			
187			Number of Usable Slots	Network Planning & Support	12			
188			DS1 Utilization on 10-Port Card	Network Planning & Support	[redacted]			
189			Number DS1Ports per 10-port Card	Network Planning & Support	10			
190			Number Required	Network Planning & Support	2			
191			**10-Port DS1 I/O Card**					
192			Material Price	Network Planning & Support	[redacted]	377C	10	P
193			DS1 Utilization on 10-Port Card	Network Planning & Support	[redacted]			
194			% Allocated to CIR	Network Planning & Support	20.00%			
195			Number DS1Ports per 10-port Card	Network Planning & Support	10			
196			**Panel**					
197			Material Price	Network Planning & Support	[redacted]	377C	07	H
198			DS1 Capacity per panel	Network Planning & Support	120			
199			Projected Actual Util - Panel DS1	Network Planning & Support	[redacted]			
200			Number DS1s	Network Planning & Support	1			
201			**DSX-1 Termination**					
202			Material Price	Fundamental Group	[redacted]	357C	03	H
203			Projected Actual Utilization	Fundamental Group	[redacted]			
204			Number Required	Fundamental Group	1			
205								
206	KY	N.1.4	**UPS - UNI/NNI FRS 44.210 MBPS**					
207			**Base System(e/w Pwr,Fan)**					
208			Material Price	Network Planning & Support	[redacted]	377C	09	C
209			Projected Actual Utilization	Network Planning & Support	[redacted]			
210			Number of Usable Slots	Network Planning & Support	12			
211			Number Ports per Slot		1			
212			**Redundant Fan**					
213			Material Price	Network Planning & Support	[redacted]	377C	08	P
214			Projected Actual Utilization	Network Planning & Support	[redacted]			
215			Number of Usable Slots	Network Planning & Support	12			
216			Number Ports per Slot	Network Planning & Support	1			
217			**CPU (2)**					
218			Material Price	Network Planning & Support	[redacted]	377C	08	P
219			Projected Actual Utilization	Network Planning & Support	[redacted]			
220			Number of Usable Slots	Network Planning & Support	12			
221			Number Ports per Slot	Network Planning & Support	1			
222			**Redundant Power Supply**					

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	A	B	C	D	E	F	G	H
1		Cost					Sub	In-Plant
2	State	Element #	Cost Unit	Source	Inputs	FRC	FRC	Type
223			Material Price	Network Planning & Support	[redacted]	377C	08	P
224			Projected Actual Utilization	Network Planning & Support				
225			Number of Usable Slots	Network Planning & Support	12			
226			Number Ports per Slot	Network Planning & Support	1			
227			**23" Rack Mount Kit**					
228			Material Price	Network Planning & Support	[redacted]	377C	07	H
229			Projected Actual Utilization	Network Planning & Support				
230			Number of Usable Slots	Network Planning & Support	12			
231			Number Ports per Slot	Network Planning & Support	1			
232			**HSSI Card(Trunking)**					
233			Material Price	Network Planning & Support	[redacted]	377C	08	P
234			Projected Actual Utilization	Network Planning & Support				
235			Number of Usable Slots	Network Planning & Support	12			
236			Number Ports per Slot	Network Planning & Support	1			
237			Number Required	Network Planning & Support	2			
238			**HSSI Card**					
239			Material Price	Network Planning & Support	[redacted]	377C	10	P
240			Projected Actual Utilization	Network Planning & Support				
241			% Allocated to CIR	Network Planning & Support	20.00%			
242			Number of Ports per Card	Network Planning & Support	1			
243			Number Required	Network Planning & Support	1			
244			**DSX3 Termination**					
245			Material Price	Fundamental Group	[redacted]	357C	03	H
246			Projected Actual Utilization	Fundamental Group				
247			Number Required	Fundamental Group	1			
248			**Kentrox DataSmart Unit**					
249			Material Price	Network Planning & Support	[redacted]	377C	08	P
250			Projected Actual Utilization	Network Planning & Support				
251			Number Required	Network Planning & Support	1			
252			**HSSI Cable**					
253			Material Price	Network Planning & Support	[redacted]	377C	08	P
254			Projected Actual Utilization	Network Planning & Support				
255			Number Required	Network Planning & Support	1			
256								
257	KY	N.1.6-N.1.20	**UPS - UNI/NNI FRS - CIR**					
258			**4-Port Unbundled I/O Card**					
259			Material Price	Network Planning & Support	[redacted]	377C	10	P
260			DS0 Utilization on 4-Port Card	Network Planning & Support				
261			% Allocated to CIR	Network Planning & Support	20.00%			
262			Number of DS0s per 4-port card	Network Planning & Support	96			
263			% of Ports	Network Planning & Support	[redacted]			
264								
265			**10-Port DS1 I/O Card**					
266			Material Price	Network Planning & Support	[redacted]	377C	10	P

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	A	B	C	D	E	F	G	H
1		Cost					Sub	In-Plant
2	State	Element #	Cost Unit	Source	Inputs	FRC	FRC	Type
267			DS1 Utilization on 10-Port Card	Network Planning & Support	[redacted]			
268			% Allocated to CIR	Network Planning & Support	20.00%			
269			Number Equiv. DS0s per Port	Network Planning & Support	24			
270			Number DS1Ports per 10-port Card	Network Planning & Support	10			
271			% of Ports	Network Planning & Support	[redacted]			
272								
273			**HSSI Card**					
274			Material Price	Network Planning & Support	[redacted]	377C	10	P
275			Projected Actual Utilization	Network Planning & Support	[redacted]			
276			% Allocated to CIR	Network Planning & Support	20.00%			
277			Number of Ports per Card	Network Planning & Support	1			
278			Number Equiv. DS0s per Port	Network Planning & Support	672			
279			% of Ports	Network Planning & Support	[redacted]			
280								
281	KY	N.1.1	**UPS - Application Software Per Port**		Year 1	Year 2	Year 3	
282		N.1.2	Cost per New Switch	Network Planning & Support	[redacted]	[redacted]	[redacted]	
283		N.1.3	Quantity	Network Planning & Support	[redacted]	[redacted]	[redacted]	
284			Growth Factor	Network Planning & Support	[redacted]	[redacted]	[redacted]	
285		N.1.4	Cost per Existing Switch Addl Year	Network Planning & Support	[redacted]	[redacted]	[redacted]	
286			Quantity	Network Planning & Support	[redacted]	[redacted]	[redacted]	
287			Actual Projected Demand	Network Planning & Support	[redacted]	[redacted]	[redacted]	
288			Growth Factor	Network Planning & Support	[redacted]	[redacted]	[redacted]	
289			ATM Port Demand	Network Planning & Support	[redacted]	[redacted]	[redacted]	
290								
291	KY	N.1.1	**UPS - DS1 Interoffice Facilities - Network Management System**					
292		N.1.2	Facilities Termination - 357C 03	Fundamental Group	$322.351	357C	03	
293		N.1.3	Facilities Termination -357C 06	Fundamental Group	$1,926.201	357C	06	
294		N.1.4	Facilities Termination - 357C 09	Fundamental Group	$396.077	357C	09	
295			Facilities Termination - 357C 15	Fundamental Group	$6.455	357C	15	
296			Facilities Per Airmile - 822C 00	Fundamental Group	$3.817	822C	00	
297			Facilities Per Airmile - 845C 00	Fundamental Group	$1.072	845C	00	
298			Facilities Per Airmile - 85C 00	Fundamental Group	$3.336	85C	00	
299			Total Circuit Airmiles - Region	Network Planning & Support	16,791			
300			# of Interoffice Circuits (DS1) - Region	Network Planning & Support	105			
301			# of DS1 Ports	Network Planning & Support	195			
302								
303					Year 1	Year 2	Year 3	
304			# of Ports - Region	Network Planning & Support	[redacted]	[redacted]	[redacted]	
305			Growth Factor	Network Planning & Support	[redacted]	[redacted]	[redacted]	
306			ATM Port Demand - Region	Network Planning & Support	[redacted]	[redacted]	[redacted]	
307								
308	KY	N.1.1 - N.1.4	Cost of Money	Study Assumption	11.25%			
309			Number of Years to Recovery Cost	Study Assumption	5			

	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	KY	N.1	UNBUNDLED PACKET SWITCHING FRAME RELAY											
6														
7	KY	N.1.1	UPS - UNI/NNI FRS 56 KBPS	DCSC - CSA	Service Order	2850	42	0.4167	0.1667					
8				DCSC - MT	Connect & Test	471X	42	1	0.5					
9				WMC	Service Order	4WXX	42	0.05	0.05					
10				COWKGRP	Connect & Test	431X	42	0.4167	0.3333					
11				CPG	Engineering	470X	42	0.0167	0.0083					
12				CCM	Service Inquiry	31XX	42	0	0					
13				ACAC	Connect & Test	471X	42	1.4595	0.18					
14														
15	KY	N.1.2	UPS - UNI/NNI FRS 64 KBPS	DCSC - CSA	Service Order	2850	42	0.4167	0.1667					
16				DCSC - MT	Connect & Test	471X	42	1	0.5					
17				WMC	Service Order	4WXX	42	0.05	0.05					
18				COWKGRP	Connect & Test	431X	42	0.4167	0.3333					
19				CPG	Engineering	470X	42	0.0167	0.0083					
20				CCM	Service Inquiry	31XX	42	0	0					
21				ACAC	Connect & Test	471X	42	1.4595	0.18					
22														
23	KY	N.1.3	UPS - UNI/NNI FRS 1.536 MBPS	DCSC - CSA	Service Order	2850	42	0.4167	0.1667					
24				DCSC - MT	Connect & Test	471X	42	1	0.5					
25				WMC	Service Order	4WXX	42	0.05	0.05					
26				COWKGRP	Connect & Test	431X	42	0.4167	0.3333					
27				CPG	Engineering	470X	42	0.0167	0.0083					
28				CCM	Service Inquiry	31XX	42	0	0					
29				ACAC	Connect & Test	471X	42	1.9595	0					
30														
31	KY	N.1.4	UPS - UNI/NNI FRS 44.210 MBPS	DCSC - CSA	Service Order	2850	42	0.4167	0.1667					
32				DCSC - MT	Connect & Test	471X	42	1.5	0.75					
33				WMC	Service Order	4WXX	42	0.05	0.05					
34				COWKGRP	Connect & Test	431X	42	0.4167	0.3333					
35				CPG	Engineering	470X	42	0.0167	0.0083					
36				CCM	Service Inquiry	31XX	42	1	0					
37				ACAC	Connect & Test	471X	42	1.9595	0					
38														
39	KY	N.1.5	UPS - UNI/NNI FRS - DLCI ADDITIONAL	DCSC - CSA	Service Order	2850	42	0.25	0					
40				DCSC - MT	Connect & Test	471X	42	0.7917	0.5833					
41	KY	N.1.21	UPS - UNI/NNI FRS CIR - FEATURE CHANGE	DCSC - CSA	Service Order	2850	42	0.25	0					
42				DCSC - MT	Connect & Test	471X	42	0.3333	0					
43	KY	N.1.22	UPS - UNI/NNI FRS CIR - TRANSFER OF SERVICE	DCSC - CSA	Service Order	2850	42	0.25	0					

000129

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
KY	N.1.1	Software Cost per Port per Month	$1.265	
KY	N.1.2	Software Cost per Port per Month	$1.265	
KY	N.1.3	Software Cost per Port per Month	$1.265	
KY	N.1.4	Software Cost per Port per Month	$1.265	
	END			

Maximum 10 entries per Cost Element #

000130

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
KY							
	END						
		Maximum 10 entries per Cost Element #					

000131

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.

				Work Time (Hours)	
State	Cost Element #	Labor Expense Description (Limited to 25 characters)	JFC	Volume Sensitive	Volume Insensitive
KY					
	END				
		Maximum 20 entries per Cost Element #			

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 6/98.
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

State	Cost Element #	Cost Element Life (Mo)	Labor Expense Description (Limited to 25 characters)	JFC Payband	(For use w/ one NR) Installation Time (Hours)	Disconnect Time Hours	First Installation Time (Hours)	First Disconnect Time Hours	Additional Installation Time (Hours)	Additional Disconnect Time Hours	Initial Installation Time (Hours)	Initial Disconnect Time Hours	Subsequent Installation Time (Hours)	Subsequent Disconnect Time Hours
KY	N.1.1	42	Service Order	2850	0.4167	0.1667								
KY	N.1.1	42	Connect & Test	471X	1	0.5								
KY	N.1.1	42	Service Order	4WXX	0.05	0.05								
KY	N.1.1	42	Connect & Test	431X	0.4167	0.3333								
KY	N.1.1	42	Engineering	470X	0.0167	0.0083								
KY	N.1.1	42	Service Inquiry	31XX	0	0								
KY	N.1.1	42	Connect & Test	471X	1.4595	0.18								
KY	N.1.2	42	Service Order	2850	0.4167	0.1667								
KY	N.1.2	42	Connect & Test	471X	1	0.5								
KY	N.1.2	42	Service Order	4WXX	0.05	0.05								
KY	N.1.2	42	Connect & Test	431X	0.4167	0.3333								
KY	N.1.2	42	Engineering	470X	0.0167	0.0083								
KY	N.1.2	42	Service Inquiry	31XX	0	0								
KY	N.1.2	42	Connect & Test	471X	1.4595	0.18								
KY	N.1.3	42	Service Order	2850	0.4167	0.1667								
KY	N.1.3	42	Connect & Test	471X	1	0.5								
KY	N.1.3	42	Service Order	4WXX	0.05	0.05								
KY	N.1.3	42	Connect & Test	431X	0.4167	0.3333								
KY	N.1.3	42	Engineering	470X	0.0167	0.0083								
KY	N.1.3	42	Service Inquiry	31XX	0	0								
KY	N.1.3	42	Connect & Test	471X	1.9595	0								
KY	N.1.4	42	Service Order	2850	0.4167	0.1667								
KY	N.1.4	42	Connect & Test	471X	1.5	0.75								
KY	N.1.4	42	Service Order	4WXX	0.05	0.05								
KY	N.1.4	42	Connect & Test	431X	0.4167	0.3333								
KY	N.1.4	42	Engineering	470X	0.0167	0.0083								
KY	N.1.4	42	Service Inquiry	31XX	1	0								
KY	N.1.4	42	Connect & Test	471X	1.9595	0								
KY	N.1.5	42	Service Order	2850	0.25	0								
KY	N.1.5	42	Connect & Test	471X	0.7917	0.5833								
KY	N.1.21	42	Service Order	2850	0.25	0								
KY	N.1.21	42	Connect & Test	471X	0.3333	0								
KY	N.1.22	42	Service Order	2850	0.25	0								
		END												

Maximum of 25 entries per Cost Element #

000133

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
KY	N.1.1	377C	10	$192.757	
KY	N.1.1	377C	09	$24.992	
KY	N.1.1	377C	08	$109.965	
KY	N.1.1	377C	07	$4.938	
KY	N.1.1	357C	03	$85.323	
KY	N.1.1	357C	15	$81.703	
KY	N.1.1	357C	06	$34.410	
KY	N.1.1	357C	09	$88.624	
KY	N.1.1	822C	00	$0.838	
KY	N.1.1	845C	00	$0.235	
KY	N.1.1	85C	00	$0.733	
KY	N.1.2	377C	10	$192.757	
KY	N.1.2	377C	09	$24.992	
KY	N.1.2	377C	08	$109.965	
KY	N.1.2	377C	07	$4.938	
KY	N.1.2	357C	03	$85.323	
KY	N.1.2	357C	15	$81.703	
KY	N.1.2	357C	06	$34.410	
KY	N.1.2	357C	09	$88.624	
KY	N.1.2	822C	00	$0.838	
KY	N.1.2	845C	00	$0.235	
KY	N.1.2	85C	00	$0.733	
KY	N.1.3	377C	10	$1,609.860	
KY	N.1.3	377C	09	$167.695	
KY	N.1.3	377C	08	$737.859	
KY	N.1.3	377C	07	$61.889	
KY	N.1.3	357C	03	$15.894	
KY	N.1.3	357C	15	$0.009	
KY	N.1.3	357C	06	$2.645	
KY	N.1.3	357C	09	$0.544	
KY	N.1.3	822C	00	$0.838	
KY	N.1.3	845C	00	$0.235	
KY	N.1.3	85C	00	$0.733	
KY	N.1.4	377C	10	$8,324.095	
KY	N.1.4	377C	09	$1,300.427	
KY	N.1.4	377C	08	$9,111.877	
KY	N.1.4	377C	07	$12.657	
KY	N.1.4	357C	03	$213.729	
KY	N.1.4	357C	15	$0.009	
KY	N.1.4	357C	06	$2.645	
KY	N.1.4	357C	09	$0.544	
KY	N.1.4	822C	00	$0.838	
KY	N.1.4	845C	00	$0.235	
KY	N.1.4	85C	00	$0.733	
KY	N.1.6	377C	10	$3.004	
KY	N.1.7	377C	10	$15.018	
KY	N.1.8	377C	10	$26.281	
KY	N.1.9	377C	10	$30.036	
KY	N.1.10	377C	10	$60.072	
KY	N.1.11	377C	10	$120.144	
KY	N.1.12	377C	10	$180.216	
KY	N.1.13	377C	10	$240.288	
KY	N.1.14	377C	10	$360.432	
KY	N.1.15	377C	10	$720.864	
KY	N.1.16	377C	10	$1,802.159	
KY	N.1.17	377C	10	$4,565.470	
KY	N.1.18	377C	10	$7,298.744	
KY	N.1.19	377C	10	$15,522.597	
KY	N.1.20	377C	10	$20,184.182	
	END				

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	A	B	C	D	E
1	**UNBUNDLED PACKET SWITCHING FRAME RELAY**			State	KY
2				Workpaper	210
3	**Summary of Cost Elements by FRC and Sub FRC**			Page	1 of 2
4					
5					Cost
6		Description	Source	Value	Element#
7	1	**UPS - UNI\NNI FRS 56 KBPS**			
8	2	**FRC 377C**			
9	3	- Sub FRC 10	WP220 Ln86+ WP310 Ln47	$192.757	N.1.1
10	4	- Sub FRC 09	WP220 Ln12+WP310 Ln41	$24.992	N.1.1
11	5	- Sub FRC 08	WP220 Ln25+38+50+77+WP310 Ln42+43+44+46	$109.965	N.1.1
12	6	- Sub FRC 07	WP220 Ln62+Ln99+WP310 Ln45+48	$4.938	N.1.1
13	7	**FRC 357C**			
14	8	- Sub FRC 03	WP220 Ln110+127+WP310 Ln32+Ln49	$85.323	N.1.1
15	9	- Sub FRC 15	WP220 Ln118+WP310 Ln35	$81.703	N.1.1
16	10	- Sub FRC 06	WP220 Ln137+WP310 Ln33	$34.410	N.1.1
17	11	- Sub FRC 09	WP220 Ln147+WP310 Ln34	$88.624	N.1.1
18	12	**FRC 822C Sub FRC 00**	WP310 Ln 37	$0.838	N.1.1
19	13	**FRC 845C Sub FRC 00**	WP310 Ln 38	$0.235	N.1.1
20	14	**FRC 85C Sub FRC 00**	WP310 Ln 39	$0.733	N.1.1
21	15				
22	16	**UPS - UNI/NNI FRS 64 KBPS**			
23	17	**FRC 377C**			
24	18	- Sub FRC 10	WP230 Ln86+ WP310 Ln47	$192.757	N.1.2
25	19	- Sub FRC 09	WP230 Ln12+WP310 Ln41	$24.992	N.1.2
26	20	- Sub FRC 08	WP230 Ln25+38+50+77+WP310 Ln42+43+44+46	$109.965	N.1.2
27	21	- Sub FRC 07	WP230 Ln62+Ln99+WP310 Ln45+48	$4.938	N.1.2
28	22	**FRC 357C**			
29	23	- Sub FRC 03	WP230 Ln110+127+WP310 Ln32+Ln49	$85.323	N.1.2
30	24	- Sub FRC 15	WP230 Ln118+WP310 Ln35	$81.703	N.1.2
31	25	- Sub FRC 06	WP230 Ln137+WP310 Ln33	$34.410	N.1.2
32	26	- Sub FRC 09	WP230 Ln147+WP310 Ln34	$88.624	N.1.2
33	27	**FRC 822C Sub FRC 00**	WP310 Ln 37	$0.838	N.1.2
34	28	**FRC 845C Sub FRC 00**	WP310 Ln 38	$0.235	N.1.2
35	29	**FRC 85C Sub FRC 00**	WP310 Ln 39	$0.733	N.1.2
36	30				
37	31	**UPS - UNI/NNI FRS 1.536 MBPS**			
38	32	**FRC 377C**			
39	33	- Sub FRC 10	WP240 Ln85+WP310 Ln47	$1,609.860	N.1.3
40	34	- Sub FRC 09	WP240 Ln11+WP310 Ln41	$167.695	N.1.3
41	35	- Sub FRC 08	WP240 Ln23+35+47+75+WP310 Ln42+43+44+46	$737.859	N.1.3
42	36	- Sub FRC 07	WP240 Ln61+Ln97+WP310 Ln45+48	$61.889	N.1.3
43	37	**FRC 357C**			
44	38	- Sub FRC 03	WP240 Ln109+WP310 Ln32+49	$15.894	N.1.3
45	39	- Sub FRC 15	WP310 Ln35	$0.009	N.1.3
46	40	- Sub FRC 06	WP310 Ln33	$2.645	N.1.3
47	41	- Sub FRC 09	WP310 Ln34	$0.544	N.1.3
48	42	**FRC 822C Sub FRC 00**	WP310 Ln 37	$0.838	N.1.3
49	43	**FRC 845C Sub FRC 00**	WP310 Ln 38	$0.235	N.1.3
50	44	**FRC 85C Sub FRC 00**	WP310 Ln 39	$0.733	N.1.3
51	45				
52	46				
53	47				
54	48				
55	49				
56	50				
57					
58					
59					
60					

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	A	B	C	D	E
61					
62					
63	**UNBUNDLED PACKET SWITCHING FRAME RELAY**			State	KY
64				Workpaper	210
65	**Summary of Cost Elements by FRC and Sub FRC**			Page	2 of 2
66					
67					Cost
68		Description	Source	Value	Element#
69	51	**UPS - UNI/NNI FRS 44.210 MBPS**			
70	52	**FRC 377C**			
71	53	- Sub FRC 10	WP250 Ln99+WP310 Ln47	$8,324.095	N.1.4
72	54	- Sub FRC 09	WP250 Ln11+WP310 Ln41	$1,300.427	N.1.4
73	55	- Sub FRC 08	WP250 Ln23+35+47+75+119+129+WP310 Ln42+43+44+46	$9,111.877	N.1.4
74	56	- Sub FRC 07	WP250 Ln61+WP310 Ln45+48	$12.657	N.1.4
75	57	**FRC 357C**			
76	58	- Sub FRC 03	WP250 Ln109+WP310 Ln32+49	$213.729	N.1.4
77	59	- Sub FRC 15	WP310 Ln35	$0.009	N.1.4
78	60	- Sub FRC 06	WP310 Ln33	$2.645	N.1.4
79	61	- Sub FRC 09	WP310 Ln34	$0.544	N.1.4
80	62	**FRC 822C Sub FRC 00**	WP310 Ln 37	$0.838	N.1.4
81	63	**FRC 845C Sub FRC 00**	WP310 Ln 38	$0.235	N.1.4
82	64	**FRC 85C Sub FRC 00**	WP310 Ln 39	$0.733	N.1.4
83	65				
84	66				
85	67				
86	68				
87	69				
88	70				
89	71				
90	72				
91	73				
92	74				
93	75				
94	76				
95	77				
96	78				
97	79				
98	80				
99	81				
100	82				
101	83				
102	84				
103	85				
104	86				
105	87				
106	88				
107	89				
108	90				
109	91				
110	92				
111	93				
112	94				
113	95				
114	96				
115	97				
116	98				
117	99				
118	100				

UNBUNDLED PACKET SWITCHING FRAME RELAY

Development of
UPS - UNI/NNI FRS 56 KBPS

State	KY
Workpaper	220
Cost Element	N.1.1
Page	1 of 3

	Description	Source	Value
1	**Base System (e/w Pwr,Fan)**		
2	Material Price	Inputs_Recur Line 7	[redacted]
3			
4	Projected Actual Utilization - Slot	Inputs_Recur Line 8	[redacted]
5			
6	Number of Usable Slots	Inputs_Recur Line 9	12
7			
8	DS0 Utilization on 4-Port Card	Inputs_Recur Line 10	[redacted]
9			
10	Number of DS0s per 4-port card	Inputs_Recur Line 11	96
11			
12	Utilized Material Price per DS0 Port	Ln2/Ln4/Ln6/Ln8/Ln10	$24.565
13			
14	**Redundant Fan**		
15	Material Price	Inputs_Recur Line 13	[redacted]
16			
17	Projected Actual Utilization - Slot	Inputs_Recur Line 14	[redacted]
18			
19	Number of Usable Slots	Inputs_Recur Line 15	12
20			
21	DS0 Utilization on 4-Port Card	Inputs_Recur Line 16	[redacted]
22			
23	Number of DS0s per 4-port card	Inputs_Recur Line 17	96
24			
25	Utilized Material Price per DS0 Port	Ln15/Ln17/Ln19/Ln21/Ln23	$2.457
26			
27	**CPU (2)**		
28	Material Price	Inputs_Recur Line 19	[redacted]
29			
30	Projected Actual Utilization - Slot	Inputs_Recur Line 20	[redacted]
31			
32	Number of Usable Slots	Inputs_Recur Line 21	12
33			
34	DS0 Utilization on 4-Port Card	Inputs_Recur Line 22	[redacted]
35			
36	Number of DS0s per 4-port card	Inputs_Recur Line 23	96
37			
38	Utilized Material Price per DS0 Port	Ln28/Ln30/Ln32/Ln34/Ln36	$49.131
39			
40	**Redundant Power Supply**		
41	Material Price	Inputs_Recur Line 25	[redacted]
42			
43	Projected Actual Utilization - Slot	Inputs_Recur Line 26	[redacted]
44	Number of Usable Slots	Inputs_Recur Line 27	12
45			
46	DS0 Utilization on 4-Port Card	Inputs_Recur Line 28	[redacted]
47			
48	Number of DS0s per 4-port card	Inputs_Recur Line 29	96
49			
50	Utilized Material Price per DS0 Port	Ln41/Ln43/Ln44/Ln46/Ln48	$7.370

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UNBUNDLED PACKET SWITCHING FRAME RELAY

Development of
UPS - UNI/NNI FRS 56 KBPS

State	KY
Workpaper	220
Cost Element	N.1.1
Page	2 of 3

	Description	Source	Value
51	**23" Rack Mount Kit**		
52	Material Price	Inputs_Recur Line 31	[redacted]
53			
54	Projected Actual Utilization - Slot	Inputs_Recur Line 32	[redacted]
55			
56	Number of Usable Slots	Inputs_Recur Line 33	12
57			
58	DS0 Utilization on 4-Port Card	Inputs_Recur Line 34	[redacted]
59			
60	Number of DS0s per 4-port card	Inputs_Recur Line 35	96
61			
62	Utilized Material Price per DS0 Port	Ln52/Ln54/Ln56/Ln58/Ln60	$0.236
63			
64	**HSSI Card (Trunking)**		
65	Material Price	Inputs_Recur Line 37	[redacted]
66			
67	Projected Actual Utilization	Inputs_Recur Line 38	[redacted]
68			
69	Number of Usable Slots	Inputs_Recur Line 39	12
70			
71	DS0 Utilization on 4-Port Card	Inputs_Recur Line 40	[redacted]
72			
73	Number of DS0s per 4-port card	Inputs_Recur Line 41	96
74			
75	Number Required	Inputs_Recur Line 42	2
76			
77	Utilized Material Price per DS0 Port	Ln65*Ln75/Ln67/Ln69/Ln71/Ln73	$49.131
78			
79	**4-Port Bundled I/O Card**		
80	Material Price	Inputs_Recur Line 44	[redacted]
81			
82	DS0 Utilization on 4-Port Card	Inputs_Recur Line 45	[redacted]
83	% Allocated to CIR	Inputs_Recur Line 46	20.00%
84	4-Port Utilized Investment	Ln80/Ln82*(1-Ln83)	$18,111.56
85	Number of DS0s per 4-port card	Inputs_Recur Line 47	96
86	Utilized Material Price per DS0 Port	Ln84/Ln85	$188.662
87			
88	**Panel**		
89	Material Price	Inputs_Recur Line 49	[redacted]
90			
91	DS1's per Panel	Inputs_Recur Line 50	120
92			
93	Projected Actual Util - Panel DS1	Inputs_Recur Line 51	[redacted]
94			
95	DS0 Utilization per DS1	Inputs_Recur Line 52	[redacted]
96			
97	Number of DS0s per DS1	Inputs_Recur Line 53	24
98			
99	Utilized Material Price per DS0 Port	Ln89/Ln91/Ln93/Ln95/Ln97	$4.544
100			

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UNBUNDLED PACKET SWITCHING FRAME RELAY

Development of
UPS - UNI/NNI FRS 56 KBPS

State	KY
Workpaper	220
Cost Element	N.1.1
Page	3 of 3

	Description	Source	Value
101	**DSX-1 Termination**		
102	Material Price	Inputs_Recur Line 55	[redacted]
103			
104	Projected Actual Utilization-DS0 C.O. S	Inputs_Recur Line 56	[redacted]
105	Projected Actual Utilization-DS0 C.O. S	Inputs_Recur Line 57	
106	Number Required	Inputs_Recur Line 58	2
107			
108	Number of DSO's per DS1Port	Inputs_Recur Line 59	24
109			
110	Utilized Material Price per DS0 Port	(L102*L106/L104)+(L102*L106/L105)/L108	$3.84
111			
112	**DCS Port - DS1**		
113	Material Price	Inputs_Recur Line 61	[redacted]
114	Projected Actual Utilization-DS0 C.O. S	Inputs_Recur Line 62	
115	Projected Actual Utilization-DS0 Field S	Inputs_Recur Line 63	
116	Number Required	Inputs_Recur Line 64	1
117	Number of DSO's per DS1Port	Inputs_Recur Line 65	24
118	Utilized Material Price per DS0 Port	(L113*L116/L114)+(L113*L116/L115)/L117	$81.69
119			
120	**D4 Channel Bank Term. per DS0 Port-Hardwired**		
121	Material Price	Inputs_Recur Line 67	[redacted]
122			
123	Projected Actual Utilization	Inputs_Recur Line 68	[redacted]
124			
125	Number Required	Inputs_Recur Line 69	1
126			
127	Utilized Material Price per DS0 Port	Ln121/Ln123 * Ln125	$81.00
128			
129			
130	**D4 Channel Bank Term. per DS0 Port-Com Eqpt.-Plug**		
131	Material Price	Inputs_Recur Line 71	[redacted]
132			
133	Projected Actual Utilization	Inputs_Recur Line 72	[redacted]
134			
135	Number Required	Inputs_Recur Line 73	1
136			
137	Utilized Material Price per DS0 Port	Ln131/Ln133 * Ln135	$31.76
138			
139			
140	**D4 Channel Bank Term. per DS0 Port-OCU-DP Plug**		
141	Material Price	Inputs_Recur Line 75	[redacted]
142			
143	Projected Actual Utilization	Inputs_Recur Line 76	[redacted]
144			
145	Number Required	Inputs_Recur Line 77	1
146			
147	Utilized Material Price per DS0 Port	Ln141/Ln143 * Ln145	$88.08
148			
149			
150			

UNBUNDLED PACKET SWITCHING FRAME RELAY

Development of
UPS - UNI/NNI FRS 64 KBPS

State	KY
Workpaper	230
Cost Element	N.1.2
Page	1 of 3

	Description	Source	Value
1	**Base System(e/w Pwr,Fan)**		
2	Material Price	Inputs_Recur Line 81	[redacted]
3			
4	Projected Actual Utilization - Slot	Inputs_Recur Line 82	[redacted]
5			
6	Number of Usable Slots	Inputs_Recur Line 83	12
7			
8	DS0 Utilization on 4-Port Card	Inputs_Recur Line 84	[redacted]
9			
10	Number of DS0s per 4-port card	Inputs_Recur Line 85	96
11			
12	Utilized Material Price per DS0 Port	Ln2/Ln4/Ln6/Ln8/Ln10	$24.565
13			
14	**Redundant Fan**		
15	Material Price	Inputs_Recur Line 87	[redacted]
16			
17	Projected Actual Utilization - Slot	Inputs_Recur Line 88	[redacted]
18			
19	Number of Usable Slots	Inputs_Recur Line 89	12
20			
21	DS0 Utilization on 4-Port Card	Inputs_Recur Line 90	[redacted]
22			
23	Number of DS0s per 4-port card	Inputs_Recur Line 91	96
24			
25	Utilized Material Price per DS0 Port	Ln15/Ln17/Ln19/Ln21/Ln23	$2.457
26			
27	**CPU (2)**		
28	Material Price	Inputs_Recur Line 93	[redacted]
29			
30	Projected Actual Utilization - Slot	Inputs_Recur Line 94	[redacted]
31			
32	Number of Usable Slots	Inputs_Recur Line 95	12
33			
34	DS0 Utilization on 4-Port Card	Inputs_Recur Line 96	[redacted]
35			
36	Number of DS0s per 4-port card	Inputs_Recur Line 97	96
37			
38	Utilized Material Price per DS0 Port	Ln28/Ln30/Ln32/Ln34/Ln36	$49.131
39			
40	**Redundant Power Supply**		
41	Material Price	Inputs_Recur Line 99	[redacted]
42			
43	Projected Actual Utilization - Slot	Inputs_Recur Line 100	[redacted]
44	Number of Usable Slots	Inputs_Recur Line 101	12
45			
46	DS0 Utilization on 4-Port Card	Inputs_Recur Line 102	[redacted]
47			
48	Number of DS0s per 4-port card	Inputs_Recur Line 103	96
49			
50	Utilized Material Price per DS0 Port	Ln41/Ln43/Ln44/Ln46/Ln48	$7.370

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UNBUNDLED PACKET SWITCHING FRAME RELAY	State	KY
	Workpaper	230
Development of	Cost Element	N.1.2
UPS - UNI/NNI FRS 64 KBPS	Page	2 of 3

Ln	Description	Source	Value
51	**23" Rack Mount Kit**		
52	Material Price	Inputs_Recur Line 105	[redacted]
54	Projected Actual Utilization - Slot	Inputs_Recur Line 106	[redacted]
56	Number of Usable Slots	Inputs_Recur Line 107	12
58	DS0 Utilization on 4-Port Card	Inputs_Recur Line 108	[redacted]
60	Number of DS0s per 4-port card	Inputs_Recur Line 109	96
62	Utilized Material Price per DS0 Port	Ln52/Ln54/Ln56/Ln58/Ln60	$0.236
64	**HSSI Card(Trunking)**		
65	Material Price	Inputs_Recur Line 111	[redacted]
67	Projected Actual Utilization - Slot	Inputs_Recur Line 112	[redacted]
69	Number of Usable Slots	Inputs_Recur Line 113	12
71	DS0 Utilization on 4-Port Card	Inputs_Recur Line 114	[redacted]
73	Number of DS0s per 4-port card	Inputs_Recur Line 115	96
75	Number Required	Inputs_Recur Line 116	2
77	Utilized Material Price per DS0 Port	Ln65*Ln75/Ln67/Ln69/Ln71/Ln73	$49.131
79	**4-Port Bundled I/O Card**		
80	Material Price	Inputs_Recur Line 118	[redacted]
82	DS0 Utilization on 4-Port Card	Inputs_Recur Line 119	[redacted]
83	% Allocated to CIR	Inputs_Recur Line 120	20.00%
84	4-Port Utilized Investment	Ln80/Ln82*(1-Ln83)	$18,111.565
85	Number of DS0s per 4-port card	Inputs_Recur Line 121	96
86	Utilized Material Price per DS0 Port	Ln84/Ln85	$188.662
88	**Panel**		
89	Material Price	Inputs_Recur Line 123	[redacted]
91	DS1's per Panel	Inputs_Recur Line 124	120
93	Projected Actual Util - Panel DS1	Inputs_Recur Line 125	[redacted]
95	DS0 Utilization per DS1	Inputs_Recur Line 126	[redacted]
97	Number of DS0s per DS1	Inputs_Recur Line 127	24
99	Utilized Material Price per DS0 Port	Ln89/Ln91/Ln93/Ln95/Ln97	$4.544
100			

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UNBUNDLED PACKET SWITCHING FRAME RELAY

Development of
UPS - UNI/NNI FRS 64 KBPS

State	KY
Workpaper	230
Cost Element	N.1.2
Page	3 of 3

	Description	Source	Value
101	**DSX-1 Termination**		
102	Material Price	Inputs_Recur Line 129	[redacted]
103			
104	Projected Actual Utilization-DS0 C.O. S	Inputs_Recur Line 130	[redacted]
105	Projected Actual Utilization-DS0 Field S	Inputs_Recur Line 131	[redacted]
106	Number Required	Inputs_Recur Line 132	2
107			
108	Number of DSO's per DS1Port	Inputs_Recur Line 133	24
109			
110	Utilized Material Price per DS0 Port	(L102*L106/L104)+(L102*L106/L105)/L108	$3.84
111			
112	**DCS Port - DS1**		
113	Material Price	Inputs_Recur Line 135	[redacted]
114	Projected Actual Utilization-DS0 C.O. S	Inputs_Recur Line 136	[redacted]
115	Projected Actual Utilization-DS0 Field S	Inputs_Recur Line 137	[redacted]
116	Number Required	Inputs_Recur Line 138	1
117	Number of DSO's per DS1Port	Inputs_Recur Line 139	24
118	Utilized Material Price per DS0 Port	(L113*L116/L114)+(L113*L116/L115)/L117	$81.69
119			
120	**D4 Channel Bank Term. per DS0 Port-Hardwired**		
121	Material Price	Inputs_Recur Line 141	[redacted]
122			
123	Projected Actual Utilization	Inputs_Recur Line 142	[redacted]
124			
125	Number Required	Inputs_Recur Line 143	1
126			
127	Utilized Material Price per DS0 Port	Ln121/Ln123 * Ln125	$81.00
128			
129			
130	**D4 Channel Bank Term. per DS0 Port-Com Eqpt.-Plug**		
131	Material Price	Inputs_Recur Line 145	[redacted]
132			
133	Projected Actual Utilization	Inputs_Recur Line 146	[redacted]
134			
135	Number Required	Inputs_Recur Line 147	1
136			
137	Utilized Material Price per DS0 Port	Ln131/Ln133 * Ln135	$31.76
138			
139			
140	**D4 Channel Bank Term. per DS0 Port-OCU-DP Plug**		
141	Material Price	Inputs_Recur Line 149	[redacted]
142			
143	Projected Actual Utilization	Inputs_Recur Line 150	[redacted]
144			
145	Number Required	Inputs_Recur Line 151	1
146			
147	Utilized Material Price per DS0 Port	Ln141/Ln143 * Ln145/Ln146	$88.08
148			
149			
150			

000142

UNBUNDLED PACKET SWITCHING FRAME RELAY

Development of
UPS - UNI/NNI FRS 1.536 MBPS

State	KY
Workpaper	240
Cost Element	N.1.3
Page	1 of 3

Line	Description	Source	Value
1	**Base System(e/w Pwr,Fan)**		
3	Material Price	Inputs_Recur Line 155	[redacted]
5	Projected Actual Utilization - Slot	Inputs_Recur Line 156	[redacted]
7	Number of Usable Slots	Inputs_Recur Line 157	12
8	DS1 Utilization on 10-Port Card	Inputs_Recur Line 158	[redacted]
9	Number DS1Ports per 10-port Card	Inputs_Recur Line 159	10
11	Utilized Material Price per Port	Ln3/Ln5/Ln7/Ln8/Ln 9	$167.269
13	**Redundant Fan**		
15	Material Price	Inputs_Recur Line 161	[redacted]
17	Projected Actual Utilization - Slot	Inputs_Recur Line 162	[redacted]
19	Number of Usable Slots	Inputs_Recur Line 163	12
20	DS1 Utilization on 10-Port Card	Inputs_Recur Line 164	[redacted]
21	Number DS1Ports per 10-port Card	Inputs_Recur Line 165	10
23	Utilized Material Price per Port	Ln15/Ln17/Ln19/Ln20/Ln21	$16.727
25	**CPU (2)**		
27	Material Price	Inputs_Recur Line 167	[redacted]
29	Projected Actual Utilization - Slot	Inputs_Recur Line 168	[redacted]
31	Number of Usable Slots	Inputs_Recur Line 169	12
32	DS1 Utilization on 10-Port Card	Inputs_Recur Line 170	[redacted]
33	Number DS1Ports per 10-port Card	Inputs_Recur Line 171	10
35	Utilized Material Price per Port	Ln27/Ln29/Ln31/Ln32/Ln33	$334.537
37	**Redundant Power Supply**		
39	Material Price	Inputs_Recur Line 173	[redacted]
41	Projected Actual Utilization - Slot	Inputs_Recur Line 174	[redacted]
43	Number of Usable Slots	Inputs_Recur Line 175	12
44	DS1 Utilization on 10-Port Card	Inputs_Recur Line 176	[redacted]
45	Number DS1Ports per 10-port Card	Inputs_Recur Line 177	10
47	Utilized Material Price per Port	Ln39/Ln41/Ln43/Ln44/Ln45	$50.181

000143

UNBUNDLED PACKET SWITCHING FRAME RELAY

Development of
UPS - UNI/NNI FRS 1.536 MBPS

State	KY
Workpaper	240
Cost Element	N.1.3
Page	2 of 3

	Description	Source	Value
51	**23" Rack Mount Kit**		
53	Material Price	Inputs_Recur Line 179	[redacted]
55	Projected Actual Utilization - Slot	Inputs_Recur Line 180	[redacted]
57	Number of Usable Slots	Inputs_Recur Line 181	12
58	DS1 Utilization on 10-Port Card	Inputs_Recur Line 182	[redacted]
59	Number Ports per Slot	Inputs_Recur Line 183	10
61	Utilized Material Price per Port	Ln53/Ln55/Ln57/Ln58/Ln59	$1.608
63	**HSSI Card(Trunking)**		
65	Material Price	Inputs_Recur Line 185	[redacted]
67	Projected Actual Utilization - Slot	Inputs_Recur Line 186	[redacted]
69	Number of Usable Slots	Inputs_Recur Line 187	12
70	Number of Usable Slots	Inputs_Recur Line 188	[redacted]
71	Number DS1Ports per 10-port Card	Inputs_Recur Line 189	10
73	Number Required	Inputs_Recur Line 190	2
75	Utilized Material Price per Port	Ln65*Ln73/Ln67/Ln69/Ln70/Ln71	$334.537
77	**10-Port DS1 I/O Card**		
79	Material Price	Inputs_Recur Line 192	[redacted]
81	DS1 Utilization on 10-Port Card	Inputs_Recur Line 193	[redacted]
82	% Allocated to CIR	Inputs_Recur Line 194	20.00%
83	10-Port Utilized Investment	Ln79/Ln81*(1-Ln82)	$16,057.643
84	Number DS1Ports per 10-port Card	Inputs_Recur Line 195	10
85	Utilized Material Price per Port	Ln83/Ln84	$1,605.764
87	**Panel**		
89	Material Price	Inputs_Recur Line 197	[redacted]
91	DS1 Capacity per panel	Inputs_Recur Line 198	120
93	Projected Actual Util - Panel DS1	Inputs_Recur Line 199	[redacted]
95	Number DS1s	Inputs_Recur Line 200	1
97	Utilized Material Price per Port	Ln 89 / Ln 91 / Ln 93 / Ln 95	$60.124

000144

UNBUNDLED PACKET SWITCHING FRAME RELAY

Development of
UPS - UNI/NNI FRS 1.536 MBPS

State	KY
Workpaper	240
Cost Element	N.1.3
Page	3 of 3

	Description	Source	Value
101	**DSX-1 Termination**		
102			
103	Material Price	Inputs_Recur Line 202	[redacted]
104			
105	Projected Actual Utilization	Inputs_Recur Line 203	[redacted]
106			
107	Number Required	Inputs_Recur Line 204	1
108			
109	Utilized Material Price per Port	Ln 103 / Ln 105 * Ln 107	$15.412
110			
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000145

UNBUNDLED PACKET SWITCHING FRAME RELAY

Development of
UPS - UNI/NNI FRS 44.210 MBPS

State	KY
Workpaper	250
Cost Element	N.1.4
Page	1 of 3

Line	Description	Source	Value
1	**Base System(e/w Pwr,Fan)**		
3	Material Price	Inputs_Recur Line 208	[redacted]
5	Projected Actual Utilization	Inputs_Recur Line 209	[redacted]
7	Number of Usable Slots	Inputs_Recur Line 210	12
9	Number Ports per Slot	Inputs_Recur Line 211	1
11	Utilized Material Price per Port	Line 3 / Line 5 / Line 7 / Line 9	$1,300.000
13	**Redundant Fan**		
15	Material Price	Inputs_Recur Line 213	[redacted]
17	Projected Actual Utilization	Inputs_Recur Line 214	[redacted]
19	Number of Usable Slots	Inputs_Recur Line 215	12
21	Number Ports per Slot	Inputs_Recur Line 216	1
23	Utilized Material Price per Port	Line 15 / Line 17 / Line 19 / Line 21	$130.000
25	**CPU (2)**		
27	Material Price	Inputs_Recur Line 218	[redacted]
29	Projected Actual Utilization	Inputs_Recur Line 219	[redacted]
31	Number of Usable Slots	Inputs_Recur Line 220	12
33	Number Ports per Slot	Inputs_Recur Line 221	1
35	Utilized Material Price per Port	Line 27 / Line 29 / Line 31 / Line 33	$2,600.000
37	**Redundant Power Supply**		
39	Material Price	Inputs_Recur Line 223	[redacted]
41	Projected Actual Utilization	Inputs_Recur Line 224	[redacted]
43	Number of Usable Slots	Inputs_Recur Line 225	12
45	Number Ports per Slot	Inputs_Recur Line 226	1
47	Utilized Material Price per Port	Line 39 / Line 41 / Line 43 / Line 45	$390.000

000146

UNBUNDLED PACKET SWITCHING FRAME RELAY

Development of
UPS - UNI/NNI FRS 44.210 MBPS

State	KY
Workpaper	250
Cost Element	N.1.4
Page	2 of 3

	Description	Source	Value
51	**23" Rack Mount Kit**		
52			
53	Material Price	Inputs_Recur Line 228	[redacted]
54			
55	Projected Actual Utilization	Inputs_Recur Line 229	[redacted]
56			
57	Number of Usable Slots	Inputs_Recur Line 230	12
58			
59	Number Ports per Slot	Inputs_Recur Line 231	1
60			
61	Utilized Material Price per Port	Line 53 / Line 55 / Line 57 / Line 59	$12.500
62			
63	**HSSI Card(Trunking)**		
64			
65	Material Price	Inputs_Recur Line 233	[redacted]
66			
67	Projected Actual Utilization	Inputs_Recur Line 234	[redacted]
68			
69	Number of Usable Slots	Inputs_Recur Line 235	12
70			
71	Number Ports per Slot	Inputs_Recur Line 236	1
72			
73	Number Required	Inputs_Recur Line 237	2
74			
75	Utilized Material Price per Port	Ln 65/Ln67 /Ln69/Ln71*Ln73	$2,600.000
76			
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88			
89	**HSSI Card**		
90			
91	Material Price	Inputs_Recur Line 239	[redacted]
92			
93	Projected Actual Utilization	Inputs_Recur Line 240	[redacted]
94	% Allocated to CIR	Inputs_Recur Line 241	20.0%
95	HSSI Card Utilized Investment	Ln91/Ln93*(1-Ln94)	$8,320.000
96	Number of Ports per Card	Inputs_Recur Line 242	1
97	Number Required	Inputs_Recur Line 243	1
98			
99	Utilized Material Price per Port	Ln 95 / Ln 96 * Ln 97	$8,320.000
100			

000147

UNBUNDLED PACKET SWITCHING FRAME RELAY

Development of
UPS - UNI/NNI FRS 44.210 MBPS

State	KY
Workpaper	250
Cost Element	N.1.4
Page	3 of 3

	Description	Source	Value
101	**DSX3 Termination**		
102			
103	Material Price	Inputs_Recur Line 245	[redacted]
104			
105	Projected Actual Utilization	Inputs_Recur Line 246	[redacted]
106			
107	Number Required	Inputs_Recur Line 247	1
108			
109	Utilized Material Price per Port	Ln 103 / Ln 105 * Ln 107	$213.247
110			
111	**Kentrox DataSmart Unit**		
112			
113	Material Price	Inputs_Recur Line 249	[redacted]
114			
115	Projected Actual Utilization	Inputs_Recur Line 250	[redacted]
116			
117	Number Required	Inputs_Recur Line 251	1
118			
119	Utilized Material Price per Port	Ln 113 / Ln 115 * Ln 117	$3,273.000
120			
121	**HSSI Cable**		
122			
123	Material Price	Inputs_Recur Line 253	$117.000
124			
125	Projected Actual Utilization	Inputs_Recur Line 254	[redacted]
126			
127	Number Required	Inputs_Recur Line 255	1
128			
129	Utilized Material Price per Port	Ln 123 / Ln 125 * Ln 127	$117.000
130			
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000148

UNBUNDLED PACKET SWITCHING FRAME RELAY

Development of
UPS - UNI/NNI FRS - CIR

State KY
Workpaper 270
Cost Element N.1.6-N.1.20

	Description	Source	Value	
1				
2	**4-Port Unbundled I/O Card**			
3	Material Price	Inputs_Recur Line 259	[redacted]	
4	DS0 Utilization on 4-Port Card	Inputs_Recur Line 260		
5	% Allocated to CIR	Inputs_Recur Line 261	20.00%	
6	Number of DS0s per 4-port card	Inputs_Recur Line 262	96.00	
7	CIR Utilized Material per DS0 Equiv.	Line 3/Line4*Line 5/Line 6	$47.166	
8	% of Ports	Inputs_Recur Line 263	[redacted]	
9	Weighted Material per DSO Equiv.	Line 7*Line 8	$20.933	
10				
11	**10-Port DS1 I/O Card**			
12	Material Price	Inputs_Recur Line 266	[redacted]	
13	DS1 Utilization on 10-Port Card	Inputs_Recur Line 267		
14	% Allocated to CIR	Inputs_Recur Line 268	20.00%	
15	Number Equiv. DS0s per Port	Inputs_Recur Line 269	24.00	
16	Number DS1Ports per 10-port Card	Inputs_Recur Line 270	10.00	
17	CIR Utilized Material per DS0 Equiv.	Ln12/Ln13*Ln14/Ln15/Ln16	$16.73	
18	% of Ports	Inputs_Recur Line 271	[redacted]	
19	Weighted Material per DSO Equiv.	Line 17*Line 18	$9.058	
20				
21	**HSSI Card**			
22	Material Price	Inputs_Recur Line 274	[redacted]	
23	Projected Actual Utilization	Inputs_Recur Line 275		
24	% Allocated to CIR	Inputs_Recur Line 276	20.00%	
25	Number of Ports per Card	Inputs_Recur Line 277	1.00	
26	Number Equiv. DS0s per Port	Inputs_Recur Line 278	672.00	
27	CIR Utilized Material per DS0 Equiv.	Ln22/Ln23*Ln24/L25/L26	$3.095	
28	% of Ports	Inputs_Recur Line 279	[redacted]	
29	Utilized Material Price per DS0 Equiv.	Ln27 / Ln28	$0.045	
30				
31	Weighted Average Cost per DS0 Equivalent			
32				
33	**Using a DS0 Value of 64 Kbps, Development of DS0 Equivalent Factors:**		$30.036	(Ln9+Ln19+Ln29)
34		DSO	Ln33*DS0	Element
35	0 Bps	0.1	$3.004	N.1.6
36	1 - 32 Kbps	0.5	$15.018	N.1.7
37	32 - 56 Kbps	0.875	$26.281	N.1.8
38	56 - 64 Kbps	1	$30.036	N.1.9
39	64 - 128 Kbps	2	$60.072	N.1.10
40	128 - 256 Kbps	4	$120.144	N.1.11
41	256 - 384 Kbps	6	$180.216	N.1.12
42	384 - 512 Kbps	8	$240.288	N.1.13
43	512 - 768 Kbps	12	$360.432	N.1.14
44	768 - 1.536 Mbps	24	$720.864	N.1.15
45	1.536 - 4 Mbps	60	$1,802.159	N.1.16
46	4 - 10 Mbps	152	$4,565.470	N.1.17
47	10 - 16 Mbps	243	$7,298.744	N.1.18
48	16 - 34 Mbps	516.8	$15,522.597	N.1.19
49	34 - 44.210 Mbps	672	$20,184.182	N.1.20
50				

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UNBUNDLED PACKET SWITCHING FRAME RELAY

Development of
UPS - Application Software Per Port

State	KY
Workpaper	300
Cost Element	N.1.1thruN.1.4
Page	1 of 1

Line	Description	Source	Value	Value	Value
1			Year 1	Year 2	Year 3
2	–		[redacted]	[redacted]	[redacted]
3	Cost per New Switch	Inputs_Recur Line 282	[redacted]	[redacted]	[redacted]
4	Quantity	Inputs_Recur Line 283	[redacted]	[redacted]	[redacted]
5	Growth Factor	Inputs_Recur Line 284	[redacted]	[redacted]	[redacted]
6	Grown Quantity		[redacted]	[redacted]	[redacted]
7	Annual Cost Year 1	Ln3*Ln6*Ln28	$ 9,336.27		
8	Annual Cost Year 2	Ln7+Yr2(Ln3*Ln6*Ln28)		$ 11,203.53	
9	Annual Cost Year 3	Ln8+Yr3(Ln3*Ln6*Ln28)			$ 13,070.78
10					
11	Cost per Existing Switch Addl Year	Inputs_Recur Line 285	[redacted]	[redacted]	[redacted]
12	Quantity	Inputs_Recur Line 286	[redacted]	[redacted]	[redacted]
13	Switch Cost	Ln11*Ln12	[redacted]	[redacted]	[redacted]
14	Annual Switch Cost	Sum(Lns7,8,9)+Ln13	$9,336.274	$57,073.529	$68,114.784
15	Actual Projected Demand	Inputs_Recur Line 287	[redacted]	[redacted]	[redacted]
16	Growth Factor	Inputs_Recur Line 288	[redacted]	[redacted]	[redacted]
17	Grown Demand		[redacted]	[redacted]	[redacted]
18	ATM Port Demand	Inputs_Recur Line 289	[redacted]	[redacted]	[redacted]
19	Total Port Demand	Ln17 + Ln18	[redacted]	[redacted]	[redacted]
20					
21	Total Switch Cost	Ln14 (Yr1+Yr2+Yr3)			$134,524.588
22	Total Port Demand	Ln19 (Yr1+Yr2+Yr3)			8859
23					
24	**Software Cost per Port per Month**	Ln21/Ln22/12			**$1.265**
25					
26					
27					
28	Annuity Factor	I*(1+I)^N/(1+I)^N-1	0.27227		
29	I = Cost of Money	Inputs_Recur Line 308	[redacted]		
30	N= Number of Years	Inputs_Recur Line 309	[redacted]		
31					
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UNBUNDLED PACKET SWITCHING FRAME RELAY

Development of
UPS - DS1 Interoffice Facilities - Network Management System

State	KY
Workpaper	310
Cost Element	N.1.1thruN.1.4
Page	1 of 1

	Description	Source	Value		
1	–				
2	Facilities Termination - 357C 03	Inputs_Recur Line 292	$322.351		
3	Facilities Termination -357C 06	Inputs_Recur Line 293	$1,926.201		
4	Facilities Termination - 357C 09	Inputs_Recur Line 294	$396.077		
5	Facilities Termination - 357C 15	Inputs_Recur Line 295	$6.455		
6	Facilities Per Airmile - 822C 00	Inputs_Recur Line 296	$3.817		
7	Facilities Per Airmile - 845C 00	Inputs_Recur Line 297	$1.072		
8	Facilities Per Airmile - 85C 00	Inputs_Recur Line 298	$3.336		
9					
10	Base System(e/w Pwr,Fan)	WP240 Line 11	$167.269		
11	Redundant Fan	WP240 Line 23	$16.727		
12	CPU (2)	WP240 Line 35	$334.537		
13	Redundant Power Supply	WP240 Line 47	$50.181		
14	23" Rack Mount Kit	WP240 Line 61	$1.608		
15	HSSI Card(Trunking)	WP240 Line 75	$334.537		
16	10-Port DS1 I/O Card	WP240 Line 85	$1,605.764		
17	Panel	WP240 Line 97	$60.124		
18	DSX-1 Termination	WP240 Line 109	$15.412		
19					
20	Total Circuit Airmiles - Region	Inputs_Recur Line 299	16,791		
21	# of Interoffice Circuits (DS1) - Region	Inputs_Recur Line 300	105		
22	# of DS1 Ports	Inputs_Recur Line 301	195		
23					
24			Year 1	Year 2	Year 3
25	# of Ports - Region	Inputs_Recur Line 304	[redacted]		
26	Growth Factor	Inputs_Recur Line 305			
27		Ln25 * Ln26			
28	ATM Port Demand - Region	Inputs_Recur Line 306			
29	Total Port Demand	Ln27 + Ln28			
30	Average Port Demand	Ln29 (Yr1+Yr2+Yr3)/3			
31					
32	Facilities Term. Invest/port 357C 03	Ln2*Ln21/Ln30	$0.443		
33	Facilities Term. Invest/port 357C 06	Ln3*Ln21/Ln30	$2.645		
34	Facilities Term. Invest/port 357C 09	Ln4*Ln21/Ln30	$0.544		
35	Facilities Term. Invest/port 357C 15	Ln5*Ln21/Ln30	$0.009		
36					
37	Facilities Airmile Invest/port 822C 00	Ln6*Ln20/Ln30	$0.838		
38	Facilities Airmile Invest/port 845C 00	Ln7*Ln20/Ln30	$0.235		
39	Facilities Airmile Invest/port 85C 00	Ln8*Ln20/Ln30	$0.733		
40					
41	Base System - 377C 09	Ln10*Ln22/Ln30	$0.427		
42	Redundant Fan - 377C 08	Ln11*Ln22/Ln30	$0.043		
43	CPU(2) - 377C 08	Ln12*Ln22/Ln30	$0.853		
44	Redundant P.S. - 377C 08	Ln13*Ln22/Ln30	$0.128		
45	23" Rack Rount Kit - 377C 07	Ln14*Ln22/Ln30	$0.004		
46	HSSI Card(Trunking) - 377C 08	Ln15*Ln22/Ln30	$0.853		
47	10-Port DS1 I/O Card - 377C 10	Ln16*Ln22/Ln30	$4.095		
48	Panel - 377C 07	Ln17*Ln22/Ln30	$0.153		
49	DSX-1 Term. - 357C 03	Ln18*Ln22/Ln30	$0.039		
50					

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FRAME RELAY SERVICE:GSST/ search 8/31/98		Detail Page for Frame Relay
SPEED CONNECTION	USOC	KY
56 KBPS	FRH56	[redacted]
64 KBPS	FRH64	
112 KBPS	FRH11	
128 KBPS	FRH12	
192 KBPS	FRH19	
256 KBPS	FRH25	
320 KBPS	FRH32	
384 KBPS	FRH38	
448 KBPS	FRH44	
512 KBPS	FRH51	
576 KBPS	FRH57	
640 KBPS	FRH40	
704 KBPS	FRH70	
768 KBPS	FRH76	
1024 KBPS	FRH24	
1152 KBPS	FRH52	
1.536 MBPS	FRH15	
44.210 MBPS	FRH1O	
KIH @ DS0	WVV1Z	
KIH @ DS1	WVV1Q	
FRAME RELAY SERVICE: INTRA+InterSTATE ACCESS/ bcats 8/31/98		
SPEED CONNECTION	USOC	KY
56 KBPS	XAFU5/N5	[redacted]
64 KBPS	XAFU6/N6	
1.536 MBPS	XAFU1/N1	
44.210 MBPS	XAFU4/N4	
IX Included Above		
SPEED CONNECTION	USOC	KY
56 KBPS	XAFU5/N5	[redacted]
64 KBPS	XAFU6/N6	
1.536 MBPS	XAFU1/N1	
44.210 MBPS	XAFU4/N4	

Detail Page for CDS

CDS SERVICE: GSST/search 8/31/98					KY					
SPEED CONNECTION	USOC									
56 KBPS	CSN5X				[redacted]					
64 KBPS	CSN6X									
112 KBPS	CSNCX									
128 KBPS	CSNDX									
192 KBPS	CSNEX									
256 KBPS	CSNFX									
320 KBPS	CSNGX									
384 KBPS	CSNHX									
448 KBPS	CSNJX									
512 KBPS	CSNKX									
576 KBPS	CSNLX									
640 KBPS	CSNMX									
704 KBPS	CSNNX									
768 KBPS	CSNPX									
1024 KBPS	CSNQX									
1152 KBPS	CSNRX									
1.536 MBPS	CSN1X									
44.210 MBPS	CSN4X									
CDS SERVICE: INTRASTATE ACCESS/ bcats 8/31/98 (zero)					KY					
SPEED CONNECTION	USOC									
56 KBPS	XACN5				[redacted]					
64 KBPS	XACN6									
1.536 MBPS	XACN1									
44.210 MBPS	XACN4									
CDS SERVICE: INTERSTATE ACCESS/ bcats 8/31/98					KY					
SPEED CONNECTION	USOC									
56 KBPS	XACN5				[redacted]					
64 KBPS	XACN6									
1.536 MBPS	XACN1									
44.210 MBPS	XACN4									
TOTAL CDS PORTS										

Total Quantity of Ports by Speed by State as of 8/31/98

(Sum of all jurisdictions for Frame Relay and CDS)

		KY
56 KBPS		[redacted]
64 KBPS		
112 KBPS		
128 KBPS		
192 KBPS		
256 KBPS		
320 KBPS		
384 KBPS		
448 KBPS		
512 KBPS		
576 KBPS		
640 KBPS		
704 KBPS		
768 KBPS		
1024 KBPS		
1152 KBPS		
1.536 MBPS		
44.210 MBPS		
TOTAL PORTS		
DS0 Equivalents by state		
	DS0 EQ	**KY**
56 KBPS	1	[redacted]
64 KBPS	1	
112 KBPS	2	
128 KBPS	2	
192 KBPS	3	
256 KBPS	4	
320 KBPS	5	
384 KBPS	6	
448 KBPS	7	
512 KBPS	8	
576 KBPS	9	
640 KBPS	10	
704 KBPS	11	
768 KBPS	12	
1024 KBPS	16	
1152 KBPS	18	
1.536 MBPS	24	
44.210 MBPS	672	
TOTAL		
Total DS0 Ports		
Number DS0 cards		
Number DS0s		
DS0 Util. on 4-Port Card		
Total DS1 Ports		
Number DS1cards		
Number DS1 Ports		
DS1 Util. On 10-Port Card		

STATE	SWITCHES		SPARE	4 PORT CH. CAR[illegible]			10 PORT T1 DSX CARDS			8 PORT T1 DSX CARDS			HSSI CARDS			[illegible]
	TOTAL	NEW	SLOTS	NO. CARDS	USED PORTS	[illegible]	NO. CARDS	USED PORTS	SPARE PORTS	NO. CARDS	USED PORTS	SPARE PORTS	NO. CARDS	USED PORTS	SPARE PORTS	[illegible]
KENTUCKY	[redacted]															
			Slots on SWITCH				UTILIZATION DSOon4P	X	DS0 Util. C.O.side	Field Side			DS1 on 10P		HSSI	
KENTUCKY			[redacted]							72.25%			[redacted]		100.00%	
					DS1 Util on PatchPanel				DS1 DCS PORT	(SOURCE: Fundamental Group)						
KENTUCKY					0.47167				$557.28							

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ATM Demand (Ports) Forecasted for 9[illegible]00, 01

	KY	CO
1999		
GSST		
DS1	79	1016
DS3	10	118
OC3	2	49
OC12	0	0
ACCESS		
DS1	2	18
DS3	2	18
OC3	1	9
OC12	0	0
TOTAL 99		
DS1	81	1034
DS3	12	136
OC3	3	58
OC12	0	0
	96	1228
2000		
GSST	KY	CO
DS1	119	1785
DS3	12	199
OC3	7	99
OC12	0	0
ACCESS		
DS1	2	18
DS3	2	18
OC3	1	9
OC12	0	0
TOTAL 00		
DS1	121	1803
DS3	14	217
OC3	8	108
OC12	0	0
	143	2128
2001		
GSST	KY	CO
DS1	157	2607
DS3	14	274
OC3	10	137
OC12	0	0
ACCESS		
DS1	2	18
DS3	2	18
OC3	1	9
OC12	0	0
TOTAL 99		
DS1	159	2625
DS3	16	292
OC3	11	146
OC12	0	0
	186	3063

KENTUCKY DOCKET NO 99-218
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. TPI's
2. Levelized Inflation Factors
3. Inplant Factors - COE
4. Inplant Factors - OSP
5. Plug-in Factors
6. Hard-wired Factors
7. Supporting Equipment & Power Loadings
8. Plant Specific Expense Factors
9. Land and Building Loadings
10. Capital Cost Model Calculations
11. Ad Valorem and Other Taxes
12. State and Federal Income Taxes
13. Gross Receipts Tax
14. Labor Rates

KENTUCKY DOCKET NO 99-218
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 ELECTRONIC	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

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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

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

BELLSOUTH		TELEPHONE PLANT INDICES (TPI)			CUMULATIVE INFLATION FACTORS				INVESTMENT INFLATION LOADINGS
		1998	1999	2000	1998	1999	2000	TOTAL	
		A	B	C	D	E	F	G	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

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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

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

BELLSOUTH		TELEPHONE PLANT INDICES (TP		CUMULATIVE INFLATION FACTORS			LEVELIZED INVESTMENT INFLATION LOADINGS
		1999	2000	1999	2000	TOTAL	
		A	B	C	D	E	F
				=1+(A/100)	=(1+B/100)*A	=C+D	=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

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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

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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

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KENTUCKY DOCKET NO 99-218
APPENDIX A
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

Inplant Factors – COE

File: coeip97.xls

	State: KY	Digital COE	Inplant Factors Study-Digital COE				
	Category	Expenditure Type Code Data Year> FRC>	1997 157C	1997 257C	1997 357C	1997 377C	1997 Digit Comp
1.	Telco Plant Labor	CP*, CQ* (EXCLD CQ1)	$7,610	$1,739,171	$400,340	$595,096	$2,742,217
2.	Telco Engineering	CE*	$279	$428,777	$350,351	$555,656	$1,335,063
3.	Telco Engineering Projects	NOT APPLICABLE					
4.	Other Costs	ALL OTHER CODES	$24,420	$826,444	$413,051	$561,390	$1,825,305
5.	Vendor Engineering	463	$4,646	$1,073,813	$994,031	$2,413,812	$4,486,302
6.	Vendor Installation	471,48D,48J,48L,48P,48Q,481	$4,410	$2,566,157	$1,351,794	$3,781,825	$7,704,186
7.	Material w/sales tax						
A.	- Exempt	CQ1					$0
B.	- Non-exempt	523,524,584,61E,61F,61G,631, ABO,AB9,CJ1,CJ4,CJ6,CJF	$548,493	$24,465,406	$18,960,778	$26,878,243	$70,852,920
8.	State Sales Tax	Current Miscellaneous Loadings	0.0600	0.0600	0.0600	0.0600	
9.	Non-exempt Mat'l less sales	Ln 7B / (1 + Ln 8)	$517,446	$23,080,572	$17,887,526	$25,356,833	$66,842,377
10	Total	Sum Lns 1-7B	$589,858	$31,099,768	$22,470,345	$34,786,022	$88,945,993
11	Material Factor	Ln 10 / Ln 9	1.1399	1.3474	1.2562	1.3719	1.3307
12	Telco Factor	Ln 10 / (Ln 5 + Ln 6 + Ln 9)	1.1203	1.1639	1.1106	1.1025	1.1254

SOURCE: Capital dollars from Resource Tracking and Analysis System (RTAP)
State Sales Tax from Tax Office

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	State: KY	COE Other	Inplant Factors Study-COE Other					
	Category	Expenditure Type Code Data Year> FRC>	1997 57C	1997 67C	1997 77C	1997 117C	1997 167C	1997 Other Comp
1.	Telco Plant Labor	CP*, CQ* (EXCLD CQ1)	$39,827	$853	$55,120	$1,865	$0	$97,665
2.	Telco Engineering	CE*	$16,275	$2,825	$38,226	$19,091	$257	$76,674
3.	Telco Engineering Projects	NOT APPLICABLE						
4.	Other Costs	ALL OTHER CODES	$19,510	$72	$95,092	$2,830	$0	$117,504
5.	Vendor Engineering	463	$31,768	$0	$114,192	$49,469	$0	$195,429
6.	Vendor Installation	471,48D,48J,48L,48P,48Q,481	$50,044	$0	$266,336	$288,971	$0	$605,351
7.	Material w/sales tax							
A.	- Exempt	CQ1						
B.	- Non-exempt	523,524,584,61E,61F,61G,631, ABO,AB9,CJ1,CJ4,CJ6,CJF	$980,499	$19,454	$2,275,648	$2,477,059	$0	$5,752,660
8.	State Sales Tax	Current Miscellaneous Loadings	0.0600	0.0600	0.0600	0.0600	0.0600	
9.	Non-exempt Mat'l less sales tax	Ln 7B / (1 + Ln 8)	$924,999	$18,353	$2,146,838	$2,336,848	$0	$5,427,038
10.	Total	Sum Lns 1-7B	$1,137,923	$23,204	$2,844,614	$2,839,285	$257	$6,845,283
11.	Material Factor	Ln 10 / Ln 9	1.2302	1.2643 1.2613	1.3250	1.2150	1.0000 1.2613	1.2613
12.	Telco Factor	Ln 10 / (Ln 5 + Ln 6 + Ln 9)	1.1302	1.2643 1.0991 surrogate	1.1255	1.0613	1.0000 1.0991 surrogate	1.0991

SOURCE: Capital dollars from Resource Tracking and Analysis System (RTAP)
State Sales Tax from Tax Office

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State: KY   COE Inplant Factors Study

	1997 157C	1997 257C	1997 357C	1997 257C+357C	1997 377C	1997 Digit Comp
11 Material Factor	1.1399	1.3474	1.2562	1.3076	1.3719	1.3307
12 Telco Factor	1.1203	1.1639	1.1106	1.1409	1.1025	1.1254

	1997 57C	1997 67C	1997 77C	1997 117C	1997 167C	1997 Other Comp
11 Material Factor	1.2302	1.2613 surrogate	1.3250	1.2150	1.2613 surrogate	1.2613
12 Telco Factor	1.1302	1.0991 surrogate	1.1255	1.0613	1.0991 surrogate	1.0991

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KENTUCKY DOCKET NO 99-218
APPENDIX A
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

Inplant Factors – OSP

File: ospip97.xls

	State: KY	Metallic All Gauges	Inplant Factors Study-Metallic						
	Category	Expenditure Type Code Data Year> FRC>	1997 5C	1997 6C	1997 12C	1997 22C	1997 45C	1997 52C	1997 METAL COMP
1.	Telco Plant Labor	CP*, CQ* (EXCLD CQ1)	$1,374,913	$0	$421,667	$4,306,906	$3,433,567	$16,511	$ 9,553,564
2.	Telco Engineering	CE*	$221,242	$0	$103,302	$1,036,060	$1,605,335	$5,432	$ 2,971,371
3.	Telco Engineering Projects	NOT APPLICABLE							
4.	Other Costs	ALL OTHER CODES	$63,149	$0	($66,294)	$408,181	$659,039	($2,037)	$ 1,062,038
5.	Vendor Engineering	463	$59,786	$0	$134,094	$944,298	$1,908,698	$0	$ 3,046,876
6.	Vendor Installation	471,48D,48J,48L,48P,48Q,481	$231,795	$0	$36,708	$604,465	$9,922,935	$0	$ 10,795,903
7.	Material w/sales tax								
A.	- Exempt	CQ1	$515,870	$0	$154,336	$1,628,648	$1,263,363	$7,209	$ 3,569,426
B.	- Non-exempt	523,524,584,61E,61F,61G,631, ABO,AB9,CJ1,CJ4,CJ6,CJF	$955,618	$0	$203,082	$3,263,815	$4,149,551	$6,540	$ 8,578,606
8.	State Sales Tax	Current Miscellaneous Loadings	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	
9.	Non-exempt Mat'l less sales	Ln 7B / (1 + Ln 8)	$901,526	$0	$191,587	$3,079,071	$3,914,671	$6,170	$ 8,093,025
10	Total	Sum Lns 1-7B	$3,422,373	$0	$986,895	$12,192,373	$22,942,488	$33,655	$ 39,577,784
11	Material Factor	Ln 10 / Ln 9	3.7962	1.0000 4.8904	5.1512	3.9598	5.8606	5.4548 4.8904	4.8904
12	Telco Factor	Ln 10 / (Ln 5 + Ln 6 + Ln 9)	2.8685	1.0000 1.8043 surrogate	2.7233	2.6346	1.4570	5.4548 1.8043 surrogate	1.8043
	Sheath Feet Placed								

SOURCE: Capital dollars from Resource Tracking and Analysis System (RTAP)
State Sales Tax from Tax Office

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	State: KY	Metallic-24 Gauge	#REF!						
		Data Year>	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
	Category	Expenditure Type Code FRC>	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
1.	Telco Plant Labor	CP*, CQ* (EXCLD CQ1)	$529,616	$0	$101,833	$1,719,317	$1,256,342	$1,185	$ 3,608,294
2.	Telco Engineering	CE*	$111,705	$0	$31,517	$371,635	$535,058	$693	$ 1,050,608
3.	Telco Engineering Projects	NOT APPLICABLE	$0	$0	$0	$0	$0	$0	
4.	Other Costs	ALL OTHER CODES	$31,884	$0	($20,226)	$146,415	$219,658	($260)	$ 377,470
5.	Vendor Engineering	463	$30,186	$0	$40,912	$338,720	$636,169	$0	$ 1,045,987
6.	Vendor Installation	471,48D,48J,48L,48P,48Q,481	$90,423	$0	$11,728	$213,557	$3,204,116	$0	$ 3,519,825
7.	Material w/sales tax								
A.	- Exempt	CQ1	$198,713	$0	$37,272	$650,156	$462,265	$518	$ 1,348,924
B.	- Non-exempt	523,524,584,61E,61F,61G,631, ABO,AB9,CJ1,CJ4,CJ6,CJF	$482,491	$0	$61,960	$1,170,730	$1,383,045	$834	$ 3,099,061
8.	State Sales Tax	Current Miscellaneous Loadings	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	
9.	Non-exempt Mat'l less sales	Ln 7B / (1 + Ln 8)	$455,181	$0	$58,453	$1,104,463	$1,304,760	$787	$ 2,923,643
10	Total	Sum Lns 1-7B	$1,475,019	$0	$264,996	$4,610,530	$7,696,653	$2,970	$14,050,168
11	Material Factor	Ln 10 / Ln 9	3.2405	1.0000	4.5335	4.1745	5.8989	3.7753	4.8057
				4.8057				4.8057	
12	Telco Factor	Ln 10 / (Ln 5 + Ln 6 + Ln 9)	2.5617	1.0000	2.3853	2.7829	1.4959	3.7753	1.8760
				1.8760				1.8760	
				surrogate				surrogate	
	Source: WGT.XLS (used for 24 gauge adjustments for copper		**FRC 5C**	**FRC 6C**	**FRC 12C**	**FRC 22C**	**FRC 45C**	**FRC 52C**	
	Plant Labor/Exempt Material (% conductor feet placed by gauge)		38.52%	0.00%	24.15%	39.92%	36.59%	7.18%	
	Engineering/Non-exempt Material (% investment by gauge)		50.49%	0.00%	30.51%	35.87%	33.33%	12.75%	
	Vendor Installation (% sheath feet placed by gauge)		39.01%	0.00%	31.95%	35.33%	32.29%	5.78%	
	Sheath Feet Placed								

SOURCE: Capital dollars from Resource Tracking and Analysis System (RTAP)
State Sales Tax from Tax Office

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	State: KY	Metallic-26 Gauge	Inplant Factors Study-26 Gauge						
		Data Year>	1997	1997	1997	1997	1997	1997	1997
	Category	Expenditure Type Code FRC>	5C	6C	12C	22C	45C	52C	ETAL COMP
1.	Telco Plant Labor	CP*, CQ* (EXCLD CQ1)	$710,555	$0	$301,618	$1,349,354	$832,640	$15,326	$ 3,209,493
2.	Telco Engineering	CE*	$79,360	$0	$62,456	$229,695	$265,041	$4,739	$ 641,291
3.	Telco Engineering Projects	NOT APPLICABLE	$0	$0	$0	$0	$0	$0	
4.	Other Costs	ALL OTHER CODES	$22,652	$0	($40,081)	$90,494	$108,807	($1,777)	$ 180,094
5.	Vendor Engineering	463	$21,445	$0	$81,073	$209,351	$315,126	$0	$ 626,995
6.	Vendor Installation	471,48D,48J,48L,48P,48Q,481	$100,460	$0	$21,426	$132,559	$1,706,745	$0	$ 1,961,190
7.	Material w/sales tax								
A.	- Exempt	CQ1	$266,602	$0	$110,397	$510,255	$306,366	$6,691	$ 1,200,310
B.	- Non-exempt	523,524,584,61E,61F,61G,631, ABO,AB9,CJ1,CJ4,CJ6,CJF	$342,780	$0	$122,783	$723,588	$685,091	$5,706	$ 1,879,948
8.	State Sales Tax	Current Miscellaneous Loadings	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	
9.	Non-exempt Mat'l less sales	Ln 7B / (1 + Ln 8)	$323,377	$0	$115,833	$682,630	$646,312	$5,383	$ 1,773,536
10	Total	Sum Lns 1-7B	$1,543,853	$0	$659,673	$3,245,295	$4,219,815	$30,685	$ 9,699,322
11	Material Factor	Ln 10 / Ln 9	4.7742	1.0000 5.4689	5.6950	4.7541	6.5291	5.7002 5.4689	5.4689
12	Telco Factor	Ln 10 / (Ln 5 + Ln 6 + Ln 9)	3.4671	1.0000 2.2237 **surrogate**	3.0214	3.1676	1.5815	5.7002 2.2237 **surrogate**	2.2237
	Source: WGT.XLS (used for 26 gauge adjustments for copper		**FRC 5C**	**FRC 6C**	**FRC 12C**	**FRC 22C**	**FRC 45C**	**FRC 52C**	
	Plant Labor/Exempt Material (% conductor feet placed by gauge)		51.68%	0.00%	71.53%	31.33%	24.25%	92.82%	
	Engineering/Non-exempt Material (% investment by gauge)		35.87%	0.00%	60.46%	22.17%	16.51%	87.25%	
	Vendor Installation (% sheath feet placed by gauge)		43.34%	0.00%	58.37%	21.93%	17.20%	94.22%	
	Sheath Feet Placed								

SOURCE: Capital dollars from Resource Tracking and Analysis System (RTAP)
State Sales Tax from Tax Office

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	State: KY	Fiber	#REF!						
		Data Year>	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
	Category	Expenditure Type Code FRC>	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
1.	Telco Plant Labor	CP*, CQ* (EXCLD CQ1)	$459,468	$0	$32,226	$981,888	$260,166	$0	$ 1,733,748
2.	Telco Engineering	CE*	$29,423	$0	$36,208	$45,683	$47,931	$0	$ 159,245
3.	Telco Engineering Projects	NOT APPLICABLE							
4.	Other Costs	ALL OTHER CODES	($142,918)	$0	($1,642)	($46,526)	$23,853	$0	$ (167,233)
5.	Vendor Engineering	463	$35,286	$0	$1,530	$109,848	$74,937	$0	$ 221,601
6.	Vendor Installation	471,48D,48J,48L,48P,48Q,481	$98,846	$281	$0	$125,549	$787,593	$0	$ 1,012,269
7.	Material w/sales tax								
A.	- Exempt	CQ1	$158,746	$0	$11,448	$345,125	$93,750	$0	$ 609,069
B.	- Non-exempt	523,524,584,61E,61F,61G,631, ABO,AB9,CJ1,CJ4,CJ6,CJF	$516,521	$0	$7,218	$727,314	$371,592	$0	$ 1,622,645
8.	State Sales Tax	Current Miscellaneous Loadings	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	
9.	Non-exempt Mat'l less sales tax	Ln 7B / (1 + Ln 8)	$487,284	$0	$6,809	$686,145	$350,558	$0	$ 1,530,797
10.	Total	Sum Lns 1-7B	$1,155,372	$281	$86,988	$2,288,881	$1,659,822	$0	$ 5,191,344
11.	Material Factor	Ln 10 / Ln 9	2.3710	1.0000 3.3913	12.7754 3.3913	3.3359	4.7348	1.0000 3.3913	3.3913
12.	Telco Factor	Ln 10 / (Ln 5 + Ln 6 + Ln 9)	1.8593	1.0000 1.8777 surrogate	10.4315 1.8777 surrogate	2.4838	1.3683	1.0000 1.8777 surrogate	1.8777
	Sheath Feet Placed								

SOURCE: Capital dollars from Resource Tracking and Analysis System (RTAP)
State Sales Tax from Tax Office

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	State: KY	Inplant Factors Study							% OF METALLIC-FUNDAMENTAL FACTOR					
11	Material Factor For:	1997 5C	1997 6C	1997 12C	1997 22C	1997 45C	1997 52C	1997 METAL COMP	1997 5C	1997 6C	1997 12C	1997 22C	1997 45C	1997 52C
	Metallic-26 Gauge	4.7742	5.4689	5.6950	4.7541	6.5291	5.4689	5.4689	126%	112%	111%	120%	111%	112%
	Metallic-24 Gauge	3.2405	4.8057	4.5335	4.1745	5.8989	4.8057	4.8057	85%	98%	88%	105%	101%	98%
	Metallic-Fundamental	3.7962	4.8904 surrogate	5.1512	3.9598	5.8606	4.8904 surrogate	4.8904						
11	Material Factor For:	1997 85C	1997 86C	1997 812C	1997 822C	1997 845C	1997 852C	1997 FIBER COMP						
	Fiber	2.3710	3.3913 surrogate	3.3913 surrogate	3.3359	4.7348	3.3913 surrogate	3.3913						
									% OF METALLIC-FUNDAMENTAL FACTOR					
12	Telco Factor For:	1997 5C	1997 6C	1997 12C	1997 22C	1997 45C	1997 52C	1997 METAL COMP	1997 5C	1997 6C	1997 12C	1997 22C	1997 45C	1997 52C
	Metallic-26 Gauge	3.4671	2.2237	3.0214	3.1676	1.5815	2.2237	2.2237	121%	123%	111%	120%	109%	123%
	Metallic-24 Gauge	2.5617	1.8760	2.3853	2.7829	1.4959	1.8760	1.8760	89%	104%	88%	106%	103%	104%
	Metallic-Fundamental	2.8685	1.8043 surrogate	2.7233	2.6346	1.4570	1.8043 surrogate	1.8043						
12	Telco Factor For:	1997 85C	1997 86C	1997 812C	1997 822C	1997 845C	1997 852C	1997 FIBER COMP						
	Fiber	1.8593	1.8777 surrogate	1.8777 surrogate	2.4838	1.3683	1.8777 surrogate	1.8777						

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KENTUCKY DOCKET NO 99-218
APPENDIX A
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

Plug-in and Hard-wired Factors

File: pihw97.xls

STATE: KENTUCKY
SOURCE DATA: 1997

1997 PLUG-IN AND HARDWIRE STUDY

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	$ 344,255	$ 360,384	1.0469	1.0600	$ 538,593	$ 852,816	1.5834	1.5834
67C	$ 1,362	$ 1,434	1.0575	1.0600	$ 13,998	$ 14,882	2.4232	2.4232
77C	$ 1,213,205	$ 1,284,636	1.0589	1.0600	$ 795,527	$ 1,588,743	1.9971	1.9971
117C	$ 1,399,649	$ 1,483,628	1.0600	1.0600	$ 158,485	$ 1,194,419	7.5365	7.5365
167C	$ 26,010	$ 26,010	1.0575	1.0600	$ -	$ -	2.4232	2.4232
SUBTOTAL	$ 2,984,481	$ 3,156,091	1.0575	1.0600	$ 1,506,603	$ 3,650,861	2.4232	2.4232
157C	$ 498,170	$ 522,206	1.0482	1.0600	$ 2,370	$ 2,398	2.4661	2.4661
257C	$ 12,377,550	$ 12,990,893	1.0496	1.0600	$ 8,612,593	$ 17,067,826	1.9817	1.9817
357C	$ 11,807,625	$ 12,427,780	1.0525	1.0600	$ 2,611,936	$ 8,383,165	3.2096	3.2096
COMPOSITE 257C/357C	$ 24,185,175	$ 25,418,673	1.0510	1.0600	$ 11,224,529	$ 25,450,992	2.2674	2.2674
377C	$ 15,183,964	$ 16,022,010	1.0552	1.0600	$ 7,170,816	$ 19,916,731	2.7775	2.7775
SUBTOTAL	$ 39,867,308	$ 41,962,889	1.0526	1.0600	$ 18,397,715	$ 45,370,121	2.4661	2.4661
TOTAL	$ 42,851,790	$ 45,118,980	1.0529	1.0600	$ 19,904,318	$ 49,020,982	2.4628	2.4628

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

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KENTUCKY DOCKET NO 99-218
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	9CO	9DO	POWER ONLY	TOTAL SE&P	POWER ONLY	SE ONLY
KY	117C	OPERATOR SYSTEMS	3,732,412	579,995	0	127,844	1.1840	1.0406	1.1434
KY	157C	DDS	6,042,521	5,553	38,216	0	1.0073	1.0000	1.0073
KY	257C	DIGITAL PAIR GAIN	231,638,768	7,876,489	826,958	6,649,304	1.0390	1.0298	1.0092
KY	357C	DIGITAL OTHER	211,230,509	12,038,311	4,212,654	8,273,535	1.0833	1.0424	1.0409
KY	377C	DIGITAL SW	386,810,674	44,146,339	67,148	31,283,093	1.1291	1.0913	1.0377
KY	57C	ANALOG CKT	44,202,632	452,779	865,725	217,625	1.0307	1.0051	1.0257
KY	67/167C	RADIO	25,495,877	1,624,452	782,615	1,185,534	1.1043	1.0513	1.0529
KY	77C	ANALOG SW	57,647,555	5,599,748	0	3,202,637	1.1076	1.0615	1.0461

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KENTUCKY DOCKET NO 99-218
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

Kentucky

SCALE=000

Line	DESCRIPTION	Account	LAND 2111	BUILDINGS - COE 2121	GEN PRPSE COMPUTERS 2124	ANALOG ELEC SWITCH 2211	DIGITAL ELEC SWITCH 2212	OPERATOR SYSTEMS 2220	RADIO 2231	DIGITAL DATA SYSTEMS 2232	DIGTL CIRC-PAIR GAIN 2232	DIGTL CIRC-OTHER 2232	ANALOG CIRC 2232
		FRC	ALL	ALL	LESS 633	77C	377C, 587C	117C	67C, 167C	157C	257C,D257C, F257C	357	57C, 457C
1	MR Book Investment 1996 EOY	Reg Investments	11,030	161,963	31,517	70,174	345,725	1,808	27,216	5,695	202,257	200,569	43,651
2	MR Book Investment 1997 EOY	Reg Investments	10,943	166,113	33,059	57,542	381,532	3,726	25,496	6,044	231,639	211,230	44,151
3	1998 Additions	Construction Budget	30	2,911	1,149	-19,415	33,040	175	-149	-1,995	22,700	4,373	0
4	Investment 1998 EOY	Ln2 + Ln3	10,973	169,024	34,208	38,127	414,572	3,901	25,347	4,049	254,339	215,602	44,151
5	1999 Additions	Construction Budget	30	1,850	1,012	-25,800	27,501	172	-191	-449	20,300	-69	0
6	Investment 1999 EOY	Ln4 + Ln5	11,003	170,874	35,220	12,327	442,073	4,073	25,156	3,600	274,639	215,534	44,151
7	2000 Additions	Construction Budget	30	1,850	999	1,200	27,250	170	-218	-507	20,800	-542	0
8	Investment 2000 EOY	Ln6 + Ln7	11,033	172,724	36,219	13,527	469,323	4,243	24,938	3,093	295,439	214,992	44,151
9	Average Investment 1997	(Ln1 + Ln2)/2	10,986	164,038	32,288	63,858	363,629	2,767	26,356	5,869	216,948	205,899	43,901
10	Average Investment 1998	(Ln2 + Ln4)/2	10,958	167,568	33,633	47,834	398,052	3,813	25,421	5,047	242,989	213,416	44,151
11	Average Investment 1999	(Ln4 + Ln6)/2	10,988	169,949	34,714	25,227	428,323	3,987	25,251	3,825	264,489	215,568	44,151
12	Average Investment 2000	(Ln6 + Ln8)/2	11,018	171,799	35,719	12,927	455,698	4,158	25,047	3,347	285,039	215,263	44,151
13	Curr Cost / Book Cost	Capital Recovery	2.039	2.039	0.625	1.431	1.107	1.056	1.308	0.928	1.036	1.036	1.036
14	1997 Curr Average Investment	Ln13 * Ln9	22,401	334,473	20,180	91,380	402,537	2,922	34,474	5,447	224,758	213,312	45,482
15	1998 Curr Average Investment	Ln14 + (Ln10 - Ln9)	22,373	338,004	21,525	75,357	436,960	3,968	33,539	4,624	250,799	220,828	45,732
16	1999 Curr Average Investment	Ln15 + (Ln11 - Ln10)	22,403	340,384	22,606	52,750	467,231	4,142	33,369	3,402	272,299	222,981	45,732
17	2000 Curr Average Investment	Ln16 + (Ln12 - Ln11)	22,433	342,234	23,611	40,450	494,606	4,313	33,164	2,924	292,849	222,675	45,732
18	1998-2000 Curr Avg Investment	(Ln15+Ln16+Ln17)/3	22,403	340,207	22,581	56,186	466,266	4,141	33,357	3,650	271,982	222,161	45,732
19	Expense Account - Lev A		—	6121	6124	6211	6212	6220	6231	6232	6232	6232	6232
20	Expense - 1997 Actual	Reg Expenses	0	12,647	10,264	2,654	21,389	1,411	120	103	4,501	3,504	551
21	Service Order Adjustment	Service Order Study				351	1,512			0	170	468	294
22	RTU Adjustment	RTU Fees / Study					6,117						
23	Rental Revenue	Reg Acct 5240		39									
24	Adjusted Exps, Lev A - 1997	Ln20-Ln21-Ln22-Ln23	0	12,608	10,264	2,303	13,760	1,411	120	103	4,331	3,035	258
25	Expense Account - Lev B		6110	6120	6120	6210	6210	6220	6230	6230	6230	6230	6230
26	Expense - 1997 Actual	Reg Expenses	886	24,803	24,803	24,043	24,043	1,411	8,778	8,778	8,778	8,778	8,778
27	Ratio: Lev A / Lev B	Ln24 / Ln26	0.0000	0.5083	0.4138	0.0958	0.5723	1.0000	0.0136	0.0117	0.4934	0.3458	0.0293
28	Level B Account		Network Support	General Support	General Support	CO Switching	CO Switching	CO Opertor Systems	Radio	CO Transmissions	CO Transmissions	CO Transmission s	CO Transmissions
29	Average Exp - Lev B (1988-2000)	Regulatory Forecast	954	25,846	25,846	25,041	25,041	1,506	9,393	9,393	9,393	9,393	9,393
30	Average Exp - Lev A (1988-2000)	Ln23 * Ln 25	0	13,138	10,696	2,399	14,331	1,506	128	110	4,634	3,248	276
31	Adj Ratio:Oper Expense / Invest.	Ln30 / Ln18	0.0000	0.0386	0.4737	0.0427	0.0307	0.3637	0.0038	0.0301	0.0170	0.0146	0.0060
32	Commercial Power - COE	Acct 6531 / Ln18	-----	-----	-----	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017
33	Plant Specific Factor	Ln31 + Ln32	0.0000	0.0386	0.4737	0.0444	0.0325	0.3654	0.0056	0.0319	0.0188	0.0164	0.0078

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Calculation of Plant Specific Expense to Investment Ratios

Forward Looking Studies - 1998-2000

Kentucky

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	SUBMARIN E 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	108,048	370,232	41,128	123,653	24,037	364,650	17,737	160	0	6,598	12	109,643
2	MR Book Investment 1997 EOY	Reg Investments	110,891	379,906	43,241	125,443	25,145	383,207	19,131	160	0	6,577	12	111,449
3	1998 Additions	Construction Budget	2,588	11,473	1,569	1,274	1,011	16,079	620	0	0	-27	0	2,812
4	Investment 1998 EOY	Ln2 + Ln3	113,479	391,379	44,811	126,717	26,155	399,286	19,750	160	0	6,550	12	114,261
5	1999 Additions	Construction Budget	2,344	11,589	2,271	1,362	1,414	16,073	815	0	0	-24	0	2,656
6	Investment 1999 EOY	Ln4 + Ln5	115,823	402,968	47,082	128,080	27,569	415,360	20,565	160	0	6,526	12	116,916
7	2000 Additions	Construction Budget	2,344	11,367	2,132	1,290	1,372	15,868	813	0	0	-26	0	2,656
8	Investment 2000 EOY	Ln6 + Ln7	118,167	414,335	49,214	129,370	28,941	431,228	21,378	160	0	6,500	12	119,572
9	Average Investment 1997	(Ln1 + Ln2)/2	109,470	375,069	42,185	124,548	24,591	373,929	18,434	160	0	6,588	12	110,546
10	Average Investment 1998	(Ln2 + Ln4)/2	112,185	385,642	44,026	126,080	25,650	391,247	19,440	160	0	6,563	12	112,855
11	Average Investment 1999	(Ln4 + Ln6)/2	114,651	397,173	45,946	127,399	26,862	407,323	20,158	160	0	6,538	12	115,588
12	Average Investment 2000	(Ln6 + Ln8)/2	116,995	408,651	48,148	128,725	28,255	423,294	20,971	160	0	6,513	12	118,244
13	Curr Cost / Book Cost	Capital Recovery	2.272	1.646	0.871	1.525	0.821	1.411	0.957	1.445	1.445	1.465	0.975	1.715
14	1997 Curr Average Investment	Ln13 * Ln9	248,715	617,363	36,743	189,936	20,189	527,613	17,641	231	0	9,651	11	189,586
15	1998 Curr Average Investment	Ln14 + (Ln10 - Ln9)	251,430	627,937	38,584	191,468	21,248	544,931	18,648	231	0	9,626	11	191,895
16	1999 Curr Average Investment	Ln15 + (Ln11 - Ln10)	253,897	639,468	40,504	192,786	22,461	561,008	19,365	231	0	9,601	11	194,629
17	2000 Curr Average Investment	Ln16 + (Ln12 - Ln11)	256,241	650,946	42,706	194,113	23,854	576,978	20,179	231	0	9,576	11	197,285
18	1998-2000 Curr Avg Investment	(Ln15+Ln16+Ln17)/3	253,856	639,450	40,598	192,789	22,521	560,972	19,397	231	0	9,601	11	194,603
19	Expense Account - Lev A		6411	6421	6421	6422	6422	6423	6423	6424	6424	6426	6426	6441
20	Expense - 1997 Actual	Reg Expenses	2,975	22,742	156	2,797	21	18,329	27	0	0	161	0	276
21	Service Order Adjustment	Service Order Study		5,478	38	0	0	5,984	9			161	0	
22	RTU Adjustment	RTU Fees / Study												
23	Rental Revenue	Reg Acct 5240	675											28
24	Adjusted Exps, Lev A - 1997	Ln20-Ln21-Ln22-Ln23	2,300	17,263	119	2,797	21	12,345	18	0	0	0	0	248
25	Expense Account - Lev B		6410	6410	6410	6410	6410	6410	6410	6410	6410	6410	6410	6410
26	Expense - 1997 Actual	Reg Expenses	48,149	48,149	48,149	48,149	48,149	48,149	48,149	48,149	48,149	48,149	48,149	48,149
27	Ratio: Lev A / Lev B	Ln24 / Ln26	0.0478	0.3585	0.0025	0.0581	0.0004	0.2564	0.0004	0.0000	0.0000	0.0000	0.0000	0.0051
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	53,939	53,939	53,939	53,939	53,939	53,939	53,939	53,939	53,939	53,939	53,939	53,939
30	Average Exp - Lev A (1988-2000)	Ln23 * Ln 25	2,577	19,339	133	3,134	23	13,829	20	0	0	0	0	277
31	Adj Ratio:Oper Expense / Invest.	Ln30 / Ln13	0.0102	0.0302	0.0033	0.0163	0.0010	0.0247	0.0010	0.0000	0.0000	0.0000	0.0000	0.0014
32	Commercial Power - COE	Acct 6531 / Ln13	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
33	Plant Specific Factor	Ln31 + Ln32	0.0102	0.0302	0.0033	0.0163	0.0010	0.0247	0.0010	0.0000	0.0000	0.0000	0.0000	0.0014

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	STRUCTURES LOADING FACTORS:	SOURCE	FACTORS
34	Poles - Embedded (1997)	Ln2: Ac2411/Ac2421	0.2621
35	Conduit - Embedded (1997)	Ln2: Ac2441/Ac2422	0.7401
36	Poles - F'wrd Looking ('98-'00)	Ln18: Ac2411/Ac2421	0.3733
37	Conduit - F'wrd Looking ('98-'00)	Ln18: Ac2441/Ac2422	0.9038

Calculation of Plant Specific Expense to Investment Ratios

Forward Looking Studies - 1998-2000

BellSouth Telecommunications

Line	DESCRIPTION	Account	LAND 2111	BUILDINGS - COE 2121	GEN PRPSE COMPUTERS 2124	ANALOG ELEC SWITCH 2211	DIGITAL ELEC SWITCH 2212	OPERATOR SYSTEMS 2220	RADIO 2231	DIGITAL DATA SYSTEMS 2232	DIGTL CIRC- PAIR GAIN 2232	DIGTL CIRC-. OTHER 2232	ANALOG CIRC 2232
	SCALE=000									157C	257C,D257C, F257C	357	57C, 457C
						77C	377C, 587C	117C	67C, 167C				
Line	DESCRIPTION	FRC	ALL	ALL	LESS 633								
1	MR Book Investment 1996 EOY	RegInvestments	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

SCALE=000

Line	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

	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	Field Code	ACFC Plt Specific Exp
KY	20C	0.0000
KY	10C	0.0386
KY	377C	0.0325
KY	377CP	0.0325
KY	117C	0.3654
KY	157C	0.0319
KY	257C	0.0188
KY	357C	0.0164
KY	1C	0.0102
KY	1CP	0.0102
KY	12C	0.0302
KY	22C	0.0302
KY	812C	0.0033
KY	822C	0.0033
KY	5C	0.0163
KY	85C	0.0010
KY	45C	0.0247
KY	845C	0.0010
KY	6C	0.0000
KY	86C	0.0000
KY	52C	0.0000
KY	852C	0.0000
KY	4C	0.0014
KY	4CP	0.0014
KY	530C	0.4737
KY	630C	0.4737

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	KENTUCKY	BELLSOUTH
1. ACCOUNT 2111 - LAND	CSS	10,942,963	153,869,990
2. ACCOUNT 2121 - BUILDING	CSS	166,112,908	2,732,307,788
3. TOTAL LAND & BLDG.	LN 1 + LN 2	177,055,871	2,886,177,778
4. ACCT 2124 - GEN PUR COMP	CSS	33,106,671	1,817,337,997
5. ACCOUNT 2200 - COE	CSS	961,359,635	18,484,440,153
6. A/C2121, CP 2- BUILDINGS ASSOC W/CO	CSS	94,059,373	1,487,330,937
6A. - PERCENT OF TOTAL BUILDINGS	LN 6/LN2	56.62%	54.43%
7. A/C2121, CP 8- BUILDINGS ASSOC W/G	CSS	3,091,479	249,477,505
7A. - PERCENT OF TOTAL BUILDINGS	LN 7/LN2	1.86%	9.13%
8. PERCENT LAND	LN 1/LN 3	6.18%	5.33%
9. PERCENT BUILDING	LN 2/LN 3	93.82%	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	0.00644	0.00453
12. CENTRAL OFFICE - BUILDING	LN 6/LN5	0.09784	0.08046
13. GEN PUR COMPUTER - LAND	(LN 7A*LN1)/LN4	0.00615	0.00773
14. GEN PUR COMPUTER - BUILDING	LN 7/LN4	0.09338	0.13728

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1998 - 2000 PROJECTED
CALCULATION OF FORWARD LOOKING LAND AND BUILDING LOADING FACTORS

DATA SOURCE:	SCALE=000	KENTUCKY	BELLSOUTH
15. ACCOUNT 2111 - LAND	1998-2000 AVG	22,403	307,469
16. ACCOUNT 2121 - BUILDING	1998-2000 AVG	340,207	5,538,103
17. TOTAL LAND & BLDG.	LN 15 + LN 16	362,610	5,845,572
18. ACCT 2124 - GEN PUR COMP	1998-2000 AVG	22,581	1,223,222
19. ACCOUNT 2200 - COE	1998-2000 AVG	1,103,475	21,345,379
20. A/C2121, BUILDINGS ASSOC W/COE	LN 6A * LN 16	192,625	3,033,105
21. A/C2121, BUILDINGS ASSOC W/GPC	LN 7A * LN 16	6,328	498,177
CALCULATION OF FORWARD LOOKING L&B FACTORS:			
11. CENTRAL OFFICE - LAND	LN6A)*(LN15)/LN19	0.01149	0.00784
12. CENTRAL OFFICE - BUILDING	LN 20 / LN 19	0.17456	0.14210
13. GEN PUR COMPUTER - LAND	LN7A)*(LN15)/LN18	0.01845	0.02295
14. GEN PUR COMPUTER - BUILDING	LN 21 / LN 18	0.28023	0.40727

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	ALABAMA			FLORIDA			GEORGIA			KENTUCKY			LOUISIANA	
STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL
AL	2111		FL	2111		GA	2111		KY	2111		LA	2111	
STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL
AL	2121		FL	2121		GA	2121		KY	2121		LA	2121	
STATE	ACCT	FRC	STATE	ACCT	FRC	STATE	ACCT	FRC	STATE	ACCT	FRC	STATE	ACCT	FRC
AL	2124	530	FL	2124	530	GA	2124	530	KY	2124	530	LA	2124	530
AL	2124	630	FL	2124	630	GA	2124	630	KY	2124	630	LA	2124	630
STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL
AL	2121	2	FL	2121	2	GA	2121	2	KY	2121	2	LA	2121	2
STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL
AL	2121	8	FL	2121	8	GA	2121	8	KY	2121	8	LA	2121	8
STATE	ACCT	FRC	STATE	ACCT	FRC	STATE	ACCT	FRC	STATE	ACCT	FRC	STATE	ACCT	FRC
AL	2211		FL	2211		GA	2211		KY	2211		LA	2211	
AL	2212		FL	2212		GA	2212		KY	2212		LA	2212	
AL	2220		FL	2220		GA	2220		KY	2220		LA	2220	
AL	2231		FL	2231		GA	2231		KY	2231		LA	2231	
AL	2232		FL	2232		GA	2232		KY	2232		LA	2232	

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MISSISSIPPI			N CAROLINA			S CAROLINA			TENNESSEE		
STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL
MS	2111		NC	2111		SC	2111		TN	2111	
STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL
MS	2121		NC	2121		SC	2121		TN	2121	
STATE	ACCT	FRC	STATE	ACCT	FRC	STATE	ACCT	FRC	STATE	ACCT	FRC
MS	2124	530	NC	2124	530	SC	2124	530	TN	2124	530
MS	2124	630	NC	2124	630	SC	2124	630	TN	2124	630
STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL
MS	2121	2	NC	2121	2	SC	2121	2	TN	2121	2
STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL	STATE	ACCT	POOL
MS	2121	8	NC	2121	8	SC	2121	8	TN	2121	8
STATE	ACCT	FRC	STATE	ACCT	FRC	STATE	ACCT	FRC	STATE	ACCT	FRC
MS	2211		NC	2211		SC	2211		TN	2211	
MS	2212		NC	2212		SC	2212		TN	2212	
MS	2220		NC	2220		SC	2220		TN	2220	
MS	2231		NC	2231		SC	2231		TN	2231	
MS	2232		NC	2232		SC	2232		TN	2232	

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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
KY	2111	20	C	1	11029691
KY	2112	40	C	1	24066209
KY	2112	40	C	3	198697
KY	2112	40	C	4	263509
KY	2112	40	C	5	174316
KY	2112	40	C	6	2830135
KY	2115	340	C	5	846472
KY	2115	341	C	6	6066
KY	2116	540	C	1	16249272
KY	2116	540	C	2	3330965
KY	2116	541	C	3	102712
KY	2121	10	C	1	317441
KY	2121	10	C	2	87416845
KY	2121	10	C	3	9775241
KY	2121	10	C	4	17567451
KY	2121	10	C	5	18891790
KY	2121	10	C	6	15876104
KY	2121	10	C	7	4534015
KY	2121	10	C	8	2557282
KY	2121	110	C	1	10167
KY	2121	110	C	2	2799899
KY	2121	110	C	3	313094
KY	2121	110	C	4	562673
KY	2121	110	C	5	605090
KY	2121	110	C	6	508500
KY	2121	110	C	7	145221
KY	2121	110	C	8	81908
KY	2122	30	C	1	93560
KY	2122	30	C	2	1097602
KY	2122	130	C	2	18222
KY	2122	331	C	3	580972
KY	2123	430	C	1	187005
KY	2123	430	C	2	1405523
KY	2123	658	C	3	1531562
KY	2123	718	C	3	2041967
KY	2123	728	C	3	8181
KY	2123	731	C	4	695628
KY	2124	530	C	2	4704468
KY	2124	531	C	4	26813
KY	2124	630	C	3	26786176
KY	2124	633	C	3	8681234
KY	2211	77	C	1	863782
KY	2211	77	C	2	4723797
KY	2211	77	C	3	6892454
KY	2211	77	C	4	57672192

KY	2211	577	C	3	21374
KY	2212	377	C	1	143518
KY	2212	377	C	2	11783995
KY	2212	377	C	3	268665
KY	2212	377	C	4	289970144
KY	2212	377	C	5	43548099
KY	2212	587	C	5	10781
KY	2215	537	C	1	6272
KY	2215	547	C	1	4005
KY	2220	117	C	1	1962085
KY	2220	117	C	2	-154426
KY	2231	67	C	1	27058305
KY	2231	167	C	1	149550
KY	2231	527	C	1	137
KY	2231	567	C	1	8040
KY	2232	57	C	1	43650704
KY	2232	157	C	1	5694778
KY	2232	257	C	1	115626638
KY	2232	257	C	3	86630631
KY	2232	357	C	1	32881241
KY	2232	357	C	4	167634917
KY	2232	457	C	1	-15327
KY	2232	557	C	1	52740
KY	2232	597	C	1	16046
KY	2311	318	C	1	79024
KY	2311	418	C	1	357
KY	2341	158	C	1	1881079
KY	2341	458	C	1	1385551
KY	2341	468	C	1	613118
KY	2351	198	C	1	10896168
KY	2351	298	C	1	160579
KY	2351	988	C	1	186
KY	2351	998	C	1	2884259
KY	2362	378	C	1	1600023
KY	2362	558	C	1	4771721
KY	2362	828	C	1	105485
KY	2362	858	C	1	6642185
KY	2362	958	C	1	346579
KY	2411	1	C	1	108048359
KY	2421	12	C	1	16835814
KY	2421	22	C	1	351306014
KY	2421	248	C	1	2089998
KY	2421	812	C	3	424435
KY	2421	812	C	4	445216
KY	2421	822	C	3	19648311
KY	2421	822	C	4	20610331
KY	2422	5	C	1	123652885
KY	2422	85	C	3	13671643
KY	2422	85	C	4	10364889
KY	2423	45	C	1	363284728
KY	2423	548	C	1	1365381

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KY	2423	845	C	3	7642435
KY	2423	845	C	4	10094948
KY	2424	6	C	1	160125
KY	2426	52	C	1	6598443
KY	2426	852	C	3	11603
KY	2441	4	C	1	109642875
KY	2681	850	C	4	331803
KY	2682	350	C	1	3074573
KY	2682	353	C	4	103142

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
KY	2111	20	C	1	10942963
KY	2112	40	C	1	24865559
KY	2112	40	C	3	127611
KY	2112	40	C	4	212710
KY	2112	40	C	5	7900
KY	2112	40	C	6	2014658
KY	2115	340	C	5	914851
KY	2116	540	C	1	19804133
KY	2116	540	C	2	196057
KY	2121	10	C	1	1092939
KY	2121	10	C	2	90693367
KY	2121	10	C	3	10191916
KY	2121	10	C	4	17273975
KY	2121	10	C	5	20361888
KY	2121	10	C	6	13003270
KY	2121	10	C	7	4570194
KY	2121	10	C	8	2980847
KY	2121	110	C	1	40563
KY	2121	110	C	2	3366006
KY	2121	110	C	3	378264
KY	2121	110	C	4	641109
KY	2121	110	C	5	755714
KY	2121	110	C	6	482605
KY	2121	110	C	7	169619
KY	2121	110	C	8	110632
KY	2122	30	C	1	82078
KY	2122	30	C	2	1028294
KY	2122	130	C	2	17937
KY	2123	430	C	1	177224
KY	2123	430	C	2	1135320
KY	2123	658	C	3	1933974
KY	2123	668	C	3	149464
KY	2123	718	C	3	1688388
KY	2123	728	C	3	224291
KY	2124	530	C	2	5186221
KY	2124	630	C	3	27920450
KY	2124	633	C	3	9002743
KY	2124	730	C	3	-47731
KY	2211	77	C	1	713261
KY	2211	77	C	2	2963204
KY	2211	77	C	3	5786127
KY	2211	77	C	4	48079343

KY	2212	377	C	1	164714
KY	2212	377	C	2	9322073
KY	2212	377	C	3	277095
KY	2212	377	C	4	327423213
KY	2212	377	C	5	44344944
KY	2220	117	C	1	1948153
KY	2220	117	C	2	1777640
KY	2231	67	C	1	25465721
KY	2231	167	C	1	30155
KY	2232	57	C	1	44151362
KY	2232	157	C	1	6044219
KY	2232	257	C	1	132423483
KY	2232	257	C	3	99215285
KY	2232	357	C	1	34638071
KY	2232	357	C	4	176591572
KY	2311	318	C	1	85483
KY	2311	418	C	1	-7354
KY	2341	158	C	1	2089127
KY	2341	458	C	1	1663532
KY	2341	468	C	1	649793
KY	2362	378	C	1	1600023
KY	2362	558	C	1	5421622
KY	2362	828	C	1	101051
KY	2362	858	C	1	6634597
KY	2362	958	C	1	346579
KY	2411	1	C	1	110890955
KY	2421	12	C	1	17657036
KY	2421	22	C	1	362129527
KY	2421	248	C	1	119076
KY	2421	348	C	1	134
KY	2421	812	C	3	260933
KY	2421	812	C	4	691898
KY	2421	822	C	3	11580667
KY	2421	822	C	4	30707691
KY	2422	5	C	1	125443321
KY	2422	85	C	3	6885840
KY	2422	85	C	4	18258727
KY	2423	45	C	1	383101925
KY	2423	548	C	1	105068
KY	2423	845	C	3	5289034
KY	2423	845	C	4	13841555
KY	2424	6	C	1	160125
KY	2424	86	C	4	281
KY	2426	52	C	1	6576617
KY	2426	852	C	3	11603
KY	2441	4	C	1	111448692
KY	2681	450	C	4	212
KY	2681	850	C	4	328365
KY	2682	350	C	1	3070196

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KY	2682	353 C	4	101318

Year-to-Date
DECEMBER 1997
Regulated MR

ACCT	SRC	FRC	KY	BST
6112	1100		4,576,225.51	71,764,169.57
6112	1900		-	-
6112	2100		-	-
6112	2900		(4,111,707.61)	(66,935,753.47)
6113	0	140M	3,539.31	288,878.55
6113	0	141M	239,900.94	4,430,809.01
6113	0		-	-
6114	1100	240M	3,924.16	243,187.70
6114	1100		-	-
6114	1900		-	-
6114	9000	240NM	-	-
6114	9000	840M	-	9,123.27
6115	0	340M	34,700.60	460,871.80
6115	0		-	-
6116	1100	540M	1,991,853.92	39,429,145.97
6116	1100		-	-
6116	1900		(2,053,090.42)	(42,200,078.00)
6116	9000	940M	201,057.25	2,653,330.88
6116	9000		-	-
6121	1000	10M	357,265.58	9,518,692.95
6121	1000	10R	-	-
6121	1000	110M	80,699.24	2,045,715.56
6121	1000		12,208,625.88	252,544,372.78
6121	8000	810M	-	-
6121	8000		-	-
6122	1000	130M	218.71	7,180.86
6122	1000		-	-
6122	2000	230M	-	-
6122	2000	30M	64,306.44	14,669,330.05
6122	2000	31M	-	121.46
6123	1000	430M	564,093.79	11,617,977.76
6123	1000		-	-
6123	2000	658M	449,620.03	12,912,293.29
6123	2000		-	15.70
6124	0		-	-
6124	1010	530M	109,574.67	2,254,574.54
6124	1010		216.24	4,515.22
6124	1020	630M	859,232.29	4,596,254.88
6124	1020		-	-
6124	1030	633M	814,370.20	33,326,170.17
6124	1030		-	-
6124	2000	930M	4,503,652.65	104,617,323.76

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6124	2000					4,791,510.09					101,948,022.46
6211	0					2,654,405.88					68,937,785.66
6211	1000	77M				-					-
6211	1000	77R				-					-
6211	8000	877M				-					-
6211	8000					-					-
6211	9000	977M				-					-
6212	0					21,388,790.30					427,706,160.98
6212	1000	377M				-					-
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				1,411,009.65					21,333,144.49
6220	1000	117R				-					-
6220	3000	417M				-					-
6220	3000	417R				-					-
6231	2200	167M				65,669.84					280,540.85
6231	2200	167R				-					-
6231	2300	67M				53,832.69					308,878.12
6231	2300	67R				-					-
6232	1100	157M				102,724.42					2,155,471.89
6232	1100	157R				-					-
6232	1200	257M				4,500,469.78					91,544,956.49
6232	1200	257R				-					-
6232	1200	D257M				215.79					115,728.08
6232	1200	D257R				-					-
6232	1200	F257M				-					9,238,501.88
6232	1200	F257R				-					-
6232	1200					-					-
6232	1300	357M				3,503,505.86					70,552,416.93
6232	1300	357R				-					-
6232	1300	F357M				-					-
6232	1300	F357R				-					-
6232	1300	T357M				-					2,406,860.09
6232	1300	T357R				-					-
6232	1300					-					-
6232	1800	857M				-					-
6232	1800					-					-
6232	2100	457M				(6.16)					67,653.49
6232	2100	457R				-					-
6232	2900	57M				551,331.72					6,290,528.69
6232	2900	57R				-					-
6311	1000	418M				-					1,814,409.61

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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				-						3,507,145.66
6341	1000	258M				-						-
6341	1000	258NM				-						-
6341	1000	58NM				-						-
6341	2000					4,016.17						39,777.36
6341	2100	208BI				-						-
6341	2100					-						-
6341	2200	208BP				-						-
6341	2300	208BR				-						-
6341	2400	208BW				-						-
6341	2900					-						-
6351	1000	188E				50,745.91						821,079.15
6351	1000	188M				359,131.50						7,492,884.98
6351	1000	188Y				(13,141.83)						(324,087.95)
6351	1000	189E				5,943.04						47,685.13
6351	1000	189M				18,232.17						230,760.89
6351	1000	189Y				4,127.38						53,590.70
6351	1000	88E				-						1,810.29
6351	1000	88M				-						3,986.21
6351	1000	88Y				-						301.05
6351	1000	89E				-						584.04
6351	1000	89M				-						2,723.76
6351	1000	89Y				-						115.56
6351	1000					-						-
6351	2000	288E				7,595.50						81,475.80
6351	2000	288M				5,788.00						181,605.40
6351	2000	288Y				204.81						2,577.11
6351	2000	289E				6.09						6,916.17
6351	2000	289M				154.98						1,653.47
6351	2000	289Y				563.56						1,802.12
6351	3000	78E				1,888.36						52,850.38
6351	3000	78M				-						19,433.61
6351	3000	78Y				-						177.04
6351	9000	988E				13,470.82						737,967.16
6351	9000	988M				49,205.27						2,748,877.20
6351	9000	988Y				7,378.06						363,172.81
6351	9000	989E				4,031.20						29,011.63
6351	9000	989M				321.49						2,694.07
6351	9000	989Y				17.36						29.88
6362	1000	358M				-						-

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6362	1000	358NM				552,269.15						12,856,829.61
6362	1000	378M				347,107.12						5,310,562.97
6362	2000	558M										
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										

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6362	6200	208BR				-						-
6362	6200	208BW				-						-
6362	7000					547,140.66						12,003,729.37
6362	9100	928M				-						295,748.36
6362	9900	68E				1,400,481.48						46,067,150.78
6362	9900	68M				1,700,135.63						35,119,974.82
6362	9900	68R				-						-
6362	9900	68Y				43,251.39						1,314,799.29
6362	9900	948NM				-						-
6362	9900	958M				8,430.86						5,215,642.84
6362	9900	958NM				-						-
6362	9900	968NM				(9,040.00)						(239,665.00)
6362	9900	978NM				-						-
6362	9900	988NM				(16,666.67)						(162,045.67)
6362	9900	B958M				-						-
6362	9900	BD28M				-						-
6362	9900	BF28M				-						-
6362	9900	D958M				-						4,661.83
6362	9900	F958M				-						5,889.10
6362	9900					16,666.67						162,045.67
6411	0					2,975,133.69						70,615,841.84
6411	1000	1M				-						-
6411	1000	1R				-						-
6411	1000	21M				-						-
6411	1000	21R				-						-
6421	1000	248M				5,062,423.46						71,006,871.07
6421	1000	312M				-						87.30
6421	1000	322M				-						1,126.57
6421	1000	322NM				-						-
6421	1000	348M				71.36						71.36
6421	1000					17,679,021.54						231,420,428.56
6421	1100	12M				-						-
6421	1100	12R				-						-
6421	1100	22M				-						-
6421	1100	22R				-						-
6421	1100	298M				-						-
6421	1100	B12M				-						-
6421	1100	B22M				-						-
6421	2000	398M				101,340.70						1,959,389.81
6421	2000	812M				-						12,304.88
6421	2000	812R				-						-
6421	2000	822M				24,560.74						110,012.12
6421	2000	822R				-						-
6421	2000	D12M				-						3,324.28
6421	2000	D12R				-						-
6421	2000	D22M				-						2,922.20
6421	2000	F12M				-						58,656.69
6421	2000	F12R				-						-
6421	2000	F22M				-						48,855.46
6421	2000	F22R				-						-
6421	2000	T12M				-						1,042.06

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6421	2000	T22M				1,377.60						6,430.56
6421	2000	T22R				-						-
6421	2000	-				130,561.62						1,000,128.44
6421	2900	982M				-						-
6422	1000	35M				125.40						743.56
6422	1000	5M				2,797,106.98						59,642,220.71
6422	1000	5R				-						-
6422	1000					-						-
6422	1100	B5M				-						-
6422	1800					-						-
6422	2000	85M				2,663.48						220,684.18
6422	2000	85R				-						-
6422	2000	D5M				-						4,356.23
6422	2000	D5R				-						-
6422	2000	F5M				-						532,648.93
6422	2000	F5R				-						-
6422	2000	T5M				309.18						14,041.48
6422	2000	T5R				-						-
6422	2000					17,764.05						1,282,273.29
6422	2100	BF5R				-						-
6422	2900	985M				-						-
6423	1000	445M				-						94,977.25
6423	1000	445NM				-						-
6423	1000	448M				-						22.48
6423	1000	448NM				-						-
6423	1000	45M				14,898,888.21						447,338,235.40
6423	1000	45R				-						-
6423	1000	548M				3,430,077.82						85,425,531.75
6423	1000	598M				824,103.89						24,534,104.29
6423	1000					-						-
6423	1100	B45M				-						-
6423	1100	B45R				-						-
6423	1800					-						-
6423	2000	498M				16,322.27						1,517,140.39
6423	2000	845M				(4,521.42)						261,950.18
6423	2000	845R				-						-
6423	2000	D45M				-						53,236.16
6423	2000	D45R				-						-
6423	2000	F45M				-						191,292.60
6423	2000	F45R				-						-
6423	2000	T45M				80.50						54,924.31
6423	2000	T45R				-						-
6423	2000					31,106.73						1,703,700.85
6423	2100	B845R				-						-
6423	2100	BD45M				-						-
6423	2100	BD45R				-						-
6423	2100	BF45M				-						-
6423	2100	BF45R				-						-
6423	2800	856M				-						-
6424	1000	6M				20.60						70,271.40
6424	1000	6R				-						-

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6424	1800					-						-
6424	2000	86M				-						-
6424	2000	86R				-						-
6424	2000	F6M				-						-
6424	2000	T6M				-						-
6424	2000					-						2,777.66
6426	1000	352M				-						6,153.83
6426	1000	52E				-						-
6426	1000	52M				160,667.06						2,647,522.33
6426	1000	52R				-						-
6426	1000	52Y				-						-
6426	1000					-						-
6426	2000	852M				-						3,080.27
6426	2000	852R				-						-
6426	2000	D52M				-						-
6426	2000	F52M				-						-
6426	2000	F52R				-						-
6426	2000	T52M				-						-
6426	2000					-						18,665.24
6431	0	3M				-						-
6431	0	3R				-						-
6441	0	4M				275,570.19						9,183,060.22
6441	0	4R				-						-
6441	0					-						-
6441	8000					-						-

000205

Average 1998-2000 Expense Projections (YEARLY)

SCALE=000

Account	Description	Kentucky	BST
6110	Network Support	954	5,720
6120	General Support	25,846	195,440
6210	CO Switching	25,041	177,082
6220	CO Opeator Systems	1,506	7,800
6230	CO Transmission	9,393	66,899
6310	Inf/Org/Term	5,035	43,986
6410	Cable & Wire	53,939	396,513
	Total	121,714	2,680,323

000206

SUMMARY OF CURRENT COST / BOOK COST RATIO

	Description	ACCT	FRC	KY
Gen Support	Motor Vehicles	2112		1.124
Gen Support	Aircraft	2113		0.000
Gen Support	Garage Work Equip	2115		1.256
Gen Support	Other Work Equip	2116		1.223
Gen Support	Buildings	2121	10	2.039
Gen Support	Furniture	2122		1.360
Gen Support	Office Support Equip	2123		1.223
Cen Office	Computers	2124	530	0.625
Cen Office	Analog-ESS	2211	77	1.431
Cen Office	Digital ESS	2212	377	1.107
Cen Office	Step-by-Step	2215		0.000
Cen Office	Operator Systems	2220	117	1.056
Cen Office	Radio System	2231	67	1.308
Cen Office	Circuit-DDS	2232	157	0.928
Cen Office	Circuit-Other than DSS	2232	357	1.036
IOT	Station Apparatus	2311		1.024
IOT	PBX	2341		0.955
IOT	Public Telephone	2351		1.167
IOT	Other Terminal Equipment	2362		1.017
Ca and Wire	Poles	2411	1	2.272
Ca and Wire	Aerial Cable-Metallic	2421	22	1.646
Ca and Wire	Aerial Cable-Fiber	2421	812	0.871
Ca and Wire	Underground Cable-Metallic	2422	5	1.525
Ca and Wire	Underground cable-Fiber	2422	85	0.821
Ca and Wire	Buried cable-Metallic	2423	45	1.411
Ca and Wire	Buried Cable-Fiber	2423	845	0.957
Ca and Wire	Submarine Cable	2424	6	1.445
Ca and Wire	Intrabuilding cable-Metal	2426	52	1.465
Ca and Wire	Intrabuilding Cable-Fiber	2426	852	0.975
IOT	Aerial Wire			0.000
Gen Support	Conduit Systems	2441	4	1.715

000207

BELLSOUTH TELECOMMUNICATIONS **INVESTMENT DATA - NET ADDITIONS**

NET ADDTIONS (Gross Cap - Retirements)

1998

SCALE = 000	KY	BST
TOTAL GENERAL SUPPORT ASSETS	5,307	387,141
LAND	30	1,989
BUILDINGS	2,911	83,919
MOTOR VEHICLES	1,785	56,375
GARAGE WORK EQPT	-70	-136
OTHER WORK EQPT	-50	15,580
FURNITURE	-200	-1,735
OFFICE SUPPORT EQUIPMENT	-110	1,239
VOICE COMMUNICATIONS	-615	-4,255
GENERAL PURPOSE COMPUTERS	1,462	122,553
DATA COMMUNICATIONS	164	111,612
TOTAL CENTRAL OFC ASSETS MINUS DLE	16,029	667,085
ANALOG ELECTRONIC SWITCHING	-19,415	-74,910
DIGITAL ELECTRONIC SWITCHING	33,040	557,604
OPERATOR SERVICES	175	6,984
RADIO	-149	-2,900
DIGITAL DATA SYSTEMS	-1,995	-6,953
CIRCUIT OTHER	4,373	187,260
TOTAL INFO.ORIG./TERMINATION	1,055	28,950
PUBLIC TELEPHONE	0	0
STATION APPARATUS	11	61
LARGE PBX	285	4,125
OTHER TERMINAL EQUIPMENT	760	24,763
TOTAL OUTSIDE NETWORK	60,100	1,374,550
DIGITAL LOOP ELECTRONICS (DLE)	22,700	424,100
CABLE & WIRE	37,400	950,450
METALLIC - AERIAL CABLE	11,473	208,306
NON-METALLIC - AERIAL CABLE	1,569	59,255
METALLIC - UNDERGROUND CABLE	1,274	25,997
NON-METALLIC - UNDERGROUND CABLE	1,011	66,453
METALLIC - BURIED CABLE	16,079	428,233
NON-METALLIC - BURIED CABLE	620	79,574
METALLIC - SUBMARINE CABLE	0	-420
NON-METALLIC - SUBMARINE CABLE	0	-123
METALLIC - INTRABUILDING NETWORK CABLE	-27	947
NON-METALLIC - INTRABUILDING NETWORK CABLE	0	-33
POLES	2,588	23,356
CONDUIT	2,812	58,906
TOTAL NET ADDITIONS	82,491	2,457,727

000208

BELLSOUTH TELECOMMUNICATIONS
NET ADDTIONS (Gross Cap - Retirements)
1999

INVESTMENT DATA - NET ADDITIONS

SCALE = 000	KY	BST
TOTAL GENERAL SUPPORT ASSETS	2,868	268,174
LAND	30	1,490
BUILDINGS	1,850	66,520
MOTOR VEHICLES	1,465	54,950
GARAGE WORK EQPT	-75	-195
OTHER WORK EQPT	-275	12,160
FURNITURE	-205	-4,070
OFFICE SUPPORT EQUIPMENT	-115	990
VOICE COMMUNICATIONS	-625	-5,045
GENERAL PURPOSE COMPUTERS	1,287	51,371
DATA COMMUNICATIONS	-469	90,003
TOTAL CENTRAL OFC ASSETS MINUS DLE	1,422	542,251
ANALOG ELECTRONIC SWITCHING	-25,800	-100,650
DIGITAL ELECTRONIC SWITCHING	27,501	491,176
OPERATOR SERVICES	172	3,069
RADIO	-191	-618
DIGITAL DATA SYSTEMS	-449	-1,991
CIRCUIT OTHER	189	151,265
TOTAL INFO.ORIG./TERMINATION	840	13,895
PUBLIC TELEPHONE	0	0
STATION APPARATUS	8	44
LARGE PBX	227	2,225
OTHER TERMINAL EQUIPMENT	605	11,626
TOTAL OUTSIDE NETWORK	58,800	1,350,338
DIGITAL LOOP ELECTRONICS (DLE)	20,300	406,400
CABLE & WIRE	38,500	943,938
METALLIC - AERIAL CABLE	11,589	210,032
NON-METALLIC - AERIAL CABLE	2,271	58,773
METALLIC - UNDERGROUND CABLE	1,362	26,305
NON-METALLIC - UNDERGROUND CABLE	1,414	65,509
METALLIC - BURIED CABLE	16,073	428,052
NON-METALLIC - BURIED CABLE	815	79,418
METALLIC - SUBMARINE CABLE	0	-491
NON-METALLIC - SUBMARINE CABLE	0	0
METALLIC - INTRABUILDING NETWORK CABLE	-24	1,090
NON-METALLIC - INTRABUILDING NETWORK CABLE	0	-31
POLES	2,344	20,030
CONDUIT	2,656	55,252
TOTAL NET ADDITIONS	63,930	2,174,658

000209

BELLSOUTH TELECOMMUNICATIONS **INVESTMENT DATA - NET ADDITIONS**

NET ADDTIONS (Gross Cap - Retirements)

2000

SCALE = 000	KY	BST
TOTAL GENERAL SUPPORT ASSETS	2,331	340,680
LAND	30	1,490
BUILDINGS	1,850	67,200
MOTOR VEHICLES	1,340	54,290
GARAGE WORK EQPT	-80	-265
OTHER WORK EQPT	-325	11,870
FURNITURE	-210	-4,095
OFFICE SUPPORT EQUIPMENT	-120	925
VOICE COMMUNICATIONS	-640	-5,270
GENERAL PURPOSE COMPUTERS	1,271	126,000
DATA COMMUNICATIONS	-785	88,535
TOTAL CENTRAL OFC ASSETS MINUS DLE	29,028	588,493
ANALOG ELECTRONIC SWITCHING	1,200	-70,550
DIGITAL ELECTRONIC SWITCHING	27,250	488,110
OPERATOR SERVICES	170	2,956
RADIO	-218	880
DIGITAL DATA SYSTEMS	-507	-1,109
CIRCUIT OTHER	1,133	168,206
TOTAL INFO.ORIG./TERMINATION	805	13,605
PUBLIC TELEPHONE	0	0
STATION APPARATUS	8	41
LARGE PBX	217	2,166
OTHER TERMINAL EQUIPMENT	580	11,398
TOTAL OUTSIDE NETWORK	58,600	1,352,545
DIGITAL LOOP ELECTRONICS (DLE)	20,800	413,650
CABLE & WIRE	37,800	938,895
METALLIC - AERIAL CABLE	11,367	208,056
NON-METALLIC - AERIAL CABLE	2,132	58,811
METALLIC - UNDERGROUND CABLE	1,290	25,754
NON-METALLIC - UNDERGROUND CABLE	1,356	65,274
METALLIC - BURIED CABLE	15,868	425,864
NON-METALLIC - BURIED CABLE	813	79,257
METALLIC - SUBMARINE CABLE	0	-491
NON-METALLIC - SUBMARINE CABLE	0	0
METALLIC - INTRABUILDING NETWORK CABLE	-26	994
NON-METALLIC - INTRABUILDING NETWORK CABLE	0	-33
POLES	2,344	20,144
CONDUIT	2,656	55,264
TOTAL NET ADDITIONS	90,764	2,295,322

000210

KENTUCKY DOCKET NO 99-218
APPENDIX A
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

Capital Cost Model Calculations

Source: BellSouth's Capital Cost Calculator

BASIC ECONOMIC INPUTS FOR CAPITAL COST CALCULATOR

10/11/99

Number	Description	Value
1	Debt Ratio	0.4000
2	Debt Interest Rate	0.0650
3	Income Tax Rate	0.3872
4	Investment	$1.00
5	Cost of Money (Rate of Return)	0.1125
6	Cost of Equity	0.144167
7		
8	Timestamp: 3/1/99 5:31:57 PM	

KENTUCKY

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)

000212

Source: BellSouth's Capital Cost Calculator

USOA Part 32 ACCOUNTS INPUT FACTORS FOR CAPITAL COST CALCULATOR

10/11/99

Number	Description	FRC	Life (Years)	Net Salvage
1	Buildings	10C	45.0	0.0000
2	Land	20C	98.0	1.0000
3				
4	Motor Vehicles	40C	8.0	0.1600
5	Spc Purpose Vehicles	240C	7.0	0.0000
6	Garage Work Equip	340C	12.0	0.0000
7	Other Work Equip	540C	15.0	0.0000
8				
9	Furniture	130C	15.0	0.1000
10	Ofc Support Equip	430C	11.5	0.0500
11				
12	Corp Comm Equip	718C	7.0	0.1000
13	Gen Purpose Comp, Other	530C	5.0	0.0000
14	G P Comp, Data Cont & Wrksta	630C	5.0	0.0000
15				
16	Analog Elec Switch	77C	3.3	0.0000
17	Digital Elec Switch	377C	10.0	0.0000
18				
19	Operator Systems	117C	10.0	0.0000
20				
21	Radio	67C	9.0	-0.0500
22				
23	Digital Circ - DDS	157C	8.0	0.0200
24	Digital Circ - Pair Gain	257C	9.0	0.0000
25	Digital Circ - Other	357C	9.0	0.0000
26	Analog Circ - Pair Gain	457C	7.8	-0.0300
27	Analog Circ - Other	57C	7.8	-0.0300
28				
29	Large PBX	158C	6.0	0.0000
30	Other Terminal Equip	378C	6.0	0.0500
31				
32	Poles	1C	34.0	-0.6000
33	Aerial Ca - Metal - Bldg Enter	12C	14.0	-0.1400
34	Aerial Ca - Metal	22C	14.0	-0.1400
35	Aerial Ca - Fiber - Bldg Enter	812C	20.0	-0.1400
36	Aerial Ca - Fiber	822C	20.0	-0.1400
37	Buried Ca - Metal	45C	14.0	-0.0700
38	Buried Ca - Fiber	845C	20.0	-0.0700
39	Underground Ca - Metal	5C	12.0	-0.0800
40	Underground Ca - Fiber	85C	20.0	-0.0800
41	Submarine Ca - Metal	6C	14.0	-0.0500
42	Submarine Ca - Fiber	86C	14.0	-0.0500
43	INTA Bldg Ntwk Ca - Metal	52C	20.0	-0.1000
44	INTA Bldg Ntwk Ca - Fiber	852C	20.0	-0.1000
45				
46	Conduit Systems	4C	55.0	-0.1000
47				
48	Timestamp: 3/1/99 5:31:58 PM			

000213

Source: BellSouth's Capital Cost Calculator

CAPITAL COST MODEL CALCULATIONS - Page 1

10/11/99

Nbr	Description	FRC	Life (Years)	COM	AP	Phi	Net Salvage	Adj Invest
1	Buildings	10C	45.0	0.1125	0.1134	0.4858	0.0000	1.0000
	Land	20C	98.0	0.1125	0.1125	0.4858	1.0000	0.0000
4	Motor Vehicles	40C	8.0	0.1125	0.1961	0.4858	0.1600	0.8400
5	Spc Purpose Vehicles	240C	7.0	0.1125	0.2139	0.4858	0.0000	1.0000
6	Garage Work Equip	340C	12.0	0.1125	0.1559	0.4858	0.0000	1.0000
7	Other Work Equip	540C	15.0	0.1125	0.1410	0.4858	0.0000	1.0000
8								
9	Furniture	130C	15.0	0.1125	0.1410	0.4858	0.1000	0.9000
10	Ofc Support Equip	430C	11.5	0.1125	0.1592	0.4858	0.0500	0.9500
11								
12	Corp Comm Equip	718C	7.0	0.1125	0.2139	0.4858	0.1000	0.9000
13	Gen Purpose Comp, Other	530C	5.0	0.1125	0.2723	0.4858	0.0000	1.0000
14	G P Comp, Data Cont & Wrksta	630C	5.0	0.1125	0.2723	0.4858	0.0000	1.0000
15								
16	Analog Elec Switch	77C	3.3	0.1125	0.3793	0.4858	0.0000	1.0000
17	Digital Elec Switch	377C	10.0	0.1125	0.1716	0.4858	0.0000	1.0000
18								
19	Operator Systems	117C	10.0	0.1125	0.1716	0.4858	0.0000	1.0000
20								
21	Radio	67C	9.0	0.1125	0.1824	0.4858	-0.0500	1.0500
22								
23	Digital Circ - DDS	157C	8.0	0.1125	0.1961	0.4858	0.0200	0.9800
24	Digital Circ - Pair Gain	257C	9.0	0.1125	0.1824	0.4858	0.0000	1.0000
25	Digital Circ - Other	357C	9.0	0.1125	0.1824	0.4858	0.0000	1.0000
26	Analog Circ - Pair Gain	457C	7.8	0.1125	0.1992	0.4858	-0.0300	1.0300
27	Analog Circ - Other	57C	7.8	0.1125	0.1992	0.4858	-0.0300	1.0300
	Large PBX	158C	6.0	0.1125	0.2381	0.4858	0.0000	1.0000
30	Other Terminal Equip	378C	6.0	0.1125	0.2381	0.4858	0.0500	0.9500
31								
32	Poles	1C	34.0	0.1125	0.1156	0.4858	-0.6000	1.6000
33	Aerial Ca - Metal - Bldg Enter	12C	14.0	0.1125	0.1451	0.4858	-0.1400	1.1400
34	Aerial Ca - Metal	22C	14.0	0.1125	0.1451	0.4858	-0.1400	1.1400
35	Aerial Ca - Fiber - Bldg Enter	812C	20.0	0.1125	0.1276	0.4858	-0.1400	1.1400
36	Aerial Ca - Fiber	822C	20.0	0.1125	0.1276	0.4858	-0.1400	1.1400
37	Buried Ca - Metal	45C	14.0	0.1125	0.1451	0.4858	-0.0700	1.0700
38	Buried Ca - Fiber	845C	20.0	0.1125	0.1276	0.4858	-0.0700	1.0700
39	Underground Ca - Metal	5C	12.0	0.1125	0.1559	0.4858	-0.0800	1.0800
40	Underground Ca - Fiber	85C	20.0	0.1125	0.1276	0.4858	-0.0800	1.0800
41	Submarine Ca - Metal	6C	14.0	0.1125	0.1451	0.4858	-0.0500	1.0500
42	Submarine Ca - Fiber	86C	14.0	0.1125	0.1451	0.4858	-0.0500	1.0500
43	INTA Bldg Ntwk Ca - Metal	52C	20.0	0.1125	0.1276	0.4858	-0.1000	1.1000
44	INTA Bldg Ntwk Ca - Fiber	852C	20.0	0.1125	0.1276	0.4858	-0.1000	1.1000
45								
46	Conduit Systems	4C	55.0	0.1125	0.1128	0.4858	-0.1000	1.1000
47								
48	Timestamp: 3/1/99 5:32:01 PM	Deflt						

Life Years = Input

Rate of Return (COM, Cost of Money) = Input

A/P = (COM * (1 + COM)^Life) / (((1 + COM)^Life) - 1)

[illegible] = (Income Tax Rate / (1 - Income Tax Rate)) • (1 - ((Debt Ratio • Debt Interest Rate) / COM))

Net Salvage = Input

Adjusted Investment = (1 - Net Salvage) * Investment

000214

Calculations rounded to four (4) decimal places.

Source: BellSouth's Capital Cost Calculator

CAPITAL COST MODEL CALCULATIONS - Page 2

10/11/99

Number	Description	FRC	Depreciation	ACFC COM	ACFC Tax	Cap Exp
1	Buildings	10C	0.0222	0.0912	0.0443	**0.1577**
[illegible]	Land	20C	0.0000	0.1125	0.0547	**0.1672**
4	Motor Vehicles	40C	0.1050	0.0777	0.0377	**0.2204**
5	Spc Purpose Vehicles	240C	0.1429	0.0711	0.0345	**0.2485**
6	Garage Work Equip	340C	0.0833	0.0725	0.0352	**0.1911**
7	Other Work Equip	540C	0.0667	0.0743	0.0361	**0.1771**
8						
9	Furniture	130C	0.0600	0.0781	0.0380	**0.1761**
10	Ofc Support Equip	430C	0.0826	0.0743	0.0361	**0.1930**
11						
12	Corp Comm Equip	718C	0.1286	0.0752	0.0365	**0.2403**
13	Gen Purpose Comp, Other	530C	0.2000	0.0723	0.0351	**0.3074**
14	G P Comp, Data Cont & Wrksta	630C	0.2000	0.0723	0.0351	**0.3074**
15						
16	Analog Elec Switch	77C	0.3030	0.0763	0.0371	**0.4164**
17	Digital Elec Switch	377C	0.1000	0.0716	0.0348	**0.2064**
18						
19	Operator Systems	117C	0.1000	0.0716	0.0348	**0.2064**
20						
21	Radio	67C	0.1167	0.0692	0.0336	**0.2195**
22						
23	Digital Circ - DDS	157C	0.1225	0.0719	0.0349	**0.2293**
24	Digital Circ - Pair Gain	257C	0.1111	0.0712	0.0346	**0.2170**
25	Digital Circ - Other	357C	0.1111	0.0712	0.0346	**0.2170**
26	Analog Circ - Pair Gain	457C	0.1321	0.0698	0.0339	**0.2358**
27	Analog Circ - Other	57C	0.1321	0.0698	0.0339	**0.2358**
29	Large PBX	158C	0.1667	0.0714	0.0347	**0.2728**
30	Other Terminal Equip	378C	0.1583	0.0735	0.0357	**0.2675**
31						
32	Poles	1C	0.0471	0.0704	0.0342	**0.1516**
33	Aerial Ca - Metal - Bldg Enter	12C	0.0814	0.0683	0.0332	**0.1829**
34	Aerial Ca - Metal	22C	0.0814	0.0683	0.0332	**0.1829**
35	Aerial Ca - Fiber - Bldg Enter	812C	0.0570	0.0728	0.0353	**0.1651**
36	Aerial Ca - Fiber	822C	0.0570	0.0728	0.0353	**0.1651**
37	Buried Ca - Metal	45C	0.0764	0.0710	0.0345	**0.1819**
38	Buried Ca - Fiber	845C	0.0535	0.0752	0.0365	**0.1652**
39	Underground Ca - Metal	5C	0.0900	0.0693	0.0337	**0.1930**
40	Underground Ca - Fiber	85C	0.0540	0.0748	0.0364	**0.1652**
41	Submarine Ca - Metal	6C	0.0750	0.0718	0.0349	**0.1816**
42	Submarine Ca - Fiber	86C	0.0750	0.0718	0.0349	**0.1816**
43	INTA Bldg Ntwk Ca - Metal	52C	0.0550	0.0741	0.0360	**0.1652**
44	INTA Bldg Ntwk Ca - Fiber	852C	0.0550	0.0741	0.0360	**0.1652**
45						
46	Conduit Systems	4C	0.0200	0.0929	0.0451	**0.1580**
47						
48	Timestamp: 3/1/99 5:32:01 PM	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

KENTUCKY DOCKET NO 99-218
APPENDIX A
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

Ad Valorem & Other Taxes

File: adval97.xls

BELLSOUTH TELECOMMUNICATIONS, INC.
RATIO OF AD VALOREM AND OTHER TAXES TO TELEPHONE PLANT IN SERVICE IN 1997

	(1)	(2)	(3)	(4)	(5)
STATE	PROPERTY (A/C 7240.1000)	OTHER (A/C 7240.3000, 7240.9100, .9200)	TOTAL	TEL. PLANT IN SERVICE (A/C 2001)	TAXES TO PLANT (3 / 4)
KENTUCKY	13,689,919	225,300	13,915,219	2,385,189,449	0.5834%

KENTUCKY DOCKET NO 99-218
APPENDIX A
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

Gross Receipts Tax

File: 98stuse3.xls

GROSS RECEIPTS TAX CALCULATIONS

AREA a	GROSS RECEIPTS NET TAX b	GROSS RECEIPTS REVENUES c	GROSS RECEIPTS TAX RATE d = b/c	GROSS RECEIPTS MARKUP FACTOR e = 1/(1-d)
KENTUCKY	1,424,383	541,418,087	0.0026	1.0026

KENTUCKY DOCKET NO 99-218
APPENDIX A
UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

State & Federal Income Taxes

File: fitsit97.xls

	1997 Tax Information
	Kentucky
Federal Income Tax (FIT) Rate	35.00%
State Income Tax (SIT) Rate	8.25%
Allows FIT deduct on SIT	No
Are Rates Same for Retail vs Wholesale?	Yes

000221

KENTUCKY DOCKET NO 99-218
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	$	46.26	7-15-98
RW	4M1X	Address & Facility Inventory (AFIG)	7-15-98	$	33.90	$	46.26	7-15-98
RW	401X	Work Management Center (WMC)	7-15-98	$	34.37	$	45.51	7-15-98
RW	410X	Install & Mtce - Pots	7-15-98	$	41.00	$	55.17	7-15-98
RW	411X	Install & Mtce - Spec Svcs (SSIM)	7-15-98	$	44.45	$	60.09	7-15-98
RW	420X	Outside Plant Constr (OSPC)	7-15-98	$	45.05	$	60.14	7-15-98
RW	421X	Outside Plant Constr (OSPC)	7-15-98	$	45.05	$	60.14	7-15-98
RW	424X	Outside Plant Admin Cntr (OPAC)	7-15-98	$	34.41	$	46.39	7-15-98
RW	422X	Cable Repair Technician (CRT)	7-15-98	$	46.96	$	63.07	7-15-98
RW	423X	Cable Repair Technician (CRT)	7-15-98	$	46.96	$	63.07	7-15-98
RW	425X	Cable Repair Technician (CRT)	7-15-98	$	46.96	$	63.07	7-15-98
RW	426X	Cable Repair Technician (CRT)	7-15-98	$	46.96	$	63.07	7-15-98
RW	430X	CO Install & Mtce Field - Switch Eq	7-15-98	$	44.88	$	53.66	7-15-98
RW	431X	CO Install & Mtce Field - Ckt & Fac	7-15-98	$	42.88	$	51.21	7-15-98
RW	431XB	CO I&M Field, Basic Time - Ckt & Fac	7-15-98	$	41.24	$	49.12	7-15-98
RW	431XO	CO I&M Field, OT - Ckt & Fac	7-15-98	$	52.06	$	62.90	7-15-98
RW	431XP	CO I&M Field, Prem Time - Ckt & Fac	7-15-98	$	62.88	$	76.68	7-15-98
RW	4321	Recent Chng Line Trans (RCMAG)	7-15-98	$	38.86	$	46.13	7-15-98
RW	4N1X	Recent Chng Line Trans (RCMAG)	7-15-98	$	38.86	$	46.13	7-15-98
RW	4320	Switch & Trunk Based Translations	7-15-98	$	45.34	$	54.24	7-15-98
RW	4N2X	Switch & Trunk Based Translations	7-15-98	$	45.34	$	54.24	7-15-98
RW	4322	CO Install, Mtce & Admin - Software	7-15-98	$	49.48	$	59.73	7-15-98
RW	4323	CO Install, Mtce & Admin - Software	7-15-98	$	49.48	$	59.73	7-15-98
RW	4324	CO Install, Mtce & Admin - Software	7-15-98	$	49.48	$	59.73	7-15-98
RW	4331	Trunk & Carrier Group (TCG)	7-15-98	$	43.55	$	57.55	7-15-98
RW	4342	Trunk & Carrier Group (TCG)	7-15-98	$	43.55	$	57.55	7-15-98
RW	473X	Trunk & Carrier Group (TCG)	7-15-98	$	43.55	$	57.55	7-15-98
RW	4N5X	Trunk & Carrier Group (TCG)	7-15-98	$	43.55	$	57.55	7-15-98
RW	4330	Network Reliability Center (NRC)	7-15-98	$	37.80	$	49.23	7-15-98
RW	4341	Network Reliability Center (NRC)	7-15-98	$	37.80	$	49.23	7-15-98
RW	4LXX	Network Reliability Center (NRC)	7-15-98	$	37.80	$	49.23	7-15-98
RW	4332	Proactive Analysis/Repair Ctr (PAR)	7-15-98	$	35.77	$	47.47	7-15-98
RW	4PXX	Proactive Analysis/Repair Ctr (PAR)	7-15-98	$	35.77	$	47.47	7-15-98
RW	470X	Circuit Provisioning Group (CPG)	7-15-98	$	37.06	$	44.30	7-15-98
RW	4N4X	Circuit Provisioning Group (CPG)	7-15-98	$	37.06	$	44.30	7-15-98
RW	471X	Acc Cust Advocate Cntr (ACAC)	7-15-98	$	38.31	$	50.84	7-15-98
RW	471XB	Acc Cust Adv Cntr, Bas Time (ACAC)	7-15-98	$	37.09	$	49.11	7-15-98
RW	471XO	Acc Cust Adv Cntr, OT (ACAC)	7-15-98	$	46.99	$	63.20	7-15-98
RW	471XP	Acc Cust Adv Cntr, Prem Time (ACAC)	7-15-98	$	56.88	$	77.30	7-15-98
RW	4AXX	Acc Cust Advocate Cntr (ACAC)	7-15-98	$	38.31	$	50.84	7-15-98
RW	472X	Equip Bill Accuracy Cont (EBAC)	7-15-98	$	38.56	$	49.80	7-15-98
RW	4N3X	Equip Bill Accuracy Cont (EBAC)	7-15-98	$	38.56	$	49.80	7-15-98
RW	4BXX	Business Repair Center (BRC)	7-15-98	$	39.11	$	52.05	7-15-98
RW	4RXX	Residence Repair Center (RRC)	7-15-98	$	34.89	$	45.85	7-15-98
RW	4WXX	Work Management Center (WMC)	7-15-98	$	34.37	$	45.51	7-15-98
RW	30XX	Land And Buildings (FG10)	7-15-98	$	67.04	$	77.48	7-15-98
RW	350X	Land And Buildings (FG10)	7-15-98	$	67.04	$	77.48	7-15-98
RW	31XX	Ntwk & Eng Planning (FG20)	7-15-98	$	56.20	$	74.52	7-15-98
RW	34XX	Ntwk & Eng Planning (FG20)	7-15-98	$	56.20	$	74.52	7-15-98
RW	3AXX	Ntwk & Eng Planning (FG20)	7-15-98	$	56.20	$	74.52	7-15-98
RW	3BXX	Ntwk & Eng Planning (FG20)	7-15-98	$	56.20	$	74.52	7-15-98

000223

SUMMARY

RW	341X	Ntwk Plug-In Admin (PICS)	7-15-98	$	36.96	$	44.42	7-15-98
RW	3A2X	Ntwk Plug-In Admin (PICS)	7-15-98	$	36.96	$	44.42	7-15-98
RW	32XX	Outside Plant Eng (FG30)	7-15-98	$	47.97	$	65.62	7-15-98
RW	356X	Outside Plant Eng (FG30)	7-15-98	$	47.97	$	65.62	7-15-98
RW	1200	Cabs Accounting	7-15-98	$	43.32	$	55.99	7-15-98
RW	2300	Customer Point Of Contact - ICSC	7-15-98	$	44.86	$	56.76	7-15-98
RW	2300B	Cust Pnt Of Cont, Basic Time - ICSC	7-15-98	$	44.00	$	55.52	7-15-98
RW	2300O	Cust Pnt Of Cont, OT - ICSC	7-15-98	$	53.06	$	68.59	7-15-98
RW	2300P	Cust Pnt Of Cont, Prem Time - ICSC	7-15-98	$	62.11	$	81.66	7-15-98
RW	2120	Pots Operator	7-15-98	$	32.58	$	40.34	7-15-98
RW	2940	Directory Assistance Operator	7-15-98	$	29.69	$	36.61	7-15-98
RW	2600	Coin Collector	7-15-98	$	35.83	$	48.49	7-15-98
RW	2E40	Collections Rep - Residence	7-15-98	$	35.30	$	47.41	7-15-98
RW	2840	Collections Rep - Business	7-15-98	$	34.65	$	46.42	7-15-98
RW	2E50	Bus Ofc Svc Rep - Residence	7-15-98	$	37.73	$	50.87	7-15-98
RW	2E70	Bus Ofc Svc Rep - Residence	7-15-98	$	37.73	$	50.87	7-15-98
RW	2850	Bus Ofc Svc Rep - Business	7-15-98	$	37.39	$	50.29	7-15-98
RW	2870	Bus Ofc Svc Rep - Business	7-15-98	$	37.39	$	50.29	7-15-98
RW	1240	Comptrollers Clerical	7-15-98	$	40.86	$	52.81	7-15-98
RW	1250	Comptrollers Clerical	7-15-98	$	40.86	$	52.81	7-15-98
RW	1260	Comptrollers Clerical	7-15-98	$	40.86	$	52.81	7-15-98
RW	1270	Comptrollers Clerical	7-15-98	$	40.86	$	52.81	7-15-98
RW	2700	Network Services Clerical	7-15-98	$	37.19	$	51.21	7-15-98
RW	2730	Network Services Clerical	7-15-98	$	37.19	$	51.21	7-15-98
RW	AEWC	Acct Executive w/Sales Comp	7-15-98	$	73.78	$	100.26	7-15-98
RW	AEWOC	Acct Executive wo/Sales Comp	7-15-98	$	59.93	$	81.45	7-15-98
RW	SDWC	Systems Designer w/Sales Com	7-15-98	$	67.26	$	91.40	7-15-98
RW	SDWOC	Systems Designer wo/Sales Com	7-15-98	$	61.84	$	84.04	7-15-98
RW	SVCC	Service Consultant	7-15-98	$	45.01	$	61.16	7-15-98
RW	NWPB56	Network Pay Band 56	7-15-98	$	43.90	$	58.67	7-15-98
RW	NWPB57	Network Pay Band 57	7-15-98	$	45.69	$	61.15	7-15-98
RW	NWPB58	Network Pay Band 58	7-15-98	$	50.31	$	67.53	7-15-98
RW	NWPB59	Network Pay Band 59	7-15-98	$	55.78	$	75.09	7-15-98
RW	NWPB61	Network Pay Band 61	7-15-98	$	68.43	$	92.57	7-15-98
RW	NWWS10	Network Wage Scale 10	7-15-98	$	32.96	$	43.55	7-15-98
RW	MKPB56	Marketing Pay Band 56	7-15-98	$	43.28	$	57.96	7-15-98
RW	MKPB57	Marketing Pay Band 57	7-15-98	$	45.08	$	60.44	7-15-98
RW	MKPB58	Marketing Pay Band 58	7-15-98	$	49.39	$	66.52	7-15-98
RW	MKPB59	Marketing Pay Band 59	7-15-98	$	55.17	$	74.38	7-15-98
RW	MKPB61	Marketing Pay Band 61	7-15-98	$	67.85	$	91.91	7-15-98
RW	MKWS10	Marketing Wage Scale 10	7-15-98	$	32.31	$	42.81	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	$	54.63	7-15-98
RW	ITPB56	IT Pay Band 56	7-15-98	$	46.03	$	62.23	7-15-98
RW	ITPB57	IT Pay Band 57	7-15-98	$	47.82	$	64.71	7-15-98
RW	ITPB58	IT Pay Band 58	7-15-98	$	52.44	$	71.09	7-15-98
RW	ITPB59	IT Pay Band 59	7-15-98	$	57.92	$	78.66	7-15-98
RW	ITPB60	IT Pay Band 60	7-15-98	$	64.53	$	87.80	7-15-98
RW	ITPB61	IT Pay Band 61	7-15-98	$	70.60	$	96.18	7-15-98
RW	ITWS10	IT Wage Scale 10	7-15-98	$	35.06	$	47.07	7-15-98
RW	ITWS14	IT Wage Scale 14	7-15-98	$	36.02	$	48.41	7-15-98
RW	ITWS16	IT Wage Scale 16	7-15-98	$	36.68	$	49.31	7-15-98
RW	ITWS18	IT Wage Scale 18	7-15-98	$	37.18	$	50.00	7-15-98
RW	ITWS32	IT Wage Scale 32	7-15-98	$	43.73	$	59.06	7-15-98

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SUMMARY

RW	FRPB56	Finance/Regualtory Pay Band 56	7-15-98	$	41.72	$	56.72	7-15-98
RW	FRPB57	Finance/Regualtory Pay Band 57	7-15-98	$	43.50	$	59.18	7-15-98
RW	FRPB58	Finance/Regualtory Pay Band 58	7-15-98	$	48.12	$	65.57	7-15-98
RW	FRPB59	Finance/Regualtory Pay Band 59	7-15-98	$	53.59	$	73.13	7-15-98
RW	FRPB61	Finance/Regualtory Pay Band 61	7-15-98	$	66.24	$	90.63	7-15-98
RW	FRWS10	Finance/Regualtory Wage Scale 10	7-15-98	$	30.78	$	41.59	7-15-98
RW	FRWS16	Finance/Regulatory Wage Scale 16	7-15-98	$	32.39	$	43.82	7-15-98

TELRIC SUMMARY

1998 - 2000 TELRIC LABOR RATES			7-15-98
PLANT WORK CENTERS	**JFC**	**REGIONAL**	**REFERENCE**
ADDRESS & FACILITY INVENTORY (AFIG)	400X 4M1X	$ 46.26	TELRIC DETAIL H11
INSTALL & MTCE - POTS	410X	$ 55.17	TELRIC DETAIL H13
INSTALL & MTCE - SPEC SVCS (SSIM)	411X	$ 60.09	TELRIC DETAIL H14
OUTSIDE PLANT CONSTRUCTION (OSPC)	420X 421X	$ 60.14	TELRIC DETAIL H15
OUTSIDE PLANT ADMIN CENTER (OPAC)	424X	$ 46.39	TELRIC DETAIL H16
CABLE REPAIR TECHNICIAN (CRT)	422X 423X 425X 426X	$ 63.07	TELRIC DETAIL H17
CO INSTALL & MTCE FIELD - SWITCH EQUIP	430X	$ 53.66	TELRIC DETAIL H18
CO INSTALL & MTCE FIELD - CIRCUIT & FAC	431X	$ 51.21	TELRIC DETAIL H19
RECENT CHANGE LINE TRANSLATIONS (RCMAG)	4321 4N1X	$ 46.13	TELRIC DETAIL H20
SWITCH & TRUNK BASED TRANSLATIONS	4320 4N2X	$ 54.24	TELRIC DETAIL H21
CO INSTALL, MTCE & ADMIN - SOFTWARE	4322 4323 4324	$ 59.73	TELRIC DETAIL H22
TRUNK & CARRIER GROUP (TCG)	4331 4342 473X 4N5X	$ 57.55	TELRIC DETAIL H23
NETWORK RELIABILITY CENTER (NRC)	4330 4341 4LXX	$ 49.23	TELRIC DETAIL H24
PROACTIVE ANALYSIS & REPAIR CTR (PAR)	4332 4PXX	$ 47.47	TELRIC DETAIL H25
CIRCUIT PROVISIONING GROUP (CPG)	470X 4N4X	$ 44.30	TELRIC DETAIL H26
ACCESS CUSTOMER ADVOCATE CENTER (ACAC)	471X 4AXX	$ 50.84	TELRIC DETAIL H27
EQUIPMENT BILLING ACCURACY CONT (EBAC)	472X 4N3X	$ 49.80	TELRIC DETAIL H28
BUSINESS REPAIR CENTER (BRC)	4BXX	$ 52.05	TELRIC DETAIL H29
RESIDENCE REPAIR CENTER (RRC)	4RXX	$ 45.85	TELRIC DETAIL H30
WORK MANAGEMENT CENTER (WMC)	4WXX 401X	$ 45.51	TELRIC DETAIL H31
ENGINEERING FORCE GROUPS	**JFC**	**REGIONAL**	**REFERENCE**
LAND AND BUILDINGS (FG10)	30XX 350X	$ 77.48	TELRIC DETAIL H43
NETWORK & ENGINEERING PLANNING (FG20)	31XX 34XX 3AXX 3BXX	$ 74.52	TELRIC DETAIL H44
NETWORK PLUG-IN ADMINISTRATION (PICS)	341X 3A2X	$ 44.42	TELRIC DETAIL H45
OUTSIDE PLANT ENGINEERING (FG30)	32XX 356X	$ 65.62	TELRIC DETAIL H46
COST GROUPS	**JFC**	**REGIONAL**	**REFERENCE**
CABS ACCOUNTING	1200	$ 55.99	TELRIC DETAIL H56
CUSTOMER POINT OF CONTACT - ICSC/LSCS	2300	$ 56.76	TELRIC DETAIL H57
POTS OPERATOR	2120	$ 40.34	TELRIC DETAIL H58
DIRECTORY ASSISTANCE OPERATOR	2940	$ 36.61	TELRIC DETAIL H59
COIN COLLECTOR	2600	$ 48.49	TELRIC DETAIL H60
COLLECTIONS REP - RESIDENCE	2E40	$ 47.41	TELRIC DETAIL H61
COLLECTIONS REP - BUSINESS	2840	$ 46.42	TELRIC DETAIL H62
BUS OFC SVC REP - RESIDENCE	2E50 2E70	$ 50.87	TELRIC DETAIL H63
BUS OFC SVC REP - BUSINESS	2850 2870	$ 50.29	TELRIC DETAIL H64
COMPTROLLERS CLERICAL	1240 1250 1260 1270	$ 52.81	TELRIC DETAIL H65
NETWORK SERVICES CLERICAL	2700 2730	$ 51.21	TELRIC DETAIL H66
ACCOUNT EXECUTIVE	NOT APPLICABLE		
WITH SALES COMPENSATION		$ 100.26	TELRIC DETAIL H80
WITHOUT SALES COMPENSATION		$ 81.45	TELRIC DETAIL H81
SYSTEMS DESIGNER	NOT APPLICABLE		
WITH SALES COMPENSATION		$ 91.40	TELRIC DETAIL H83
WITHOUT SALES COMPENSATION		$ 84.04	TELRIC DETAIL H84
SERVICE CONSULTANT	NOT APPLICABLE	$ 61.16	TELRIC DETAIL H85

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			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	$	54.63	TELRIC IT PB DETAIL H12
PAY BAND 56	$	62.23	TELRIC IT PB DETAIL H13
PAY BAND 57	$	64.71	TELRIC IT PB DETAIL H14
PAY BAND 58	$	71.09	TELRIC IT PB DETAIL H15
PAY BAND 59	$	78.66	TELRIC IT PB DETAIL H16
PAY BAND 60	$	87.80	TELRIC IT PB DETAIL H17
PAY BAND 61	$	96.18	TELRIC IT PB DETAIL H18
WAGE SCALE 10	$	47.07	TELRIC IT PB DETAIL H19
WAGE SCALE 14	$	48.41	TELRIC IT PB DETAIL H20
WAGE SCALE 16	$	49.31	TELRIC IT PB DETAIL H21
WAGE SCALE 18	$	50.00	TELRIC IT PB DETAIL H22
WAGE SCALE 32	$	59.06	TELRIC IT PB DETAIL H23

TELRIC MKTG PB SUM

			7-15-98
1998 - 2000 TELRIC LABOR RATES			
BST MARKETING	**HOURLY RATE**		**REFERENCE**
PAY BAND 56	$	57.96	TELRIC MKTG PB DETAIL H11
PAY BAND 57	$	60.44	TELRIC MKTG PB DETAIL H12
PAY BAND 58	$	66.52	TELRIC MKTG PB DETAIL H13
PAY BAND 59	$	74.38	TELRIC MKTG PB DETAIL H14
PAY BAND 61	$	91.91	TELRIC MKTG PB DETAIL H15
WAGE SCALE 10	$	42.81	TELRIC MKTG PB DETAIL H16

000228

TELRIC NTWK PB SUM

			7-15-98
1998 - 2000 TELRIC LABOR RATES			
BST NETWORK	**HOURLY RATE**		**REFERENCE**
PAY BAND 56	$	58.67	TELRIC NTWK PB DETAIL H11
PAY BAND 57	$	61.15	TELRIC NTWK PB DETAIL H12
PAY BAND 58	$	67.53	TELRIC NTWK PB DETAIL H13
PAY BAND 59	$	75.09	TELRIC NTWK PB DETAIL H14
PAY BAND 61	$	92.57	TELRIC NTWK PB DETAIL H15
WAGE SCALE 10	$	43.55	TELRIC NTWK PB DETAIL H16

TELRIC FINANCE PB SUM

			7-15-98
1998 - 2000 TELRIC LABOR RATES			
BST FINANCE/REGULATORY	**HOURLY RATE**		**REFERENCE**
PAY BAND 56	$	56.72	TELRIC FINANCE PB DETAIL H11
PAY BAND 57	$	59.18	TELRIC FINANCE PB DETAIL H12
PAY BAND 58	$	65.57	TELRIC FINANCE PB DETAIL H13
PAY BAND 59	$	73.13	TELRIC FINANCE PB DETAIL H14
PAY BAND 61	$	90.63	TELRIC FINANCE PB DETAIL H15
WAGE SCALE 10	$	41.59	TELRIC FINANCE PB DETAIL H16
WAGE SCALE 16	$	43.82	TELRIC FINANCE PB DETAIL H17

TELRIC SECURITY SUM

SECURITY ESCORT			7-15-98
		1998 - 2000 TELRIC	REFERENCE
ACAC			
BASIC	$	49.11	SECURITY ACAC B15
OVERTIME	$	63.20	SECURITY ACAC B26
PREMIUM	$	77.30	SECURITY ACAC B37
COIM - CIR & FAC			
BASIC	$	49.12	SECURITY COIM-CIR&FAC B15
OVERTIME	$	62.90	SECURITY COIM-CIR&FAC B26
PREMIUM	$	76.68	SECURITY COIM-CIR&FAC B37
ICSC/LCSC			
BASIC	$	55.52	SECURITY ICSC LCSC B15
OVERTIME	$	68.59	SECURITY ICSC LCSC B26
PREMIUM	$	81.66	SECURITY ICSC LCSC B37

DIR ASSG SUM

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

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			7-15-98
1998 - 2000 DIRECTLY ASSIGNED LABOR RATES			
	1998 - 2000 DIRECTLY ASSIGNED		
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

SHARED LABOR FACTOR	
	1997 - 1999
	SHARED
PLANT WORK CENTERS	**LABOR FACTOR**
ADDRESS & FACILITY INVENTORY (AFIG)	0.4813
WORK MANAGEMENT CENTER (WMC) - JFC 401X	0.4813
INSTALLATION & MTCE - POTS	0.4813
INSTALLATION & MTCE - SPEC SVCS (SSIM)	0.4813
OUTSIDE PLANT CONSTRUCTION (OSPC)	0.4813
OUTSIDE PLANT ADMIN CENTER (OPAC)	0.4813
CABLE REPAIR TECHNICIAN (CRT)	0.4813
CO INSTALL & MTCE FIELD - SWITCH EQUIP	0.2734
CO INSTALL & MTCE - CIRCUIT & FACILITY	0.2734
RECENT CHANGE LINE TRANS (RCMAG)	0.2734
SWITCH & TRUNK BASED TRANSLATIONS	0.2734
CO INSTALL, MTCE & ADMIN - SOFTWARE	0.2734
TRUNK & CARRIER GROUP (TCG)	0.4528
NETWORK RELIABILITY CENTER (NRC)	0.4266
PROACTIVE ANALYSIS & REPAIR CTR (PAR)	0.4266
CIRCUIT PROVISIONING GROUP (CPG)	0.2734
ACCESS CUSTOMER ADVOCATE CTR (ACAC)	0.4243
EQUIP BILLING ACCURACY CONTROL (EBAC)	0.4266
BUSINESS REPAIR CENTER (BRC)	0.4266
RESIDENCE REPAIR CENTER (RRC)	0.4266
WORK MANAGEMENT CENTER (WMC) - JFC 4WX	0.4266
ENGINEERING FORCE GROUPS	
LAND & BUILDINGS (FG10)	0.2071
NETWORK & ENGINEERING PLANNING (FG20)	0.4266
NETWORK PLUG-IN ADMINISTRATION (PICS)	0.2734
OUTSIDE PLANT ENGINEERING (FG30)	0.4813
COST GROUPS	
CARRIER ACCESS BILLING SYSTEM (CABS)	0.4432
CUSTOMER POINT OF CONTACT - ICSC/LCSC	0.4432
POTS OPERATOR	0.3080
DIRECTORY ASSISTANCE OPERATOR	0.3080
COIN COLLECTOR	0.4432
COLLECTIONS REPRESENTATIVE - RES	0.4432
COLLECTIONS REPRESENTATIVE - BUS	0.4432
BUSINESS OFFICE SERVICE REP - RES	0.4432
BUSINESS OFFICE SERVICE REP - BUS	0.4432
COMPTROLLERS CLERICAL	0.4432
NETWORK SERVICES CLERICAL	0.4851
ACCOUNT EXECUTIVE	
WITH SALES COMPENSATION	0.4432
WITHOUT SALES COMPENSATION	0.4432
SYSTEMS DESIGNER	
WITH SALES COMPENSATION	0.4432
WITHOUT SALES COMPENSATION	0.4432
SERVICE CONSULTANT	0.4432
OTHER THAN IOT, COE & OSP	0.4859

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INFL FACTOR

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			

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	0.4813	$ 11.66	$ 43.64	1.059854	$ 46.26
INSTALLATION & MTCE - POTS	$ 27.78	$ 10.90	0.4813	$ 13.37	$ 52.06	1.059854	$ 55.17
INSTALLATION & MTCE - SPEC SVCS (SSIM)	$ 30.66	$ 11.29	0.4813	$ 14.75	$ 56.70	1.059854	$ 60.09
OUTSIDE PLANT CONSTRUCTION (OSPC)	$ 29.58	$ 12.93	0.4813	$ 14.24	$ 56.74	1.059854	$ 60.14
OUTSIDE PLANT ADMIN CENTER (OPAC)	$ 23.49	$ 8.98	0.4813	$ 11.30	$ 43.77	1.059854	$ 46.39
CABLE REPAIR TECHNICIAN (CRT)	$ 31.58	$ 12.73	0.4813	$ 15.20	$ 59.50	1.059854	$ 63.07
CO INSTALL & MTCE FIELD - SWITCH EQUIP	$ 30.30	$ 12.05	0.2734	$ 8.28	$ 50.63	1.059854	$ 53.66
CO INSTALL & MTCE - CIRCUIT & FACILITY	$ 28.75	$ 11.70	0.2734	$ 7.86	$ 48.32	1.059854	$ 51.21
RECENT CHANGE LINE TRANS (RCMAG)	$ 25.11	$ 11.56	0.2734	$ 6.86	$ 43.53	1.059854	$ 46.13
SWITCH & TRUNK BASED TRANSLATIONS	$ 30.72	$ 12.06	0.2734	$ 8.40	$ 51.18	1.059854	$ 54.24
CO INSTALL, MTCE & ADMIN - SOFTWARE	$ 35.37	$ 11.31	0.2734	$ 9.67	$ 56.35	1.059854	$ 59.73
TRUNK & CARRIER GROUP (TCG)	$ 29.18	$ 11.91	0.4528	$ 13.21	$ 54.30	1.059854	$ 57.55
NETWORK RELIABILITY CENTER (NRC)	$ 25.28	$ 10.38	0.4266	$ 10.79	$ 46.45	1.059854	$ 49.23
PROACTIVE ANALYSIS & REPAIR CTR (PAR)	$ 25.87	$ 7.88	0.4266	$ 11.04	$ 44.79	1.059854	$ 47.47
CIRCUIT PROVISIONING GROUP (CPG)	$ 24.97	$ 10.00	0.2734	$ 6.83	$ 41.80	1.059854	$ 44.30
ACCESS CUSTOMER ADVOCATE CTR (ACAC)	$ 27.88	$ 8.27	0.4243	$ 11.83	$ 47.97	1.059854	$ 50.84
EQUIP BILLING ACCURACY CONTROL (EBAC)	$ 24.85	$ 11.54	0.4266	$ 10.60	$ 46.99	1.059854	$ 49.80
BUSINESS REPAIR CENTER (BRC)	$ 28.62	$ 8.29	0.4266	$ 12.21	$ 49.11	1.059854	$ 52.05
RESIDENCE REPAIR CENTER (RRC)	$ 24.26	$ 8.66	0.4266	$ 10.35	$ 43.26	1.059854	$ 45.85
WORK MANAGEMENT CENTER (WMC)	$ 24.65	$ 7.77	0.4266	$ 10.52	$ 42.94	1.059854	$ 45.51
* TOTAL DIR ASSG WORK SHEETS D19+22+26							
** TOTAL DIR ASSG WORK SHEETS D31-D26-D22-D19							
*** SHARED LABOR FACTOR							
**** INFL FACTOR E14							

000240

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	0.2071	$ 9.85	$ 73.11	1.059854	$ 77.48
NETWORK & ENGINEERING PLANNING (FG20)	$ 40.53	$ 12.50	0.4266	$ 17.29	$ 70.32	1.059854	$ 74.52
NETWORK PLUG-IN ADMINISTRATION (PICS)	$ 25.74	$ 9.13	0.2734	$ 7.04	$ 41.91	1.059854	$ 44.42
OUTSIDE PLANT ENGINEERING (FG30)	$ 34.60	$ 10.66	0.4813	$ 16.65	$ 61.92	1.059854	$ 65.62
*** 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	0.4432	$ 11.95	$ 52.83	1.059854	$ 55.99
CUSTOMER POINT OF CONTACT - ICSC/LCSC	$ 25.33	$ 16.99	0.4432	$ 11.23	$ 53.55	1.059854	$ 56.76
POTS OPERATOR	$ 23.79	$ 6.94	0.308	$ 7.33	$ 38.06	1.059854	$ 40.34
DIRECTORY ASSISTANCE OPERATOR	$ 21.19	$ 6.83	0.308	$ 6.52	$ 34.54	1.059854	$ 36.61
COIN COLLECTOR	$ 26.96	$ 6.85	0.4432	$ 11.95	$ 45.75	1.059854	$ 48.49
COLLECTIONS REPRESENTATIVE - RES	$ 25.77	$ 7.54	0.4432	$ 11.42	$ 44.73	1.059854	$ 47.41
COLLECTIONS REPRESENTATIVE - BUS	$ 25.07	$ 7.62	0.4432	$ 11.11	$ 43.80	1.059854	$ 46.42
BUSINESS OFFICE SERVICE REP - RES	$ 27.97	$ 7.63	0.4432	$ 12.40	$ 47.99	1.059854	$ 50.87
BUSINESS OFFICE SERVICE REP - BUS	$ 27.46	$ 7.82	0.4432	$ 12.17	$ 47.45	1.059854	$ 50.29
COMPTROLLERS CLERICAL	$ 25.43	$ 13.12	0.4432	$ 11.27	$ 49.83	1.059854	$ 52.81
NETWORK SERVICES CLERICAL	$ 27.27	$ 7.82	0.4851	$ 13.23	$ 48.32	1.059854	$ 51.21
*** TOTAL DIR ASSG WORK SHEETS D19**							
**** TOTAL DIR ASSG WORK SHEETS D22-D19**							
***** SHARED LABOR FACTOR**							

**** INFL FACTOR E14 A	B	C	D	E	F	G	H
COST GROUPS (CONTINUED)	**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)**
ACCOUNT EXECUTIVE							
WITH SALES COMPENSATION	$ 56.38	$ 13.23	0.4432	$ 24.99	$ 94.60	1.059854	$ 100.26
WITHOUT SALES COMPENSATION	$ 45.80	$ 10.74	0.4432	$ 20.30	$ 76.85	1.059854	$ 81.45
SYSTEMS DESIGNER							
WITH SALES COMPENSATION	$ 51.40	$ 12.06	0.4432	$ 22.78	$ 86.24	1.059854	$ 91.40
WITHOUT SALES COMPENSATION	$ 47.26	$ 11.08	0.4432	$ 20.95	$ 79.29	1.059854	$ 84.04
SERVICE CONSULTANT	$ 34.39	$ 8.07	0.4432	$ 15.24	$ 57.71	1.059854	$ 61.16
*** TOTAL DIR ASSG WORK SHEET AE SD SC**							
**** TOTAL DIR ASSG WORK SHEET AE SD SC**							
***** SHARED LABOR FACTOR**							
****** INFL FACTOR E14**							

000242

AFIG

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			

I&M POTS

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			

SSIM

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			

000245

OSPC

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			

OPAC

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			

000248

COIM-CIR&FAC

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			

000249

COIM-SW EQ

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			

000251

TRANSLATIONS

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			

000252

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			

000253

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			

000254

NRC

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			

PAR

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			

000257

ACAC

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			

000259

BRC

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			

000261

WMC

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			

000262

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			

PICS

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			

000265

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			

000266

CABS

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			

000267

ICSC LCSC

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			

000268

POTS OPER

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			

000269

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			

000270

COIN COLL

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			

000271

COLL REP-RES

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			

COLL REP-BUS

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			

000273

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			

000274

SVC REP-BUS

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			

000275

COMP CLER

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			

NTWK SVC CLER

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			
				1997
		1996		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	0.4859	$ -	$ 36.41	1.059854	$ 38.59
PAY BAND 55	$ 27.38	$ 10.86	0.4859	$ 13.30	$ 51.54	1.059854	$ 54.63
PAY BAND 56	$ 31.46	$ 11.97	0.4859	$ 15.29	$ 58.72	1.059854	$ 62.23
PAY BAND 57	$ 32.79	$ 12.33	0.4859	$ 15.93	$ 61.05	1.059854	$ 64.71
PAY BAND 58	$ 36.22	$ 13.26	0.4859	$ 17.60	$ 67.08	1.059854	$ 71.09
PAY BAND 59	$ 40.28	$ 14.37	0.4859	$ 19.57	$ 74.22	1.059854	$ 78.66
PAY BAND 60	$ 45.18	$ 15.71	0.4859	$ 21.95	$ 82.84	1.059854	$ 87.80
PAY BAND 61	$ 49.68	$ 16.93	0.4859	$ 24.14	$ 90.75	1.059854	$ 96.18
WAGE SCALE 10	$ 23.33	$ 9.75	0.4859	$ 11.34	$ 44.42	1.059854	$ 47.07
WAGE SCALE 14	$ 24.05	$ 9.94	0.4859	$ 11.69	$ 45.68	1.059854	$ 48.41
WAGE SCALE 16	$ 24.53	$ 10.08	0.4859	$ 11.92	$ 46.53	1.059854	$ 49.31
WAGE SCALE 18	$ 24.90	$ 10.18	0.4859	$ 12.10	$ 47.18	1.059854	$ 50.00
WAGE SCALE 32	$ 29.76	$ 11.50	0.4859	$ 14.46	$ 55.72	1.059854	$ 59.06
*IT PAY BAND B6:B23							
**IT PAY BAND B24:B29							
***SHARED LABOR FACTOR B56							
**** INFL FACTOR E14							

000279

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	0.4859	$ 13.85	$ 54.69	1.059854	$ 57.96
PAY BAND 57	$ 29.83	$ 12.70	0.4859	$ 14.49	$ 57.02	1.059854	$ 60.44
PAY BAND 58	$ 33.26	$ 13.34	0.4859	$ 16.16	$ 62.76	1.059854	$ 66.52
PAY BAND 59	$ 37.32	$ 14.73	0.4859	$ 18.13	$ 70.18	1.059854	$ 74.38
PAY BAND 61	$ 46.72	$ 17.30	0.4859	$ 22.70	$ 86.72	1.059854	$ 91.91
WAGE SCALE 10	$ 20.37	$ 10.12	0.4859	$ 9.90	$ 40.39	1.059854	$ 42.81
*MARKETING PAY BAND B6:B23							
**MARKETING PAY BAND B24:B29							
***SHARED LABOR FACTOR B56							
**** INFL FACTOR E14							

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

000283

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	0.4851	$ 13.94	$ 55.36	1.059854	$ 58.67
PAY BAND 57	$ 30.06	$ 13.05	0.4851	$ 14.58	$ 57.69	1.059854	$ 61.15
PAY BAND 58	$ 33.49	$ 13.98	0.4851	$ 16.25	$ 63.72	1.059854	$ 67.53
PAY BAND 59	$ 37.55	$ 15.08	0.4851	$ 18.22	$ 70.85	1.059854	$ 75.09
PAY BAND 61	$ 46.95	$ 17.62	0.4851	$ 22.78	$ 87.35	1.059854	$ 92.57
WAGE SCALE 10	$ 20.60	$ 10.50	0.4851	$ 9.99	$ 41.09	1.059854	$ 43.55
*NETWORK PAY BAND B6:B23							
**NETWORK PAY BAND B24:B29							
***SHARED LABOR FACTOR B47							
**** INFL FACTOR E14							

000284

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

000285

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	0.4859	$ 14.15	$ 53.51	1.059854	$ 56.72
PAY BAND 57	$ 30.46	$ 10.58	0.4859	$ 14.80	$ 55.84	1.059854	$ 59.18
PAY BAND 58	$ 33.89	$ 11.51	0.4859	$ 16.47	$ 61.87	1.059854	$ 65.57
PAY BAND 59	$ 37.95	$ 12.61	0.4859	$ 18.44	$ 69.00	1.059854	$ 73.13
PAY BAND 61	$ 47.35	$ 15.15	0.4859	$ 23.01	$ 85.51	1.059854	$ 90.63
WAGE SCALE 10	$ 21.00	$ 8.04	0.4859	$ 10.20	$ 39.24	1.059854	$ 41.59
WAGE SCALE 16	$ 22.20	$ 8.36	0.4859	$ 10.79	$ 41.35	1.059854	$ 43.82
*FINANCE PAY BAND B6:B23							
**FINANCE PAY BAND B24:B29							
***SHARED LABOR FACTOR B56							
**** INFL FACTOR E14							

000286

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

000287

SECURITY ACAC

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	$	11.34	B11*SHARED LABOR FACTOR B22
OTHER DIRECT	$	8.27	ACAC D31-ACAC D19
BASIC LESS PREMIUM	$	46.33	
TOTAL 1998 - 2000 TELRIC	**$**	**49.11**	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	$	15.30	B21+B22*SHARED LABOR FACTOR B22
OTHER DIRECT	$	8.27	ACAC D31-ACAC D19
OT LESS PREM + 1/2 PROD	$	59.63	
TOTAL 1998 - 2000 TELRIC	**$**	**63.20**	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	$	19.26	B32+B33*SHARED LABOR FACTOR B22
OTHER DIRECT -	$	8.27	ACAC D31-ACAC D19
PREM LESS PREM + 1X PROD	$	72.94	
TOTAL 1998 - 2000 TELRIC	**$**	**77.30**	B25*INFL FACTOR E14

000288

SECURITY COIM-CIR FAC

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	$	7.44	B11*SHARED LABOR FACTOR B14
OTHER DIRECT	$	11.70	COIM-CIR&FAC D31-D19-D22-D26
BASIC LESS PREMIUM	$	46.35	
TOTAL 1998 - 2000 TELRIC	**$**	**49.12**	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	$	10.23	B21+B22*SHARED LABOR FACTOR B14
OTHER DIRECT	$	11.70	COIM-CIR&FAC D31-D19-D22-D26
OT LESS PREM + 1/2 PROD	$	59.35	
TOTAL 1998 - 2000 TELRIC	**$**	**62.90**	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	$	13.02	B32+B33*SHARED LABOR FACTOR B14
OTHER DIRECT	$	11.70	COIM-CIR&FAC D31-D19-D22-D26
PREM LESS PREM + 1X PROD	$	72.35	
TOTAL 1998 - 2000 TELRIC	**$**	**76.68**	B36*INFL FACTOR E14

SECURITY ICSC LCSC

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	$ 10.87	B11*SHARED LABOR FACTOR B38
OTHER DIRECT	$ 16.99	ICSC LCSC D22-D19
BASIC LESS PREMIUM	$ 52.38	
TOTAL 1998 - 2000 TELRIC	**$ 55.52**	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	$ 14.66	B21+B22*SHARED LABOR FACTOR B38
OTHER DIRECT	$ 16.99	ICSC LCSC D22-D19
OT LESS PREM + 1/2 PROD	$ 64.71	
TOTAL 1998 - 2000 TELRIC	**$ 68.59**	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	$ 18.44	B32+B33*SHARED LABOR FACTOR B38
OTHER DIRECT	$ 16.99	ICSC LCSC D22-D19
PREM LESS PREM + 1X PROD	$ 77.05	
TOTAL 1998 - 2000 TELRIC	**$ 81.66**	B36*INFL FACTOR E14

000290

A	B	C	D	E	F
					7-15-98
1998 - 2000 DIRECTLY ASSIGNED LABOR RATES					
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					

000291

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					

000292

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**				

000293

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**				

000294

DIR ASSG NTWK PB DETAIL

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**				

000295

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**				

000296

SECURITY DIR ASSG ACAC

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

SECURITY DIR ASSG COIM-CIR FAC

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

000298

SECURITY DIR ASSG ICSC LCSC

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

000299

KENTUCKY DOCKET NO 99-218

APPENDIX B

UNBUNDLED NETWORK ELEMENT (UNE) STUDIES

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

BellSouth
TELRIC Calculator
Version 1.3

Operating Instructions

Installing the BellSouth TELRIC Suite

- Insert the CD-ROM in the CD-ROM drive.

- Windows 3.1: Select the **File** | **Run** menu option in Program Manager.
  Windows 95/NT: Click the **Start** button on the task bar and then click **Run.**

- Type the drive letter of the CD-ROM drive, followed by a colon (:) and a backslash (\), and the word **setup**. For example:

  d:\setup

  You may optionally click the Browse button to locate the setup.exe file on the CD-ROM.

  Click **OK.**

- You will be guided through the remainder of the installation process. Follow the instructions on your screen. Click **Next** to continue through the Setup process. Once the setup program has written the application files to your PC, it may need to restart Windows to complete the installation. You will be prompted if this is necessary. In this case, if Windows is not restarted, the applications may not function correctly.

000302

Starting the BellSouth TELRIC Calculator

Windows 3.11

Open the Program Group entitled "BellSouth TELRIC Suite v1.3".
Double-click the BellSouth TELRIC Calculator icon.

Windows 95 and Windows NT 4.0

Click the Start Button.
Move the mouse to highlight Programs.
A list of programs and folders will pop-up.
Locate the folder entitled "BellSouth TELRIC Suite v1.3".
Move the mouse to highlight the BellSouth TELRIC Calculator icon and release the mouse button.

000303

Opening Screen

Menu Options

File

Open TELRIC Calculator - Selecting this option will display the Cost Element Selection Screen, the interface for computing TELRIC for the unbundled cost elements. This may also be accomplished by clicking the BellSouth logo.
Exit TELRIC Calculator - Choose this option to exit the TELRIC Calculator.

Models

Loop Model - Selecting this option will launch the BellSouth Loop Model.
Switched Network Calculator - Selecting this option will launch the BellSouth Switched Network Calculator.
Capital Cost Calculator - Selecting this option will launch the BellSouth Capital Cost Calculator.
Shared and Common Cost - Selecting this option will launch the BellSouth Shared and Common Cost Application.

Help

Contents - Displays help table of contents.
Search - Displays list of help topics that can be searched.
About - Displays a dialog box containing version information.

000304

Cost Element Selection Screen

The Cost Element Selection Screen is the focal point for creating and running TELRIC scenarios. When you open the Calculator for the first time, the BellSouth default factors and investments are loaded into the TELRIC WORKING database. You may create multiple scenarios by modifying the factors and investments stored in the WORKING database and saving them for future retrieval.

Cost Element Selection List

The Cost Element Selection List is similar to Windows File Manager or Explorer. When the screen is first displayed, a list of folders are displayed along with their description. These folders represent cost element groupings. Clicking on a folder will expand the list so that you can see all elements or folders that are grouped under it. The selected item will be highlighted. Clicking the same folder again will close the folder. Cost elements are denoted by a page icon.

At this time the TELRIC Calculator will only allow you to select one item in the list. That item may be a folder of elements or an individual element. The item that you select will affect other functions on the screen. For instance, if you select the A.0 folder, all elements under A.0 will be processed when you click run. Also, your selection will affect what elements are displayed when you choose to view or edit Investments. If you select the topmost folder, all elements will be displayed or run.

Factors and Investments Option

The Factors and Investments option button at the bottom left corner of the screen controls the factors and investments that will be displayed and/or run. If BellSouth Defaults is selected, the BellSouth default factors and investments will be displayed or run. If Current Scenario is selected, the factors and investments stored in the WORKING database are used. In this manner, you may choose to use the BellSouth default values for a run without opening a new scenario and wiping out the modifications you have made to the WORKING factors and investments.

Factors Button

Clicking this button will display the **View/Edit Factors** screen where you may make changes to factors. Refer to the section entitled **View/Edit Factors** for instructions on using this screen.

000305

Cost Element Selection Screen (cont.)

Investments Button

Clicking this button will display the **View/Edit Investments** screen where you may make changes to investments. Refer to the section entitled **View/Edit Investments** for instructions on using this screen.

View Output Button

Clicking this button will display the **View Output** screen where you may view the output Excel worksheet files that are created by the Calculator runs. Refer to the section entitled **View Output** for instructions on using this screen.

Run Button

Clicking this button will start the process that will calculate TELRIC for the selected cost elements. If you run less than 20 elements, the average run time per element is two minutes. If you run 20 elements or more, the average run time per element is reduced to roughly one half the time depending on the elements that are run.

Status Bar

At the bottom of the screen is a status bar. The status bar provides information about the currently running process. In addition, if you position your mouse over objects on the screen, the status bar will indicate the object's function.

000306

Cost Element Selection Screen (cont.)

Menu Options

File

New - Resets the WORKING database to the BellSouth defaults.
Open - Displays a screen which allows you to open saved or exported scenarios. Refer to the sections entitled **Opening a Scenario** and **Importing a Scenario** for instructions.
Save - Saves the current WORKING database for later retrieval. Refer to the section entitled **Saving a Scenario** for instructions.
Export - Creates a copy of a scenario that can be transported to another PC. Refer to the section entitled **Exporting a Scenario** for instructions.
Run - Runs the currently loaded scenario.
View Output - Displays the output screen where you may view run output.
Close Current Screen - Closes the Cost Element Selection screen and returns you to the opening screen
Exit TELRIC Calculator - Choose this option to exit the TELRIC Calculator.

State

All BellSouth states are listed but not all are available depending on the user. The unavailable states are grayed out and cannot be selected. The currently selected state is indicated by a check mark.

Options

Collapse List - Closes all the cost element folders in the selection list.

Summary

Last Run - Displays a summary report that includes the elements processed in the last run that was executed.
All Elements - Current Scenario - Displays a summary report that includes all elements in the currently loaded scenario.
All Elements - BellSouth Base Case - Displays a summary report that includes all elements processed with the BellSouth default factors and investments.

Help

Contents - Displays help table of contents.
Search - Displays list of help topics that can be searched.
About - Displays a dialog box containing version information.

000307

View / Edit Factors Screen

To display the **View / Edit Factors Screen**, click the **Factors** button on the Cost Element Selection Screen. If the Factors and Investments option button the Cost Element Selection Screen is set to BellSouth Defaults, the BellSouth Default factors will be displayed. The defaults can not be modified. If the Factors and Investments option button is set to Current Scenario, the factors currently stored in the WORKING database will be displayed.

The factors are arranged into the following categories displayed on tabbed file folders:

Inplant Factors
Loadings
Miscellaneous
Annual Cost Factors (excluding Cost of Capital factors which have their own tab)
Cost of Capital
Disconnect Factors
Global Factors

You may switch between the factor categories by clicking on the tabs.

Current Record

As you move around in the factor tables by clicking with the mouse or using the arrow keys, the description for the currently selected record will be displayed at the top of the tab.

Modifying Factors

You may modify the factors by clicking on the cell that you want to modify, typing the changes, and pressing <ENTER> or moving to another row. If you type into a cell, without pressing <ENTER> or moving to another row and then click another tab, your updates will be lost.

Reset to BellSouth Defaults

On each tab there is a **Reset to BellSouth Defaults** button. Clicking this button will cause all factors on that tab to be reset to the BellSouth default values.

If you wish to reset all factors, not just the ones on the current tab, select the **Defaults | Reset ALL factors to BellSouth defaults** menu option.

000308

View / Edit Factors Screen (cont.)

Capital Cost Calculator

The factors on the Cost of Capital tab were developed in the **BellSouth Capital Cost Calculator**. You may open the Capital Cost Calculator to change the development of these factors by clicking the **Capital Cost Calculator** button.

Once you make the desired changes, please exit the Capital Cost Calculator. To apply the changes that you made in the Capital Cost Calculator to the TELRIC Calculator WORKING database, click the **Load Values From Calculator** button.

Since the Shared Cost Factor, Common Factor, and TELRIC Labor Rates are dependent on the output from the Capital Cost Calculator, they will be updated at this time. This may take several minutes.

Shared and Common Cost Application

The Shared and Common Cost factors are developed in the Shared and Common Cost Application. In addition, the TELRIC Labor Rates are dependent on the output of the Shared and Common Cost Application. On the Annual Cost Factors and Global tabs there is a **Open Shared and Common** button. Clicking this button will cause the Shared and Common Cost Application to be opened so that you may make changes. To apply the changes that you made in the Shared and Common Cost Application to the TELRIC WORKING database, click the **Load Shared and Common** button.

000309

View / Edit Investments Screen

To display the **View / Edit Investments Screen**, click the **Investments** button on the Cost Element Selection Screen. If the Factors and Investments option button the the Cost Element Selection Screen is set to BellSouth Defaults, the BellSouth Default investments will be displayed. The defaults can not be modified. If the Factors and Investments option button is set to Current Scenario, the investments currently stored in the WORKING database will be displayed.

The investments are arranged into the following categories displayed on tabbed file folders:

Investments (Volume-Sensitive and Non-Volume Sensitive)
Recurring Additives
Non-Recurring Additives
Recurring Labor (Hours)
Non-Recurring Labor (Hours)
Labor Rates

You may switch between the investment categories by clicking on the tabs.

Current Record

As you move around in the investment tables by clicking with the mouse or using the arrow keys, the description for the currently selected record will be displayed at the top of the tab.

Modifying Investments

You may modify the investments by clicking on the cell that you want to modify, typing the changes, and pressing <ENTER> or moving to another row. If you type into a cell, without pressing <ENTER> or moving to another row and then click another tab, your updates will be lost.

000310

View / Edit Investments Screen (cont.)

Reset to BellSouth Defaults

On each tab there is a **Reset to BellSouth Defaults** button. When you click this button you will be given three options:

> **Selected record only** - Only the currently selected record will be reset.
> **Displayed elements only** - All elements displayed on the tab will be reset.
> **All elements** - All elements in this investment category will be reset.

If you wish to reset all investment categories, not just the ones on the current tab, select the **Defaults | Reset ALL investment types to BellSouth defaults** menu option.

Open Source

As you navigate the investment tables, the name of the development source for the selected row will be displayed. If you would like to view and/or modify the investment development, you may open the source by clicking the **Open Source** button. Depending on the element, the source may be the BellSouth Loop Model, the BellSouth Switched Network Calculator, or an Excel worksheet.

Reload Values From Source

At this time, updating the source does not automatically update the WORKING database. To apply any changes that you made, click the **Reload Values From Source** button. A list of all elements in the source will be displayed. All elements that are listed will be updated. If you do not wish to continue, click the **Cancel** button, otherwise click the **OK** button.

Depending on the source and the number of elements that are being reset, the amount of time required to perform the reset will vary. The status bar will keep you informed about what the Calculator is doing during this process.

000311

View / Edit Investments Screen (cont.)

Resetting Investment Worksheet To BellSouth Defaults

When you first open an Excel Investment Worksheet, the default worksheet is copied into the BLSTLRIC\TELRIC\INVSTMTS\USER*state* directory. The Calculator will continue to read the investment worksheet from this directory until you choose to delete it. To delete all the user copies of the investment worksheets, select the **Defaults | Reset Investments Worksheets to BellSouth defaults** menu option. All of the copies of investment worksheets will be deleted and any subsequent open of an investment worksheet will cause a fresh copy to be loaded.

Non-Recurring Labor Element Life and Disconnect Factors

The Non-Recurring Labor Element Life is element specific. On the Non-Recurring Labor tab you may have multiple Job Function entries for an element and the Life is specifed for each element. Because the Life is element specific, when you change the Life for one row, all rows for that element will be updated.

Because the Life plays a role in calculating the Disconnect factor for an element, any Life changes will cause the Disconnect factor for that element to be recalculated. In the event the Life specified is beyond the available range (ie. date is too far in the future), you will be presented with several options:

Reset Life To Its Original Value
The Life will be restored to its value before you made the change.

Accept Default Disconnect Factor of 1
The Disconnect Factor will be set to 1

Calculate Disconnect As Indicated Below
The Disconnect Factor will be recalculated based on the End-Point factor for the last month in the disconnect table. The calculation will be displayed so that you may preview what the factor will be.

000312

View Output Screen

To display the output files created by the Calculator, click the **View Output** button on the Cost Element Selection Screen. The Output Screen will be displayed, listing the available output files.

List Options

By default, the outputs from the most recent run will be listed. To display all available output files that you have created, click the **All available user outputs** button. To display the default BellSouth output files, click the **Default BellSouth outputs** button.

Selecting Files

To select a file, click on its entry in the list. The entry will be highlighted. For the Print and Delete options, but not the View option, you may select more than one file. To select multiple files hold down the Ctrl key when you click. To select a block of files, click the starting file, hold down the Shift key, and click the ending file. The entire range will be highlighted.

View File

You may view only one output file at a time. To view the selected file, click the **View File** button. Excel will be started and the file will be displayed. **Warning: Using Excel in this fashion requires significant resources. To reduce the risk of depleting Windows resources, please close down Excel after you have finished viewing the file.**

Print File(s)

To print one or more files you have selected, click the **Print File(s)** button. Before printing the files you may wish to change the setup of your printer. You may do so by selecting **Print Setup** from the File menu. After you click the **Print Files(s)** button, the selected files will be printed. **Warning: Unless you have a large amount of RAM, spooling a large number of files may fill up your spool and cause system problems. Therefore, exercise caution when printing multiple files at one time.**

Delete File(s)

You may delete the selected files by clicking the **Delete File(s)** button.

000313

Saving a Scenario

Once you have made changes to factors and/or investments, you may want to save these changes so that you may recall them for future use. Please note that only the current condition of the WORKING database is saved. This includes the factors, investments, and summary reports. **Due to the size of the output worksheet files, they will not be saved with the scenario. If you would like to save the output files, you may copy them from the BLSTLRIC\TELRIC\OUTPUT\USER*state* directory (where *state* is the state that you are running).**

To save the current contents of the WORKING database to a scenario file, select the **File | Save** menu option on the Cost Element Selection screen. The Save Scenario screen will be displayed.

The Calculator will automatically generate a name for the scenario. You may enter a **Title** (up to 50 characters) and a **Narrative** describing the scenario in more detail. While the **Title** is required, the **Narrative** is optional.

To save the scenario, click the save button.

To close the Save Scenario screen without saving the scenario, click the **Cancel** button.

000314

Opening A Saved Scenario

To open a saved scenario, select the **File** | **Open** menu option on the Cost Elements Selection screen. The Scenarios screen will be displayed.

At the top of the screen is a table of saved scenarios if you have any. The columns in the table are:

State - The state for which the scenario was created.
Number - A sequential number assigned by the Calculator.
Date / Time - The date and time that the scenario was saved.
Title - Up to 50 character title for the scenario. This title will be displayed on the Cost Element Selection screen when you open the scenario.

At the bottom of the screen is an input area labeled **Narrative**. This box contains any narrative that was entered when the scenario was saved.

Selecting a Scenario

You may select a scenario by clicking the corresponding row in the table. The record selection marker will move to that scenario. After a scenario is selected, there are several operations that you may perform:

Update Title and Narrative

To update the Title and Narrative fields, click on the field and type in your changes. In order for these fields to be updated, you must press <ENTER> or move up or down to another record (like Excel).

Open

When the **Open** button is clicked, the saved scenario will be copied to the WORKING database and the Scenario title on the Cost Element Selection Screen will be changed to the title of the scenario.

000315

Opening A Saved Scenario (cont.)

Delete

To delete the selected scenario, click the **Delete** button. You will be asked to confirm the deletion.

Help

Click the **Help** button to display help for the current screen.

Cancel

Click the **Cancel** button to close the Scenarios screen without opening a scenario.

000318

Exporting a Scenario

Once you have created a scenario, you may wish to transport that scenario to someone else's PC. The **File | Export** menu option on the **Cost Element Selection Screen** allows you to copy the currently loaded scenario or a saved scenario to a file that may be imported on another PC. For instructions on importing a scenario, refer to the section entitled **Importing A Scenario**.

When you select the **File | Export** menu option a popup menu is displayed allowing you to indicate whether you want to export the currently loaded scenario or a saved scenario.

Current Scenario

If you select **Current Scenario**, you will be prompted for an output file name. A file extension is not required because the file will be created with a default extension of **.exp**. If the specified file already exists you will be asked to confirm the overwrite of the existing file. You may choose to continue with the overwrite or cancel the export.

Saved Scenario

If you select Saved Scenario, the BellSouth TELRIC Calculator - Scenarios screen will be displayed. All scenarios that you have saved will be listed in a table. To select a scenario to be exported, click its entry in the table and then click the **Export** button. As in the Current Scenario procedure, you will be prompted to enter a file name.

Once you have created a scenario export file you may transport it to another PC for importing.

000317

Importing a Scenario

To import an exported scenario, select the **File | Open** menu option on the **Cost Element Selection Screen**. When the BellSouth TELRIC Calculator - Scenarios screen is displayed, click the **Open** button. You will be prompted for the exported scenario's file name. Specify the desired file name and click **OK** to continue with the import or **Cancel** to cancel the import. After clicking **OK**, the Import Scenario screen will be displayed. The TELRIC Calculator will generate a unique name for the scenario and ask you to specify a title and optionally a narrative that describes the new scenario.

Once you have typed a title for the new scenario, click **Import** to continue the import. You may cancel the import by clicking **Cancel**. Once the scenario is imported, it will be listed as an available saved scenario. You may now open it if you choose.

000318

Exiting the TELRIC Calculator

To exit the TELRIC Calculator, select the **File | Exit TELRIC Calculator** menu option.

000319

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 Jerry Hendrix, who being by me first duly sworn, deposed and said that:

He is appearing as a witness before the Kentucky Public Service Commission in Case No. 99-218 on behalf of BellSouth Telecommunications, Inc., and if present before the Commission and duly sworn, his testimony would be as set forth in the annexed testimony consisting of 53 pages and 9 exhibit (s).

Jerry Hendrix

SWORN TO AND
SUBSCRIBED BEFORE ME
this the 20th day
of October, 1999.

NOTARY PUBLIC

My Commission expires:

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

BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF JERRY HENDRIX

BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION

CASE NO. 99-218

OCTOBER 21, 1999

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

A. My name is Jerry Hendrix. I am employed by BellSouth Telecommunications, Inc. as Senior Director – Interconnection Services Revenue Management, Network and Carrier Services. 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 Morehouse College in Atlanta, Georgia, in 1975 with a Bachelor of Arts Degree. I began employment with Southern Bell in 1979 and have held various positions in the Network Distribution Department before joining the BellSouth Headquarters Regulatory organization in 1985. On January 1, 1996, my responsibilities moved to Interconnection Services Revenue Management, Network and Carrier Services in the Interconnection Customer Business Unit. In my position as Senior Director, I oversee the negotiation of interconnection agreements between BellSouth and Competitive Local Exchange Companies ("CLECs").

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony provides BellSouth's policy position on numerous issues raised by ICG Telecom Group, Inc. ("ICG") in its Petition for Arbitration filed with the Kentucky Public Service Commission ("Commission") on May 27, 1999. Specifically, I respond to the following issues raised by ICG in the following order: 4, 1 & 8, 3, 6, 7, 11, 5 and 19-26. I also address the ramifications of recent judicial and regulatory decisions as they specifically relate to ICG Issues 1 & 8, 3, 4, 6, and 7.

Q. PLEASE SUMMARIZE HOW RECENT COURT DECISIONS APPEAR TO 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.* ("*Iowa Utilities Bd.*") 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, as well as the January 25, 1999, decision by the United States Supreme Court, the status of the FCC's rules can be divided into 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 because the Eighth Circuit's 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 rates adopted by this Commission in Case No. 96-431, MCI Arbitration, and Case No. 96-482, AT&T Arbitration ("Arbitration Orders"), be used in this arbitration proceeding, in addition to prices supported by cost studies filed in this proceeding.

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 this Commission 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 regarding 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 elements 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 is issued. Based on the only documentation currently available regarding the FCC's decision on Rule 51.319, it appears that UNEs must be providing service to a BellSouth end-user at the time a CLEC requests the combination to be considered "currently combined." However, the criteria for determining whether UNEs are currently combined will not be known definitively until the FCC's 319 Order becomes effective.

This Commission presumably will have, and should have, a role in implementing the "necessary" and "impair" standards. However, this Commission's decisions should, as a practical matter, await the FCC's further definition of those standards. Furthermore, even if this Commission eventually is empowered to decide which elements must remain combined, the FCC has not issued a written order indicating exactly which elements are considered to be "currently combined."

Q. WHAT IS YOUR UNDERSTANDING OF BELLSOUTH'S REGULATORY OBLIGATIONS IN LIGHT OF THE RULINGS BY THE SUPREME COURT AND THE EIGHTH CIRCUIT COURT REGARDING NETWORK ELEMENT COMBINATIONS?

A. With respect to network element combinations, the Supreme Court's decision to vacate Rule 51.319 and its reinstatement of other rules directly impact the network elements BellSouth is required to provide. In accordance with Rule 51.315(a), BellSouth is obligated to provide UNEs 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 this Commission 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 this Commission simply require BellSouth to provide currently combined UNEs to the extent required by law. Only the FCC and courts can determine the applicable requirements. This Commission need not, nor should it, speculate on the outcome of these proceedings.

Q. PLEASE FURTHER DESCRIBE WHY THIS COMMISSION SHOULD WAIT ON ACTION BY THE FCC BEFORE SPECIFYING WHICH UNE COMBINATIONS MUST BE OFFERED.

A. 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 this Commission to mandate combinations of network elements unless and until it is clear what those elements are and what constitutes currently combined UNEs.

Issue 4: Should BellSouth be required to provide as a UNE "Enhanced Extended Link" Loops ("EELs")?

Q. WHAT IS AN EEL?

A. An EEL is a combination of at least two network elements: 1) a local channel from an end user's premises to the end office serving that end user's premises, and 2) dedicated interoffice transport from that end office to another serving wire center, as well as any multiplexing equipment that may be needed.

Q. WHAT IS BELLSOUTH'S POSITION ON PROVIDING EELs?

A. This Commission should not require BellSouth to provide EELs to ICG. There is no question that an EEL is not a single network element, but is a combination of loops and dedicated transport. Indications from the FCC's September 15, 1999, press release are that the FCC agrees with BellSouth on this point and that they did not include EELs on the list of UNEs. As ICG is apparently requesting this combination, BellSouth would be required to combine an end user's local loop with dedicated interoffice transport from that end user's end office to an ICG collocation space in another central office.

BellSouth is not obligated to combine elements that are not currently combined, and there is no reasonable way for this Commission to mandate the provision of currently combined network elements unless and until the FCC clearly states what those elements are and under what circumstances they are considered to be currently combined. When those rules become effective, BellSouth will comply with the FCC's rules.

Furthermore, to provide EELs as requested by ICG, BellSouth will have to physically combine the necessary elements. There is no facility currently in place that would connect a BellSouth customer to ICG's collocation space. If a customer is connected to ICG's collocation space, the customer is receiving service from ICG, not BellSouth. The facility requested by ICG must be created by BellSouth; it does not already exist. Although none of us has seen the FCC's definition, I cannot imagine that the situation ICG suggests could ever fit into any definition of "currently combined." Since BellSouth is not obligated to combine UNEs that are not already combined, ICG's request should be denied for that reason alone.

Going beyond its obligations under the Act, BellSouth has voluntarily committed to the FCC that, until Rule 51.319 is resolved and a minimum list of UNEs has been determined, it will continue to offer as a UNE any <u>individual</u> network element currently offered as a UNE, under the condition that the network elements offered may change once the FCC issues its final order on Rule 51.319. This offer does not extend to the provisioning of combinations of elements. Granting ICG's request to require BellSouth to provide this combination would seriously undermine private line and special access revenues, which support basic services for Kentucky's rural residents; it would eliminate resale as a viable option under the Act; and it is inconsistent with the

Act's intention to promote new investment.

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.

Until the FCC issues its final order on Rule 51.319, ICG has several options open to it to serve its end users. ICG can 1) resell BellSouth's retail private line service at the Commission-approved discount rate; 2) enter into an agreement with BellSouth that is not subject to the Act through which BellSouth will combine these elements for ICG; 3) ICG can combine these elements itself through a collocation arrangement; or 4) ICG can adopt another CLEC's agreement and operate under its provisions until the FCC rules on this issue.

Issues 1 & 8: Until the FCC adopts a rule with prospective application, should dial-up calls to Internet service providers ("ISPs") be treated as if they were local calls for purposes of reciprocal compensation?

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 THIS COMMISSION TO ADDRESS THIS ISSUE AT THIS TIME?

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 this Commission to establishing an interim compensation arrangement for ISP-bound traffic may not be the best use of resources.

Q. SHOULD THIS COMMISSION ARBITRATE THIS ISSUE?

A. No. BellSouth recommends this Commssion deny the relief requested by ICG as to this issue. Compensation for ISP-bound traffic is not subject to a Section 252 arbitration. Reciprocal compensation in the Act, as interpreted by the FCC, is limited to "local traffic." As the *Declaratory Ruling* makes clear, traffic to ISPs is not local but is 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* <u>*local*</u> *telecommunications traffic. We conclude in this Declaratory Ruling, however,* <u>*that ISP-bound traffic is non-local interstate traffic. Thus, the reciprocal compensation requirements*</u> *of 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* <u>*do not govern inter-carrier compensation for this traffic*</u>*. As discussed,* <u>*supra*</u>*, 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.* (emphases added)

Thus, it is not subsumed in the Act's reciprocal compensation obligations and should not be arbitrated. Although the *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 ICG HAS RAISED COMPARE TO THE ISP ISSUES ALREADY BEING ADDRESSED BY THIS COMMISSION IN OTHER PROCEEDINGS?

A. In the Complaint of e.spire Communications, Inc., ALEC, Inc. and Hyperion Telecommunications of Louisville, Inc., Case No. 98-212, currently in process, the Commission is dealing with interpretation of language in existing interconnection agreements. The issue at hand today deals with a new interconnection agreement; therefore, any other rulings on language interpretation are irrelevant to this case. 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.

Q. HAVE OTHER STATES IN BELLSOUTH'S REGION RULED ON THE ISSUE OF RECIPROCAL COMPENSATION, ON A GOING-FORWARD BASIS, SINCE THE *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" (see Exhibit JH-1). The

Louisiana Public Service Commission voted on October 13, 1999, in KMC Petition to Enforce the Reciprocal Compensation Provisions of the Parties' Interconnection Agreement, Docket U-23839, that BellSouth is not obligated to pay reciprocal compensation on ISP-bound traffic. In the ICG arbitration case in Alabama, Docket No. 27069, the Alabama Panel Recommendation states that BellSouth should be required to pay reciprocal compensation on ISP traffic; however, the Panel Recommendation is not a decision of the Alabama Public Service Commission. The Alabama Commission will consider the proposed order on November 1, 1999.

Q. YOU HAVE STATED THAT IT IS NOT APPROPRIATE FOR THE COMMISSION TO ADDRESS ISP-BOUND TRAFFIC IN THE CONTEXT OF SECTION 251 OF THE ACT. WHAT DOES BELLSOUTH RECOMMEND THE COMMISSION DO WITH RESPECT TO THE ISSUE OF RECIPROCAL COMPENSATION FOR ISP-BOUND TRAFFIC?

A. It is not necessary for this Commission to take any action during the interim period since compensation for ISP-bound traffic is not an obligation under Section 251 and any state commission's decision on this issue is, at best, effective only until the FCC's plan becomes effective. Although action by this Commission pending the FCC's ruling is not necessary, if this Commission wishes to address the issue of inter-carrier compensation for ISP-bound 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) This Commission could direct the parties to create a mechanism to track ISP-bound calls originating on each parties' respective network 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 this Commission, 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) This Commission 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 JH-2). 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 JH-3 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 local exchange carrier ("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 and 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 inter-exchange carrier ("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. 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 JH-3:

(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 8.06% 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 8.06% 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 JH-4 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 relationship of switching and transport costs to total costs (switching, transport and loop), and then dividing that result by two because each carrier bears a portion of the switching and transport cost. In order to determine the relationship, BellSouth looked to the Benchmark Cost Proxy Model ("BCPM") results filed in Kentucky in the Universal Service Fund proceedings. The average, state-wide voice grade loop, switching and transport capital costs produced by BCPM are $24.04, $4.40 and $.22, respectively. Therefore, the loop capital cost represents 83.88% of the total average state-wide capital cost which means that the switching and transport capital costs represent 16.12% of the total capital cost. Again, dividing the 16.12% by two in order to account for the fact that both carriers incur switching and transport costs results in a sharing percentage of 8.06%.

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 Kentucky, total loop investment was $1,547,025,000, switching investment was $303,946,000 and transport investment was $47,127,000. Therefore, switching and transport investment divided by the total investment and then divided again by two in order to account for the fact that both carriers incur switching and transport costs results in a sharing percentage of 9.2% (($303,946,000 + 47,127,000) ÷ $1,898,098,000 ÷ 2).

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 (8.06%) to compensate the CLEC as it proposes for billing the CLEC.

Q. WHAT IMPACT WOULD BELLSOUTH'S PROPOSAL HAVE ON A CLEC SUCH AS ICG?

A. As an example, I will assume that ICG serves its ISP customers with PRI service which is equivalent to a DS1 (24 DS0s). Further, I will assume that ICG 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 ICG, then the amount of monthly compensation that BellSouth's proposal would result in ICG owing to BellSouth is calculated as follows:

55,000,000 / 9000 / 24 = 254.63 DS1s

254.63 DS1s x $850.00 x .0806 = $17,444.70

At a PRI rate of $850, ICG will collect $216,436 in revenue from its ISP customer(s) just for the traffic originated by BellSouth. Total compensation ICG owes to BellSouth for the 55,000,000 MOUs BellSouth originated to ICG would be $17,444.70.

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. 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 THIS COMMISSION USE BILL-AND-KEEP AS AN INTERIM MECHANISM?

A. Yes. 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 8.06% 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-BOUND 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 any 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 the same paragraph, the FCC finds that "[a]s the Commission [FCC] stated in *BellSouth MemoryCall,* this Commission [FCC] 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 JH-5 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 ICG'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."

(Emphases 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 IXC or an ISP purchases access service, it is the IXC or the ISP, not the end user, who is the customer of the 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 JH-6 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 JH-7 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 ICG REQUESTS THAT IT BE COMPENSATED FOR ISP-BOUND TRAFFIC.

A. Exhibit JH-8 to my testimony consists of a Diagram G which illustrates ICG's request that BellSouth pay reciprocal compensation for ISP-bound traffic where the ISP is ICG's customer. It is obvious from this diagram that ICG 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 ICG reciprocal compensation for ISP-bound traffic would result in BellSouth's end user customers subsidizing ICG'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. ICG 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 JH-7) and Diagram G (on Exhibit JH-8) 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 ICG 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 Commission 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. ICG CLAIMS THAT IT CANNOT RECOVER ITS COSTS OF HANDLING ISP-BOUND TRAFFIC WITHOUT RECIPROCAL COMPENSATION. DO YOU AGREE?

A. No. If ICG truly believes it is unable to recover its cost of providing service to ISPs, ICG could have submitted cost studies to the Commission proving its case. However, ICG has not done so. The reason is simple; ICG does not incur costs for ISP-bound traffic on a per minute of use basis. ICG bills its ISP customers on a flat-rated basis and recovers its costs in that manner. ICG would be unable to demonstrate per minute of use costs that it is unable to recover. Further, ICG 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 example of this distortion.

	SERVING AN ISP AND RECEIVING RECIPROCAL	***SERVING AN ISP WITHOUT RECEIVING***

	COMPENSATION	*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 ICG does.

Issue 3: Should BellSouth be required to make available as UNEs packet-switching

capabilities, including but not limited to: (a) user-to-network interface ("UNI") at 56 kbps, 64 kbps, 128kbps, 256 kbps, 384 kbps, 1.544 Mbps, 44.736 Mbps; (b) network-to-network interface ("NNI") at 56 kbps, 64 kbps, 1.544 Mbps, 44.736 Mbps; and (c) data link control identifiers ("DLCIs"), at committed information rates ("CIRs") of 0 kbps, 8 kbps, 9.6 kbps, 16 kbps, 19.2 kbps, 28 kbps, 32 kbps, 56 kbps, 64 kbps, 128 kbps, 192 kbps, 256 kbps, 320 kbps, 384 kbps, 448 kbps, 512 kbps, 576 kbps, 640 kbps, 704 kbps, 768 kbps, 832 kbps, 896 kbps, 960 kbps, 1.024 Mbps, 1.088 Mbps, 1.152 Mbps, 1.216 Mbps, 1.280 Mbps, 1.344 Mbps, 1.408 Mbps, 1.472 Mbps, 1.536 Mbps, 1.544 Mbps, 3.088 Mbps, 4.632 Mbps, 6.176 Mbps, 7.720 Mbps, 9.264 Mbps, 10.808 Mbps, 12.350 Mbps, 13.896 Mbps, 15.440 Mbps, 16.984 Mbps, 18.528 Mbps, 20.072 Mbps?

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

A. It is BellSouth's understanding that ICG is requesting that BellSouth unbundle its existing tariffed Packet Switching Frame Relay Service. Preliminary indications from the FCC's September 15, 1999, press release indicate that such advanced services will not be subject to unbundling. However, pending the FCC's ruling, BellSouth has agreed to provide unbundled Packet Switching Frame Relay Service. BellSouth witness Ms. Daonne Caldwell is sponsoring studies for the functions as they are found in BellSouth's tariff. One Frame Relay rate element, Data Link Connection Identifier ("DLCI") is offered in BellSouth's tariff at varying Committed Information Rates ("CIRs"). BellSouth studied this functionality in "groupings" of CIRs that mirror its tariff offering. BellSouth's costs and proposed rates applicable during this interim period for unbundled packet switching capabilities are found on Exhibit JH-9 attached to my testimony.

Q. PLEASE EXPLAIN BELLSOUTH'S PROPOSAL FOR SETTING RATES FOR THE ELEMENTS DISCUSSED IN THIS AND OTHER ISSUES IN THIS PROCEEDING.

A. Where ICG is requesting capabilities for which no rates have been established, BellSouth is filing cost studies that are consistent with the Total Element Long Run Incremental Cost ("TELRIC") methodology advocated by this Commission in its Arbitration Orders. Ms. Caldwell presents and supports those cost studies, and BellSouth's proposed rates for these capabilities are found on my Exhibit JH-9.

Q. ARE BELLSOUTH'S COST STUDIES GENERALLY CONSISTENT WITH THE FCC'S PRICING METHODOLOGY?

A. Yes. FCC Rule 51.505 defines the FCC's cost methodology for UNEs. BellSouth's TELRIC studies used to support prices for capabilities in this proceeding are generally consistent with those methods. Per the FCC's rules, such costs must be developed using an efficient network configuration, which uses the existing location of the incumbent LEC'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.

In addition to Rule 51.505, there are several other rules that describe the rate structure requirements that the FCC applies to UNEs. With the exception of Rule 51.507(f), BellSouth has proposed prices for these interim capabilities that are consistent with the FCC's rate structure requirements.

Q. DOES BELLSOUTH AGREE THAT INTERCONNECTION AND UNE PRICES SHOULD BE REQUIRED TO BE SET EQUAL TO TELRIC?

A. No. BellSouth does not agree that interconnection and UNE prices should be required to be set equal to TELRIC. There are a number of reasons why such a requirement should <u>not</u> be established. In fact, various challenges to the FCC's pricing rules have been raised and are currently under review by the Eighth Circuit. However, during this interim period, the FCC's rules are in effect, therefore, BellSouth is proposing prices in accordance with the FCC's rules for network elements requested by ICG in this proceeding.

Q. WHAT IS BELLSOUTH PROPOSING WITH REGARD TO GEOGRAPHIC DEAVERAGING?

A. FCC Rule 51.507(f) requires that each state commission establish at least three geographic rate zones for UNEs and interconnection that reflect cost differences. On May 7, 1999, the FCC released an order in CC Docket No. 96-98 issuing a stay of Rule 51.507(f). The stay will remain in effect until six months after the FCC issues its order in CC Docket No. 96-45 finalizing and ordering implementation of high-cost universal service support for non-rural local exchange carriers. Therefore, Rule 51.507(f) should not be applied to the unbundled network capabilities that BellSouth would offer at this time.

Issue 6: Should volume and term discounts be available for UNEs?

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

A. BellSouth should not be required to provide volume and term discounts for UNEs. Neither the Act nor any FCC order or rule requires volume and term discount pricing. The UNE recurring rates that ICG will pay are cost-based in accordance with the requirements of Section 252(d) and are derived using least-cost, forward looking technology consistent with the FCC's rules. Furthermore, BellSouth's nonrecurring rates already reflect any economies involved when multiple UNEs are ordered and provisioned at the same time.

Issue 7: For purposes of reciprocal compensation, should ICG be compensated for end office, tandem, and transport elements of termination where ICG's switch services a geographic area comparable to the area served by BellSouth's tandem switch?

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

A. BellSouth's position is that carriers should be compensated only for those functions they actually perform. If a call is not handled by a switch on a tandem basis, it is not appropriate to pay reciprocal compensation for the tandem switching function. A tandem switch connects one trunk to another trunk and is an intermediate switch or connection between an originating telephone call location and the final destination of the call. An end office switch is connected to a telephone subscriber and allows the call to be originated or terminated. If ICG's switch is an end-office switch, then it is handling calls that originate from or terminate to customers served by that local switch, and thus ICG's switch is not providing a tandem function. ICG is seeking to be compensated for the cost of equipment it does not own and for functionality it does not provide. Therefore, the Commission should deny ICG's request for tandem switching compensation when tandem switching is not performed.

Q. PLEASE RESPOND TO ICG'S CONTENTION THAT ICG'S SWITCH SERVES A GEOGRAPHIC AREA COMPARABLE TO BELLSOUTH'S TANDEM.

A. Without additional information, it is not possible to determine whether ICG's switch would actually serve a geographic area comparable to BellSouth's tandem. Even if one were to assume that ICG's switch covers a geographic area similar to BellSouth's tandem, ICG's switch is not performing tandem functions which the FCC has indicated is one of the criteria that a CLEC's switch must meet to be eligible for tandem switching.

Q. PLEASE COMMENT ON ICG'S POSITION THAT ICG PROVIDES TRANSPORT BETWEEN ITS SWITCH AND ITS COLLOCATION SPACES.

A. Without specific information from ICG to the contrary, the equipment in ICG's collocation space is most likely nothing more than a Subscriber Loop Carrier ("SLC"). A SLC is part of loop technology and provides no "switching" functionality. Thus, ICG is only providing the termination function, which is not the same as transport from the ILEC tandem to end offices as ICG contends.

In paragraph 1039 of the FCC's First Report and Order, the FCC clearly defines transport:

> *We conclude that transport and termination should be treated as two distinct functions. We define 'transport' for purposes of section 251(b)(5), as the transmission of terminating traffic that is subject to section 251(b)(5) from the interconnection point between the two carriers to the terminating carrier's end office switch that directly serves the called party (or equivalent facility provided by the non-incumbent carrier).*

Further, in paragraph 1040 of the FCC's First Report and Order,

> *We define "termination" for purposes of section 251(b)(5), as the*

switching of traffic that is subject to section 251(b)(5) at the terminating carrier's end office switch (or equivalent facility) and delivery of that traffic from that switch to the called party's premises.

Additionally in that same paragraph, the FCC states:

As such, we conclude that we need to treat transport and termination as separate functions – each with its own cost.

Clearly, the FCC recognized that transport and termination charges should apply only if those functions are provided. Transport includes any flat-rated dedicated services, tandem switching function and "common" transport between the tandem switch and end office switch necessary to transport the call from the interconnection point to the end office. ICG's switch is not providing a common transport or tandem function, but is switching traffic through its end office for delivery of that traffic from that switch to the called party's premises.

Q. IS ICG'S POSITION CONSISTENT WITH WHAT THE FCC DETERMINED TO BE THE "ADDITIONAL COST" OF TERMINATING A CALL?

A. No. In paragraph 1057, the FCC clearly indicates what should be charged for terminating a call:

We find that, once a call has been delivered to the incumbent LEC end office serving the called party, the 'additional cost' to the LEC of terminating a call that originated on a competing carrier's network *primarily consists of the traffic-sensitive component of local switching. The network elements involved with the termination of traffic include the end-office switch and local loop. The costs of local loops and line ports associated with local switches do not vary in proportion to the number of calls terminated over these facilities. We conclude that such non-traffic sensitive costs should not be considered 'additional costs' when a LEC terminates a call that originated on the network of a competing carrier.*

Obviously, the FCC intends for the terminating LEC to recover its loop costs from the end user customer, not the originating LEC. ICG is clearly attempting to recover its loop costs from BellSouth by inappropriately classifying their end office switch as a tandem switch.

Issue 11: Should BellSouth be required to commit to provisioning the requisite network buildout and necessary support when ICG agrees to a binding forecast of its traffic requirements in a specified period?

Q. SHOULD THIS COMMISSION ORDER BELLSOUTH TO COMPLY WITH THIS ISSUE AS ICG HAS STATED IT?

A. No. BellSouth is not required by the Act to commit to a binding forecast with CLECs. While the specifics of such an arrangement have not been finalized, BellSouth is agreeable to continue to negotiate with ICG to meet their forecasting needs.

BellSouth is currently analyzing the possibility of providing a service whereby BellSouth commits to provisioning the necessary network buildout and support when a CLEC agrees to enter into a binding forecast of its traffic requirements. While BellSouth has not yet completed the analysis needed to determine if this is a feasible offering, as I noted, BellSouth is willing to discuss the specifics of such an arrangement with ICG.

Issue 5: Should BellSouth be subject to liquidated damages for failing to meet the time intervals for provisioning UNEs specified in Attachment 2 on UNEs?

Issue 19: Should BellSouth be required to pay liquidated damages when BellSouth fails to install, provision, or maintain any service in accordance with the due dates set forth in an interconnection agreement between the Parties?

Issue 20: Should BellSouth continue to be responsible for any cumulative failure in a one-month period to install, provision, or maintain any service in accordance with the due dates specified in the interconnection agreement with ICG?

Issue 21: Should BellSouth be required to pay liquidated damages when BellSouth's service fails to meet the requirements imposed by the interconnection agreement with ICG (or the service is interrupted causing loss of continuity or functionality)?

Issue 22: Should BellSouth continue to be responsible when the duration of

service's failure exceeds certain benchmarks?

Issue 23: Should BellSouth be required to pay liquidated damages when BellSouth's service fails to meet the grade of service requirements imposed by the interconnection agreement with ICG?

Issue 24: Should BellSouth continue to be responsible when the duration of service's failure to meet the grade of service requirements exceeds certain benchmarks?

Issue 25: Should BellSouth be required to pay liquidated damages when BellSouth's fails to provide any data in accordance with the specifications of the interconnection agreement with ICG?

Issue 26: Should BellSouth continue to be responsible when the duration of its failure to provide the requisite data exceeds certain benchmarks?

Q. ARE LIQUIDATED DAMAGES APPROPRIATE AS AN ISSUE FOR ARBITRATION?

A. No. First, penalties are not appropriate as an issue for arbitration, nor as a contractual remedy, and should not be imposed by this Commission. Penalties are neither a requirement of Section 251 of the Act nor of the FCC's rules. The FCC expressed a preference for self-executing enforcement mechanisms only as a public interest concern under the statutory standard of review for assessing an application under Section 271. At most, penalties are an issue under Section 271, not a requirement of Section 251. Thus, they are not appropriate for arbitration.

Q. WHAT IS BELLSOUTH'S POSITION REGARDING INCORPORATION OF PERFORMANCE PENALTIES INTO INTERCONNECTION AGREEMENTS?

A. 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 Service Quality Measurements ("SQMs") that BellSouth has proposed are fully enforceable through the Commission's complaint process in the event of BellSouth's failure to meet such measurements.

Q. WHAT IS BELLSOUTH'S POSITION REGARDING ICG'S REQUEST FOR BELLSOUTH TO BE RESPONSIBLE FOR SERVICE FAILURES THAT EXCEED CERTAIN BENCHMARKS?

A. BellSouth believes that the only remedies appropriate for inclusion in an interconnection agreement are those to which the parties mutually agree. BellSouth is currently working with the FCC to finalize BellSouth's proposal for self-effectuating enforcement measures. This is a voluntary proposal made by BellSouth which would take effect on a state-by-state basis concurrent with approval for BellSouth to enter into long distance in each state and subject to acceptance by the FCC. This proposal should not, however, be interpreted in any way as BellSouth's admission that this Commission or the FCC has the authority to impose self-executing penalties or liquidated damages without BellSouth's agreement.

Q. HAS THIS COMMISSION PREVIOUSLY ADDRESSED THE ISSUE OF PERFORMANCE PENALTIES?

A. Yes. Specifically, in the AT&T Arbitration Order, this Commission declined to require liability provisions in the Interconnection Agreement. This Commission should find again that liability provisions, or performance penalties, should not be required to be included in an interconnection agreement.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 1999-259-C - ORDER NO. 1999-690

OCTOBER 4, 1999

IN RE: Petition of ITC^DeltaCom Communications, Inc. for Arbitration with BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996.	))))	ORDER ON ARBITRATION

I. INTRODUCTION

This arbitration proceeding is pending before the South Carolina Public Service Commission ("Commission") pursuant to Section 252 (b) of the Telecommunications Act of 1996 ("1996 Act"). This proceeding arose after ITC^DeltaCom Communications, Inc. ("ITC^DeltaCom") and BellSouth Telecommunications, Inc. ("BellSouth") were unable to reach agreement on all issues despite the good faith negotiations conducted over an extended period of time. On June 11, 1999, ITC^DeltaCom filed a Petition for Arbitration with BellSouth in South Carolina. BellSouth filed its Response to ITC^DeltaCom's Petition on July 6, 1999. The Petition and Response included a list of some seventy-three (73) issues to be decided by this Commission.

The Hearing of this Arbitration was held on September 8 – 9, 1999, with the Honorable Philip T. Bradley, Chairman, presiding. Prior to the evidentiary hearing, the parties were able to resolve approximately forty (40) of the disputed issues that were originally listed in the Petition. Thus, this Commission will only address in this Order the remaining disputed issues as of the date of the Hearing. At the evidentiary hearing, ITC^DeltaCom was represented by Mitchell Willoughby, Esquire; B. Craig Collins, Esquire; David I. Adelman, Esquire; and Nanette S. Edwards, Esquire. ITC^DeltaCom offered the testimony of Christopher J. Rozycki; Stephen D. Moses[1]; Michael Thomas; Michael Starkey and Don J. Wood. BellSouth was represented by Caroline N. Watson, Esquire; William F. Austin, Esquire; Lisa Foshee, Esquire; and Thomas B. Alexander, Esquire. BellSouth offered the testimony of Alphonso J. Varner; Dr. William Taylor; D. Daonne Caldwell; David L. Thierry; David D. Scollard; Ronald M. Pate and W. Keith Milner.

The purpose of this Arbitration proceeding is the resolution by the Commission of the remaining disputed issues set forth in the Petition and Response. 47 U.S.C.§ 252(b)(4)(C). Under the 1996 Act, the Commission shall ensure that its arbitration decision meets the requirements of Section 251 and any valid Federal Communications Commission ("FCC") regulations pursuant to Section 252; shall establish rates according to the provisions of Section 252(d) for interconnection, services, and network elements; and shall provide a schedule for implementation of the terms and conditions by the parties to the Agreement. 47 U.S.C. § 252(c).

II. Procedural Motions

A. BellSouth's Motion to Strike.

At the beginning of the Hearing the Commission heard oral arguments from counsel for BellSouth and counsel for ITC^DeltaCom regarding BellSouth's Motion to Strike and Exclude Certain Testimony of ITC^DeltaCom. (Tr. Vol. 1 at 10-46).

[1] ITC^DeltaCom prefiled the testimony of Thomas Hyde; however, due to personal reasons, Mr. Hyde did

Specifically, through its Motion, BellSouth sought to strike certain portions of the prefiled direct and rebuttal testimony of ITC^DeltaCom witnesses, Thomas Hyde (whose testimony was adopted by Stephen D. Moses) and Don Wood, and to exclude any related live testimony at the Hearing. Principally, the Motion to Strike and Exclude was directed at testimony by Mr. Hyde (Moses) and Mr. Wood that attempted to put in evidence information regarding BellSouth's recurring and nonrecurring costs as to certain unbundled network elements ("UNEs") and the expansion of Issue No. 5 from one (1) issue stated in ITC^DeltaCom's Petition to four (4) separate issues. At the conclusion of oral argument, the Commission announced that it would take BellSouth's Motion to Strike and Exclude under advisement and rule on it in the Commission's Final Order. (Tr. Vol. 1 of p. 46). Upon review, the Commission finds now that BellSouth's Motion to Strike and Exclude should be denied.

With regard to the portion of BellSouth's Motion to Strike that seeks to have portions of rebuttal testimony of ITC^DeltaCom's witnesses Wood and Hyde excluded, BellSouth asserts that it is not appropriate for ITC^DeltaCom, through this two-party arbitration, to attempt to re-litigate UNE cost issues that this Commission decided in an open generic proceeding regarding BellSouth's costs to provision UNEs in South Carolina (*See* Order, June 1, 1998, Docket No. 97-374-C, *Proceeding to Review BellSouth Telecommunications, Inc.'s Cost Studies for Unbundled Network Elements).* Further, BellSouth asserts that portions of the testimony are based on evidence that is not in the record of the instant proceeding. ITC^DeltaCom argues that the law with regard to

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not appear and was replaced at the Hearing by Mr. Stephen D. Moses, also an employee of ITC^DeltaCom.

UNE rates has changed since the Commission's approved UNE rates for BellSouth and that the rates are not compliant with FCC Rules. ITC^DeltaCom states that it propounded discovery to BellSouth, to which BellSouth properly responded, and that the discovery led to information upon which the ITC^DeltaCom witness based his opinion. Therefore, ITC^DeltaCom contends that it may properly challenge and present evidence of FCC compliant rates within the context of this Arbitration proceeding.

Upon consideration of the Motion to Strike, the Commission is cognizant that it has broad discretionary powers in admitting or excluding evidence much like that of a trial court. *See Hoeffer v. The Citadel,* 311 S.C. 361, 429 S.E.2d 190 (1993), rehearing denied. Further, the Commission is aware that the South Carolina Rules of Evidence allow for an expert to rely on information which is not admissible into evidence to form his or her expert opinion. See, Rule 703, SCRE. The Commission concludes that the Motion to Strike relating to witness Wood's rebuttal testimony and witness Hyde's rebuttal testimony should be denied and that the testimony should be admitted. In admitting the evidence, the Commission is not concurring with ITC^DeltaCom's assertion that the UNE rates are properly challenged in this Arbitration proceeding. The Commission is merely admitting evidence which the Commission may, or may not, consider in its deliberations and give that evidence whatever weight or credibility the Commission deems appropriate.

BellSouth also contends that it is not appropriate for ITC^DeltaCom to attempt to add new issues to this Arbitration proceeding by expanding Issue No. 5 from one (1) issue in the Petition to four (4) separate issues. ITC^DeltaCom asserts that it expressly incorporated a proposed interconnection agreement and summary issues matrix into its Petition for Arbitration which was filed on June 11, 1999. Additionally, ITC^DeltaCom states that the binding forecast issue was addressed in the prefiled testimony of BellSouth witness Varner.

The Commission concludes that BellSouth's Motion to Strike as regarding Issue 5 should be denied. The Commission recognizes that the issue of binding forecast, as stated in the restated Issue 5 proposed by ITC^DeltaCom, was addressed by BellSouth in its prefiled testimony. Further, the subtopics identified in Issue 5 as stated by ITC^DeltaCom are set out in the Exhibit B which was attached to the Petition and incorporated by reference; Exhibit B provided a summary of the issues on which the parties had not reached agreement. *See* Petition for Arbitration of ITC^DeltaCom, p. 3, ¶ 7 and Exhibit B to Petition. Inasmuch as BellSouth filed testimony on the restated issue, including the issue of binding forecast, the Commission can find no prejudice to BellSouth. As no prejudice has been demonstrated, the Commission denies BellSouth's Motion to Strike with regard to Issue 5.

B. ITC^DeltaCom's Objection to Introduction of BellSouth's Service Quality Measurements.

During the Hearing, the Commission requested both parties to review and compare the other party's performance measurements and to report back with the results. BellSouth prepared a written analysis comparing the two sets of measurements. ITC^DeltaCom did not do so. In order to make the comparison document meaningful, BellSouth also presented the Commission with a copy of BellSouth's most recent version of its performance measurements, which it calls, Service Quality Measurements ("SQMs"). Counsel for BellSouth requested that both documents be admitted into evidence in this proceeding. ITC^DeltaCom objected to admission of the SQMs. The Commission marked the documents for identification only and stated that it would rule on their admissibility in the Final Order. The Commission now overrules ITC^DeltaCom's objection and allows the exhibits to be admitted into the evidence of record in this proceeding as Hearing Exhibit No. 17. The Commission has wide latitude in accepting evidence at proceedings such as this one, akin to that of a trial court. *See Hoeffer v. The Citadel, supra.* The Commission requested both parties to provide comparisons of the other's performance measurements. BellSouth was the only party to do so. The Commission finds BellSouth's comparison document extremely helpful. Moreover, the Commission finds that it is both necessary and useful to have BellSouth's actual Service Quality Measurements in the record to determine an unresolved issue in this proceeding.

III. DISCUSSION OF ISSUES FOR ARBITRATION.

Based upon a careful consideration of the entire record in this Arbitration proceeding, the Commission makes the following determinations and decisions regarding the issues presented in this arbitration proceeding:

<u>Issue 1(a)</u>

Should BellSouth be required to comply with 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?

ITC^DeltaCom Position:

Yes. BellSouth should be required to provide performance measures and three-tiered performance guarantees as proposed by witness Rozycki and incorporated into contract language in Attachment 10 to Exhibit A to the Petition. Section 251(c)(3) of the Act requires nondiscriminatory unbundled access to all UNEs including OSS. See First Report and Order of the FCC (OSS is UNE) CC Docket 96-98, ¶ 525. Thus it is also a requirement of Section 271 of the Act. BellSouth itself proposed self-executing performance guarantees. See BellSouth's Ex Parte Proposal to the FCC for Self Effectuating Measures, April 3, 1999.

BellSouth Position:

BellSouth disagrees that the so called "performance measures" and performance "guarantees" in Attachment 10 to the Petition are appropriate. The South Carolina Commission has previously declined to establish additional performance and service measurements in an arbitration proceeding, having found that: "[t]his Commission already has service measurements in place. BellSouth must provide the same quality of services to AT&T that it provides to its own customers…. " (*See* Order No. 97-189, at 5-6, March 10, 1997, Docket No. 96-358-C, *AT&T/BellSouth Arbitration*). BellSouth has offered a comprehensive set of performance measurements (Service Quality Measurements or "SQMs") which ensure that BellSouth provides ITC^DeltaCom and all other CLECs with nondiscriminatory access as required by the 1996 Act and applicable rules of the Federal Communications Commission ("FCC"). BellSouth also is willing to provide ITC^DeltaCom any additional performance measurements that the Commission may order BellSouth to provide to other CLECs in this state.

With respect to performance "guarantees", BellSouth does not believe that financial incentives, "guarantees", penalties or liquidated damages are appropriate matters for arbitration under the 1996 Act. ITC^DeltaCom's proposal is not required by the 1996 Act and represents a supplemental enforcement scheme that is inappropriate and unnecessary. ITC^DeltaCom has adequate legal recourse in the event BellSouth breaches its interconnection agreement. Moreover, the South Carolina Commission has previously determined that it "lacks the jurisdiction or legislatively-granted authority to impose penalties or fines" in the context of a similar arbitration proceeding. (See Order No. 97-189, at 6, March 10, 1997, Docket 96-358-C, AT&T/BellSouth Arbitration).

Discussion:

The Commission has been presented with two (2) sets of performance measurements by which BellSouth's provision of services to competitive local exchange carriers ("CLECs"), such as ITC^DeltaCom, may be measured. On the one hand, ITC^DeltaCom witness Mr. Rozycki offered a set of performance measures and performance guarantees which may be found as Attachment 10 to Exhibit A of ITC^DeltaCom's Petition. Mr. Rozycki testified that these were very similar to a set of performance measures/performance guarantees that had been used by CLECs and the incumbent local exchange carrier ("ILEC") in Texas. (Rozycki, Tr. Vol. 1 at 69). Mr. Rozycki testified that the performance guarantee aspect of the performance measurements that ITC^DeltaCom was supporting included a three-tiered system of financial consequences if BellSouth were not to meet certain levels of performance under the forty-five (45) different measurements proposed by ITC^DeltaCom. For example, a failure under the second tier constitutes a "specified performance breach" and would require BellSouth to compensate ITC^DeltaCom $25,000 for each measurement BellSouth failed to meet. A failure to perform under the third tier constitutes a "breach-of-contract" which would require BellSouth to pay penalties in the amount of $100,000 for each default for each day the breach or default continues. (Rozycki, Tr. Vol. 1 at 68 - 71). At the Hearing, Mr. Rozycki changed positions and offered to have any such penalties made payable to the State of South Carolina rather than individually to ITC^DeltaCom. (Tr. Vol. 1 at 119 and 691).

On the other hand, BellSouth offered its own detailed set of performance measurements developed over the last two years by working with various state commissions and CLECs. (Tr. Vol. 1 at 727). BellSouth witness Mr. Varner testified that BellSouth is taking very seriously the FCC's request for "clear and precise" measurements by which CLECs and regulators can confirm nondiscriminatory provisioning of network facilities and services. (Ameritech-Michigan Order 12 FCC Rcd. at 20655-56, ¶ 209. Mr. Varner testified that BellSouth's Service Quality Measurements ("SQMs") covered nine (9) separate categories of measurements: (1) Pre-Ordering OSS; (2) Ordering; (3) Provisioning; (4) Maintenance & Repair; (5) Billing; (6) Operator Services (Toll) and Directory Assistance; (7) E911; (8) Trunk Group Performance; and (9) Collocation. (Varner, Tr. Vol. 1 at 405 - 406 and Hearing Ex. 17 at 1 (Table of Contents)). BellSouth's Service Quality Measurements, which comprise some 69 pages of details regarding how these nine (9) categories are measured, is part of Hearing Exhibit No. 17.

Also, a part of Hearing Exhibit No. 17 is BellSouth's Matrix which compares ITC^DeltaCom's proposed performance measurements to BellSouth's Service Quality Measurements. Mr. Varner stressed that by using BellSouth's detailed set of measurements, along with the raw data provided, ITC^DeltaCom and the Commission can monitor BellSouth's performance and verify that services are being provided at parity with BellSouth and with other CLECs. Rather than attempting to negotiate different performance measurements in the various individual interconnection agreements for each CLEC doing business in BellSouth's region, as ITC^DeltaCom is attempting to do through its own version of performance measurements taken from another state outside BellSouth's region, BellSouth states that it is committed to delivering BellSouth's Service Quality Measurements equally to all CLECs, including ITC^DeltaCom. (Varner, Tr. Vol. 1 at 405 - 407). Significantly, BellSouth's SQMs have been approved by several state Commissions and have been incorporated into numerous interconnection agreements with other CLECs in BellSouth's region. (Tr. Vol. 1 at 726-727).

Mr Varner also testified that the so-called performance "guarantees" are nothing more than penalties or liquidated damages. As such, they are not an appropriate matter to be determined through arbitration. (Varner Tr. Vol. 1 at 407 - 408) None of the requirements found in Section 251 of the 1996 Act involves a duty for the parties to agree on a set of financial performance guarantees or liquidated damages-type provisions. The 1996 Act does not specifically require an arbitrated agreement to satisfy any conditions regarding performance guarantees, penalties or liquidated damages. BellSouth noted that state law and state and federal commission procedures are available, and perfectly adequate, to address any performance or breach of contract situation should it arise. For example, BellSouth's SQMs are fully enforceable through commission complaints in the event of BellSouth's failure to meet such measurements.

Dr. William Taylor, on behalf of BellSouth, testified that performance measures "based on penalties or liquidated damages are completely unnecessary and inappropriate. Apart from the fact that legal and other remedies are already available, ITC^DeltaCom's proposed performance guarantee system suffers from an important incentive problem known in economics as *moral hazard.*" (Dr. Taylor, Tr. Vol. 1 at 548). (emphasis in original). As Dr. Taylor explained, moral hazard is a form of gaming by which one party to a contract may resort to actions – within the contract – that create unanticipated competitive or financial advantage for that party *at the expense of the other party* to the contract. (Dr. Taylor, Tr. Vol. 1 at 548 – 549). Dr. Taylor's testimony on this point may explain Mr. Rozycki's change in positions --- the penalties are now proposed to be paid to the State rather than ITC^DeltaCom. Even with this change of position, the problem of "moral hazard" still exists.

Finally, Mr. Varner testified that BellSouth is currently working with the FCC to decide on a BellSouth voluntary proposal for self-effectuating enforcement measures. These measurements would take effect on a state-by-state basis concurrent with approval for BellSouth to enter the long distance market (i.e. obtain Section 271 interLATA relief). (Varner, Tr. Vol. 1 at 407).

Upon consideration of this issue, the positions of the parties, and the evidence from the hearing, the Commission concludes that a generic docket should be opened to investigate and rule on proper performance measures to be imposed on BellSouth and potentially other ILECs. As illustrated by the performance measures admitted in this proceeding and by the positions of the parties, the Commission recognizes that the issue of performance measures has far-reaching implications in the telecommunications industry, especially relating to competition under the 1996 Act.

In the interim, the Commission finds that BellSouth's Service Quality Measurements (as contained in Hearing Exhibit No. 17) are appropriate and should be adopted as performance measures for the parties to use until the Commission can conclude a generic proceeding on performance measures. In deciding to use the BellSouth SQMs, the Commission notes that BellSouth's SQMs have undergone two years of review and formulation by the FCC and several state commissions and input from various CLECs. As such, the Commission recognizes that these performance measurements are in place and ready to be implemented within the context of this agreement until this Commission can conclude its generic proceeding.

With regard to the performance guarantees, the Commission expressly rejects imposing any sort of "performance guarantee" or penalty provision associated with performance measurements. The Commission finds that neither the 1996 Act nor state law allows the Commission to impose penalties or fines in this arbitration. Additionally, this Commission has previously determined in the context of a proceeding resolving disputed issues for an arbitrated agreement under the 1996 Act that it lacks the jurisdiction or legislatively-granted authority to impose penalties or fines in the context of an arbitrated agreement. (*See* Order No. 97-189, at 6, March 10, 1997 in Docket No. 96-358-C (*AT&T/BellSouth Arbitration*).

The Commission also notes, with respect to ITC^DeltaCom's witness Mr. Rozycki's statements concerning so-called "anti-back sliding measures" that this matter is more appropriate for consideration under the public interest standard under Section 271 of the 1996 Act than an arbitration for an interconnection agreement. The Commission further notes that BellSouth is currently working voluntarily with the FCC to develop such measures.

Ordering Paragraph:

By this Order, the Commission directs that a generic docket be established to investigate and rule on proper performance measures to be followed by BellSouth and potentially other ILECs operating in South Carolina. In the interim until a generic docket can be concluded, the Commission directs the parties to utilize the BellSouth Service

Quality Measurements as a part of the parties' interconnection agreement for South Carolina. The Commission rejects imposing any sort of "performance guarantee" or penalty provision associated with performance 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?

ITC^DeltaCom Position:
Yes. If BellSouth's assigned due date is missed as a result of BellSouth's error, BellSouth should waive the non-recurring charges. BellSouth seems to have agreed with this position in a brief submitted in Tennessee. Other guarantees are needed to assure the due date is not missed repeatedly. This applies to all UNEs. This issue is covered by witness Rozycki in his direct testimony pages 6 through 9.

BellSouth Position:
A contract requirement obligating BellSouth to waive nonrecurring charges when it misses a due date would constitute a penalty or liquidated damages provision which is inappropriate for arbitration under the 1996 Act (nothing in Section 251 or 252 requires penalties or liquidated damages to be either agreed upon or arbitrated). (Also See BellSouth's position on Issue 1(a)). The only remedies that should be included in an interconnection agreement between BellSouth and ITC^DeltaCom are those mutually agreed upon by the parties. BellSouth has voluntarily agreed to the waiver of nonrecurring charges when it misses the due date for the conversion (cut-over) of UNE loops. Thus, this issue is not appropriate for arbitration. (Exhibit "A" attached to this Issues Matrix contains BellSouth's proposed contract language on this issue).

Discussion:

The specific question presented by this issue is whether in cases where BellSouth misses a due date (*e.g.* fails to cut over a customer on the scheduled date for such a cut over) should BellSouth be allowed to impose nonrecurring charges for such a missed appointment and should BellSouth be permitted to impose charges when it finally meets the deadline. ITC^DeltaCom asserts that BellSouth offers similar performance guarantees to its customers in its tariffs and also argues that without performance guarantees, BellSouth has both economic and competitive incentives to miss scheduled due dates. (Rozycki, Tr. Vol. 1 at 97) Mr. Rozycki testified that ITC^DeltaCom incurs costs for each scheduled event and further that the ITC^DeltaCom customer often incurs cost when the customer has scheduled a vendor or technician to be on site during a scheduled event. (Rozycki, Tr. Vol. 1 at 97) Mr. Rozycki contends that BellSouth has taken conflicting positions on this issue when it voluntarily offered to the FCC, in its self-effectuating enforcement measures document, to waive certain charges, but takes the position here that a mandatory waiver of nonrecurring charges, such as here for a missed due date, constitutes a penalty. (Rozycki, Tr. Vol. 1 at 98) BellSouth witness Mr. Varner testified that a requirement obligating BellSouth to waive nonrecurring charges when it misses a due date would be a penalty or liquidated damages provision. (Varner, Tr. Vol. 1 at 408) Mr. Varner also offered that this Commission has no authority to award the relief sought by ITC^DeltaCom and further offered that ITC^DeltaCom has adequate remedies available before the commission, the FCC, and the courts to address any breach of contract situation. (Varner, Tr. Vol. 1 at 407)

Upon consideration of this issue, the positions of the parties, and the evidence from the hearing, the Commission concludes that BellSouth should waive the non-recurring charges if BellSouth's assigned due date is missed as a result of BellSouth's error. This required waiver is on an interim basis until the Commission concludes a generic proceeding on performance measures. The Commission finds that this required waiver of the nonrecurring charges is not a penalty but is compensation for costs incurred when a due date is missed. Further, the Commission finds that this required waiver of nonrecurring charges provision is consistent with similar provisions contained in BellSouth's tariffs approved by this Commission. In the generic proceeding on performance measures, the Commission will entertain proposals on "performance guarantees," penalties, and liquidated damages provisions. Therefore, this provision will be subject to the Commission's ruling in the generic proceeding on performance measures established herein.

Ordering Paragraph:

The Commission directs the parties to include a provision in the interconnection agreement that BellSouth should waive the non-recurring charges if BellSouth's assigned due date is missed as a result of BellSouth's error. This provision will be in effect on an interim basis until the Commission concludes its generic proceeding on performance measures, including proposals on "performance guarantees," penalties, and liquidated damages provisions, and issues a ruling.

Issue 2 and 2(a)(iv)

(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 and
(4) An unbundled loop using Integrated Digital Loop Carrier ("IDLC") technology.

ITC^DeltaCom Position:

(a) Where BellSouth provides service to ITC^DeltaCom at least equal-in-quality to that provided to BellSouth or any BellSouth subsidiary. See Section 3.1 and 3.2 of ITC^DeltaCom's Proposed Interconnection Agreement.

(b)(1) Yes. At no charge pursuant to the testimony of witness Wood or, if so, at FCC compliant TELRIC rates spread equally over all end-user consumers pursuant to the testimony of witness Rozycki.

(b)(2) Yes. At FCC compliant TELRIC rates. The *Iowa Utilities Board* case upholds the FCC's Rules regarding the appropriate prices of UNEs under Section 252(d). This issue is discussed by witness Wood at pages 21 and 22.

(b)(3) Yes. At FCC compliant TELRIC rates. (*Id.*)

(b)(4) Yes. At FCC compliant TELRIC rates. (*Id.*)

BellSouth Position:

(a) BellSouth offers services to ITC^DeltaCom at parity. BellSouth has offered to include language in the interconnection agreement which defines parity as the provision of UNEs and resold services in a manner that gives an efficient CLEC a meaningful opportunity to compete. This definition is consistent with the 1996 Act and the FCC's rules regarding parity of service (47 C.F.R. §51.311 (UNEs) and 47 C.F.R. §51.603 (Resale).

(b)(1) BellSouth provides CLECs with nondiscriminatory access to its OSS through electronic and manual interfaces. (See BellSouth's position on Issue 6(a) and 6(b) for discussion of rates).

(b)(2) BellSouth provides CLECs with nondiscriminatory access to UNEs pursuant to 47 U.S.C. §251(c)(3) and 47 C.F.R. §51.311. (See BellSouth's position on Issue 6(b) for discussion of rates).

(b)(3) BellSouth is fulfilling its duties under 47 U.S.C. § 251(b)(2) and (b)(3) with respect to providing number portability and dialing parity. BellSouth should not be required to provide access to numbering resources since BellSouth has not been the North American Numbering Plan Administrator ("NANPA") since 8-14-98.

(b)(4) BellSouth provides access to all of its loops on an unbundled basis including those loops served by IDLC equipment. BellSouth will provide ITC^DeltaCom with loops that meet ITC^DeltaCom's specific transmission requirements at the appropriate rates. (See BellSouth's position on Issue 6(b) for discussion of rates).

Discussion:

Because this issue has multiple sub-parts, the Commission will address each item in order.

(a): ITC^DeltaCom contends that parity is at the heart of the Telecommunications Act because it is vital to the survival of companies like ITC^DeltaCom. (Rozycki, Tr. Vol. 1 at 71). Mr. Rozycki testified that ITC^DeltaCom wants specific contract language in the parties' Interconnection Agreement to make clear the parties' obligations under the law. (Rozycki, Tr. Vol. 1 at 103). Mr. Rozycki references the FCC's First Report and Order released on August 8, 1996, at ¶312, indicating that ITC^DeltaCom must receive nondiscriminatory access that is "at least equal-in-quality to that which the incumbent LEC provides to itself". (Rozycki, Tr. Vol. 1 at 104 -- 105). BellSouth acknowledges that it is obligated by the 1996 Act to provide ITC^DeltaCom, and any other CLEC, with nondiscriminatory access to UNEs including its operations support systems ("OSS"). Mr. Varner testified that BellSouth complies with its obligations under the Act and the FCC's Orders and provides services to CLECs in a nondiscriminatory manner. (Varner, Tr. Vol. 1 at 408 – 409). The question remaining for the Commission is what definition of parity should be used in the parties' interconnection agreement. According to BellSouth witness Varner, ITC^DeltaCom, relying on the "at least equal-in-quality" language from the FCC's First Report and Order, has proposed language which would require BellSouth to provide access that is "equal to or greater than that which BellSouth provides to its own end-users". (Varner, Tr. Vol. 1 at 410) (emphasis added). BellSouth does not agree to such language and states that the language proposed by ITC^DeltaCom goes beyond the parity requirements of the 1996 Act and the FCC's orders. BellSouth's position is that the Commission should reject ITC^DeltaCom's request to have this Commission impose a totally unnecessary additional requirement on BellSouth that is different from the expressed language of the Act or the FCC's rules. BellSouth has acknowledged that it must provide nondiscriminatory access to UNEs, including BellSouth's OSS, in a manner that will provide a reasonable competitor with a meaningful opportunity to compete. (*See* 47 C.F.R. Section 51.311) (UNEs) and (47 C. F. R. Section 51.603) (Resale).

Upon consideration of this issue, the positions of the parties, and the evidence of record, the Commission finds that the definition of parity as proposed by BellSouth should be used in the interconnection agreement. The definition proposed by BellSouth is consistent with the FCC's rules which require the provision of UNEs and Resale services in a manner that gives an efficient CLEC a meaningful opportunity to compete. The Commission finds that ITC^DeltaCom's proposed definition of parity goes beyond the requirements of the 1996 Act and, therefore, is not acceptable.

Ordering Paragraph:

The Commission directs the parties to include in the interconnection agreement the definition of parity as proposed by BellSouth since this definition comports with the FCC's rules which require the provision of UNEs and Resale services in a manner that gives an efficient CLEC a meaningful opportunity to compete.

(b)(1) & (2) Access to OSS and UNEs: ITC^DeltaCom contends that BellSouth should be required to provide access to its Operations Support Systems ("OSS") at parity, meaning at least equal-in-quality, to that which BellSouth provides to itself, but that BellSouth currently is not doing so for a variety of reasons. Mr. Rozycki testified that (1) BellSouth's OSS currently does not work; (2) ITC^DeltaCom did not request a separate system to be constructed for it and thus should not have to pay for it; (3) ITC^DeltaCom should not be required to pay for any system or interface that it does not use; and (4) that the prices that BellSouth is seeking to charge for its OSS are unacceptable and have no competitive analogy. (Rozycki, Tr. Vol. at 72 - 74). BellSouth witness, Mr. Ronald Pate, testified that BellSouth is indeed providing nondiscriminatory access to its operations support systems and provided details as to the various nondiscriminatory electronic interfaces BellSouth provides to its OSS for CLECs. (Pate, Tr. Vol. 1 at 607). Mr. Pate testified that 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, provides a reasonable competitor with a meaningful opportunity to compete. BellSouth's OSS is in compliance with the 1996 Act and the FCC's rules. (Pate, Tr. Vol. 1 at 607 – 608). Rates for OSS shall continue as established by Order No. 98-214 (June 1, 1998) in Docket No. 97-374-C; the issue of rates is more fully discussed and decided as part of Issue 6(a).

Upon consideration of this issue, the positions of the parties, and the evidence of record, the 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. The 1996 Act requires BellSouth to provide access to OSS; it does not specify the type of access or direct that the access must be as requested by a CLEC. The Commission finds that BellSouth's interfaces allow for nondiscriminatory access should a CLEC desire to access BellSouth's OSS.

With regard to rates for OSS, the Commission finds that its previously issued Cost Orders in Docket No. 97-374-C are controlling. The Commission finds that its previously approved UNE rates should apply to the new interconnection agreement. This arbitration proceeding is not the proper forum for challenging UNE rates previously established in Docket No. 97-374-C.

Ordering Paragraph:

As the Commission finds that BellSouth is providing nondiscriminatory access to its Operations Support Systems ("OSS") through a variety of electronic and manual interfaces which have been designed specifically for CLECs, the Commission does not require the parties to include any additional access to BellSouth's OSS in the parties' interconnection agreement. The interconnection agreement shall incorporate rates for OSS as established by Order No. 98-214 (June 1, 1998) in Docket No. 97-374-C.

(b)(3): ITC^DeltaCom contends that it needs access to numbering resources. BellSouth contends that it should not be required to provide any additional access to numbering resources to ITC^DeltaCom because BellSouth is no longer the North American Numbering Plan Administrator ("NANPA"). BellSouth witness, Mr. Keith Milner, testified that the transition of responsibility from BellSouth to the new NANPA, Lockheed-Martin, took place over a year ago, on August 14, 1998. (Milner, Tr. Vol. 1 at 657).

Upon consideration of this issue, the positions of the parties, and the evidence of record, the Commission finds that BellSouth is not required to provide any further access to numbering resources as ITC^DeltaCom requests since BellSouth is no longer the North American Numbering Plan Administrator. The Commission finds that BellSouth is only required to fulfill its duties under Section 251(b)(2) and (b)(3) under the 1996 Act with respect to providing number portability and dialing parity.

Ordering Paragraph:

BellSouth is not required to provide additional access to numbering resources provided by the North American Numbering Plan Administrator ("NANPA").

(b)(4): ITC^DeltaCom contends that BellSouth should provide it with an unbundled loop using Integrated Digital Loop Carrier ("IDLC") technology. ITC^DeltaCom witness, Mr. Stephen Moses, testified as to a number of reasons that he believes BellSouth should be required to provide IDLC loops rather than long copper loops or loops using the Universal Digital Loop Carrier ("UDLC") technology. (Moses, Tr. Vol. 1 at 127 - 130). In general, Mr. Moses contends that BellSouth does not make IDLC loops available, but instead provides the UNE loop on different (non-IDLC) facilities. (Moses, Tr. Vol. 1 at 138).

BellSouth's witness, Mr. Keith Milner, testified that BellSouth provides access to all of its loops on an unbundled basis, including those loops that are served by IDLC technology, by any means that are technically feasible. Mr. Milner further testified, however, that IDLC equipment allows the "integration" of loop facilities with switch facilities by eliminating equipment in the central office referred to as Central Office Terminals ("COTs"). Mr. Milner further explained that if a CLEC wants to serve an end-user customer over the CLEC's own switch and that end-user customer was previously served by BellSouth over IDLC equipment, then the loop can no longer be integrated with the BellSouth switch. Mr. Milner also further explained that to the extent that

ITC^DeltaCom contends that IDLC loops are somehow engineered to provide a better level of service than non-IDLC loops that this is simply an incorrect assumption. BellSouth designs its network to meet particular transmission parameters for particular grades of services. (Milner, Tr. Vol. 1 at 658 - 659). Mr. Milner further testified that the real issue between the parties is whether ITC^DeltaCom has requested specific transmission parameters for a given unbundled loop and whether BellSouth has agreed to provide such an arrangement. The bona fide request ("BFR") process is available to ITC^DeltaCom to request specific transmission parameters for any UNE loops that it may desire to order. Mr. Milner testified that he is unaware of any such BFR having been issued by ITC^DeltaCom; however, should ITC^DeltaCom do so, Mr. Milner testified that BellSouth will investigate the technical feasibility of ITC^DeltaCom's request and, if technically feasible, BellSouth will comply with it. (Milner, Tr. Vol. 1 at 659 - 662).

Upon consideration of this issue, the positions of the parties, and the evidence of record, the Commission finds BellSouth is providing nondiscriminatory access to all of its loops on an unbundled basis, including loops served by integrated digital loop carrier ("IDLC") technology by any means that is technically feasible. The Commission finds that BellSouth provides access to all of its loops on an unbundled basis, including those loops served by IDLC technology. Further, the Commission finds that ITC^DeltaCom may and should utilize the bona fide request ("BFR") process to request specific transmission parameters for any UNE loops that it wants to order. The record establishes after receipt of a BFR that BellSouth will investigate the technical feasibility of the request and, if technically feasible, will comply with the request.

With regard to rates for unbundled loops, the Commission finds that its previously issued Cost Orders in Docket No. 97-374-C are controlling. The Commission finds that its previously approved UNE rates should apply to the new interconnection agreement. This arbitration proceeding is not the proper forum for challenging UNE rates previously established in Docket No. 97-374-C.

Ordering Paragraph:

As the Commission finds that BellSouth is providing nondiscriminatory access to its unbundled loops, including loops served by IDLC technology, the Commission does not require the parties to include any additional access to unbundled loops. The interconnection agreement shall incorporate rates for unbundled loops as established by Order No. 98-214 (June 1, 1998) in Docket No. 97-374-C.

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

ITC^DeltaCom Position:
[Question 2]: Yes. This is required by Section 251(c)(3) of the Act and supported by the First Report and Order, §525. This issue is close to resolution and will be incorporated into the interconnection agreement. However, BellSouth must provide the rates, terms and conditions for the RSAG download. BellSouth should recover costs associated with this requirement only one time. The cost issue may remain outstanding.

BellSouth Position:
[Question 2]: BellSouth currently makes the Regional Street Address Guide ("RSAG") available on a real time basis electronically through the Local Exchange Navigation System ("LENS") and the TAG pre-ordering interfaces. This access includes updates to RSAG. Thus, BellSouth is providing nondiscriminatory access to its OSS in a manner

that allows ITC^DeltaCom and other CLECs to access the RSAG, even though ITC^DeltaCom may prefer a different method of access. Appropriate cost based rates should apply for the initial and subsequent downloads of this data.

Discussion:

ITC^DeltaCom has requested that BellSouth provide it with an electronic download of the Regional Street Address Guide ("RSAG") database, which contains address and facility availability information. ITC^DeltaCom witness, Mr. Michael Thomas, contends that ITC^DeltaCom needs this information to incorporate it into ITC^DeltaCom's "back office systems" to check the validity of the customer's address, just as BellSouth's systems use the RSAG database to check BellSouth's orders. (Thomas, Tr. Vol. 1 at 189 - 190). Mr. Don Wood, on behalf of ITC^DeltaCom, testified that ITC^DeltaCom should receive the RSAG download on a daily basis at no charge. (Wood, Tr. Vol. 1 at 338). BellSouth witness, Mr. Ronald Pate, testified that BellSouth's electronic interfaces provide CLECs with access to BellSouth's OSS for the required functions and informational databases, including the RSAG database, in substantially the same time and manner that BellSouth provides to its retail service representatives (Pate, Tr. Vol. 1 at 617). BellSouth is therefore in compliance with the 1996 Act and the FCC's rules. Mr. Pate further testified that, although it is not required to provide a download of the RSAG, BellSouth has made a proposal to ITC^DeltaCom to provide such a download at rates and conditions to be negotiated. Regardless, Mr. Pate testified that BellSouth currently provides to all CLECs, including ITC^DeltaCom, nondiscriminatory access to the RSAG database on a real time basis through the Local Exchange Navigation System ("LENS") and the Telecommunications Access Gateway ("TAG") pre-ordering interfaces. Because the RSAG database is updated nightly, CLECs have real-time access by means of these electronic interfaces to an up-to-date database. Mr. Pate testified that if ITC^DeltaCom were to integrate the pre-ordering functionality of the TAG interface with the Electronic Data Interexchange ("EDI") ordering interface, it would eliminate the need to re-key or re-enter certain information obtained during pre-ordering from the customer service record ("CSR") and/or the RSAG database into the EDI or TAG ordering interface. (Pate, Tr. Vol. 1 at 620). At the Hearing, Mr. Thomas, on behalf of ITC^DeltaCom, testified that ITC^DeltaCom plans to implement TAG in the near future. (Tr. Vol. 1 at 230 and Tr. Vol. 2 at 69 - 70).

Upon consideration of this issue, the positions of the parties, and the evidence of record, the Commission finds that BellSouth currently makes available nondiscriminatory access to the Regional Street Address Guide ("RSAG") database on a real-time basis, electronically through the Local Exchange Navigation System ("LENS") and the Telecommunications Access Gateway ("TAG") pre-ordering interfaces. The Commission finds that this access is reasonable and nondiscriminatory under the 1996 Act.

Ordering Paragraph:

As the Commission 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 of this arbitration) with BellSouth toward that end.

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

ITC^DeltaCom Position:

Yes. ITC^DeltaCom must be given the opportunity to make adjustments for changes to BellSouth's rules and guidelines. See Section 251(c)(3) of the Act. Because such guidelines are developed by BellSouth, by definition BellSouth will have adequate notice. 45 days is adequate notice. BellSouth should e-mail changes to ITC^DeltaCom. In an emergency, less notice would be acceptable.

BellSouth Position:

BellSouth posts changes to its business rules on the BellSouth Interconnection Web Page which provides fair and reasonable notice to all CLECs, including ITC^DeltaCom. BellSouth uses its best efforts to provide thirty (30) days advance notice of any such changes, which strikes a reasonable balance between BellSouth's need for flexibility to modify its processes and the CLECs' need to have advance notice of such modifications. Individual notices to ITC^DeltaCom or other CLECs (whether by e-mail, facsimile transmission or U.S. Mail) would be an additional administrative expense and would have the potential for discriminatory treatment to occur in the event some, but not all, CLECs received such individual notice or if receipt of the notice varied in time.

Discussion:

ITC^DeltaCom witness, Mr. Michael Thomas, testified that ITC^DeltaCom needs at least 45 days advanced notice, by e-mail or other electronic means, of changes to BellSouth's business rules for CLECs that will affect its systems and business rules. Mr. Thomas testified that this advanced time is necessary in order to receive training or to make the necessary changes to ITC^DeltaCom's systems. Mr. Thomas acknowledged that BellSouth provides carrier notifications on its website on a weekly basis. (Thomas, Tr. Vol. 1 at 192 - 193).

BellSouth witness, Mr. Alphonso Varner, testified that BellSouth agrees that it should provide advanced notice of changes to its business rules and ordering guidelines, but there should not be a requirement that such notice be given in a specified number of days in advance. Today, BellSouth posts changes to its business rules and ordering guidelines regarding resale and UNEs on an easily accessible Internet website. As a general rule, BellSouth makes a good faith effort to post all OSS-related notifications at lease thirty (30) days prior to the implementation of the change or rule. Mr. Varner noted, however, that there may be circumstances in which the thirty-day timeframe is simply not possible. Mr. Varner testified that the current process is both appropriate and practical because it strikes a proper balance between BellSouth's flexibility to modify its processes and the CLECs need to have advanced notice of such modifications. (Varner, Tr. Vol. [illegible] at 411 - 412). Providing individual notices to ITC^DeltaCom or to other CLECs would be an additional administrative expense. Additionally, this method of notice could potentially cause discriminatory treatment if some, but not all, CLECs receive such individual notices or if receipt of such notices varied in time between CLECs.

Upon consideration of this issue, the positions of the parties, and the evidence of record, the Commission finds BellSouth's good faith effort to provide 30 days notice is a good starting point for the notice requirement. The 45 day advance notice requested by ITC^DeltaCom strikes the Commission as too lengthy a time frame. The Commission concludes that 30 days notice strikes a reasonable balance between BellSouth's need for flexibility to modify its processes and systems and the CLECs need to have advanced notice of such modifications. With regard to the manner of notification, the Commission agrees with BellSouth's concern that requiring individual notices would invite complaints of discriminatory treatment. Additionally, the Commission does not believe that the benefit of individual notices would be justified in terms of administrative expenses. Therefore, the Commission finds that BellSouth's method of notification of changes to business rules or ordering guidelines is reasonable and appropriate and should be continued without modification.

Ordering Paragraph:

The Commission finds that BellSouth should provide at least thirty (30) days advance notice of any changes to its business rules or ordering guidelines and directs the parties to include language in the interconnection agreement to this effect.

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 ITC^DeltaCom under the interconnection agreement previously approved?

ITC^DeltaCom Position:

Yes. The current agreement was approved under Section 252 by the authority as compliant with the Act. It remains compliant and should continue until the SCPSC orders otherwise with regard to pricing UNE combinations. ITC^DeltaCom's access should continue as previously approved. All interconnection agreements should be filed with the SCPSC under Section 252 of the Act. Section 252(c)(1) requires approval of "any" interconnection agreement.

BellSouth Position:

BellSouth will continue to comply with its obligations under the 1996 Act and applicable FCC rules. BellSouth also will continue to provide any individual UNE currently offered until the FCC completes its Rule 51.319 proceedings consistent with the U.S. Supreme Court's decision in the *Iowa Utilities Board* case. The 1996 Act does not require BellSouth to combine elements for CLECs, and the FCC's rules (47 C.F.R.

§§51.315(c) – (f)) which purported to impose such an obligation on incumbent LECs such as BellSouth were vacated. Thus, this issue is not appropriate for arbitration. BellSouth is, however, willing to negotiate a voluntary commercial agreement with ITC^DeltaCom to perform certain services or functions that are not subject to the requirements of the 1996 Act.

Discussion:

ITC^DeltaCom's position is that the Commission has the authority it needs to require the parties to maintain the status quo under its existing interconnection agreement with BellSouth until the FCC issues its final decision on UNEs and any UNE combinations. (Moses, Tr. Vol. 1 at 124 - 125). Mr. Wood, on behalf of ITC^DeltaCom, testified that BellSouth must provide combinations of UNEs to CLECs, including ITC^DeltaCom. (Wood, Tr. Vol. 1 at 365 - 369). BellSouth's position is that it will continue to comply with its obligations under the 1996 Act and applicable FCC rules.

Mr. Varner testified that BellSouth made a voluntary commitment to the FCC that until Rule 51.319 is resolved, BellSouth will continue to provide any individual UNE currently offered with the condition that the network elements offered may change once the FCC completes its proceeding and resolves Rule 51.319. (Varner, Tr. Vol. 1 at 414) To the extent that ITC^DeltaCom wants BellSouth to provide UNE combinations at the sum of the individual elements, BellSouth is not required to combine network elements on behalf of ITC^DeltaCom or other CLECs. The FCC's rules (51.315(c) through 51.315(f)) that attempted to impose a requirement on incumbent LECs to combine UNEs for CLECs were vacated by the United States Court of Appeals for the Eighth Circuit in the *Iowa Utilities Board* case and because no party challenged that ruling before the U.S. Supreme Court, those rules are not in effect today. Thus, because those rules are not in effect, BellSouth is not required to combine network elements on behalf of another carrier. (Varner, Tr. Vol. 1 at 415).

Finally, the Commission is aware that after the Hearing had been completed in this proceeding, the FCC, on September 15, 1999, issued a press release in the Rule 319 proceeding Although there is no written order yet, it is clear that there will be further work on this rule by the FCC.

Upon consideration of this issue, the positions of the parties, and the evidence of record, the Commission finds that BellSouth should continue to provide the individual UNEs it is currently offering until further issuance of orders or rulings from the FCC regarding UNEs. This position is supported by BellSouth's voluntary commitment to the FCC that it will continue to offer as a UNE any individual network element currently offered. Further with regard to combinations, the Commission finds that BellSouth should continue to provide to ITC^DeltaCom those combinations of UNEs currently being provided today at the rates provided in Order No. 98-214 (June 1, 1998) in Docket No. 97-374-C. However, no further combinations shall be required until further rulings and orders are issued from the FCC or the courts. The ruling on this issue does not apply to "extended loops" and "loop/port" combinations which are decided in a separate issue.

Ordering Paragraph:

The parties shall include language in the interconnection agreement that BellSouth will provide the individual UNEs it is currently offering until further issuance of orders or rulings from the FCC regarding UNEs. Further with regard to combinations, language shall be included in the interconnection agreement that BellSouth will continue to provide to ITC^DeltaCom those combinations of UNEs currently being provided today at the rates provided in Order No. 98-214 (June 1, 1998) in Docket No. 97-374-C but that no further combinations shall be required until further rulings and orders are issued from the FCC or the courts. The ruling on this issue does not apply to "extended loops" and "loop/port" combinations which are decided in a separate issue.

Issue 2(b)(iii)

(a) Should BellSouth be required to provide to ITC^DeltaCom extended loops and the loop/port combination?
(b) If so, at what rates?

ITC^DeltaCom Position:

(a) Yes. ITC^DeltaCom currently serves customers through extended loops provided by BellSouth. The Act as interpreted in *Iowa Utilities Board* requires BellSouth to provide a loop/port combination. Until the FCC indicates otherwise, all UNE combinations are available.

(b) Rates should be FCC compliant at TELRIC rates. See *First Report and Order*, CC No. Docket 96-98.

BellSouth Position:

(a) No. First, neither loops, ports, nor transport have been defined by the FCC as unbundled network elements that BellSouth must provide. Second, even if loops, ports, and transport are defined as UNEs, BellSouth is only obligated to provide combinations of those elements where they are currently combined in BellSouth's network. BellSouth is not obligated under the 1996 Act or the FCC's rules to combine network elements on behalf of CLECs such as ITC^DeltaCom. Thus, there is no requirement to provide an "extended loop" (e.g., UNE loop and UNE dedicated transport) or a "loop/port" (e.g., UNE loop and UNE switch port) combination. Further, there is no requirement for BellSouth to combine UNEs with tariffed services such as a loop combined with access transport (See also BellSouth's Position on Issue 2(b)(ii)).

(b) Because BellSouth is not required to combine network elements for CLECs under the 1996 Act, the issue of applicable rates for such network combinations is not properly the subject of arbitration. To the extent the Commission concludes otherwise or determines to establish rates for network elements that are currently combined in BellSouth's network, the Commission should do so in the context of a generic proceeding rather than an arbitration involving one CLEC. Thus, this issue is not appropriate for arbitration. (See also BellSouth's position on Issue 2(b)(ii)).

Discussion:

ITC^DeltaCom takes the position that its current interconnection agreement requires BellSouth to provide what ITC^DeltaCom calls a version of an "extended loop." Mr. Moses, on behalf of ITC^DeltaCom, testified that the current interconnection agreement at ¶ IV B14 requires the parties to attempt in good faith to mutually devise and implement a means to extend the unbundled loop sufficient to enable ITC^DeltaCom to use a collocation arrangement at one BellSouth location per LATA . . .." (Moses, Tr. Vol. 1 at 131 and Moses Tr. Vol. 1 at 159 - 160). Mr. Moses contends that this revision requires BellSouth to provide extended loops. Mr. Moses also testified that BellSouth has provided ITC^DeltaCom with more than 2,500 extended loops of which more than 1,000 are in South Carolina. (Moses, Tr. Vol. 1 at 160). Mr. Wood, on behalf of ITC^DeltaCom, testified that BellSouth is required to provide extended loops as well as a loop/port combination. Mr. Wood contends that, until the FCC indicates otherwise, all UNE combinations must be made available. (Wood, Tr. Vol. 1 at 366 - 369). Mr. Wood also contended that these UNE combinations were "often the only way to provide service to rural customers." (Wood, Tr. Vol. 2 at 106).

BellSouth's position is that although ITC^DeltaCom has requested an "extended loop," which is commonly known as a local loop combined with dedicated transport, there is no question that an extended loop constitutes a combination of a UNE local loop and a UNE dedicated transport. BellSouth is not required to combine individual UNEs such as the loop and dedicated transport under either the 1996 Act or any FCC rules in force today. Further, until the FCC issues its final, non-appealable, decision regarding

Rule 51.319 as to the list of UNEs that ILECs must make available to CLECs, this Commission should not attempt to impose such a requirement in the parties' interconnection agreement. Mr. Varner further testified that, with respect to ITC^DeltaCom's arguments about BellSouth having provided to ITC^DeltaCom a so-called extended loop consisting of a UNE loop combined with BellSouth's tariffed special access service, BellSouth did so by mistake and, more importantly, BellSouth has taken steps to correct it. Mr. Varner testified that the prior ITC^DeltaCom/BellSouth interconnection agreement, contrary to Mr. Moses' testimony, does not require the provision of such combinations. In fact, in order to bring these service arrangements into compliance, ITC^DeltaCom and BellSouth reached a mutual understanding whereby ITC^DeltaCom submitted over 50 additional collocation applications in May, 1999. As soon as these collocation arrangements are completed, BellSouth's provisioning of these service arrangements will be curtailed and these unique combinations will be converted. (Varner, Tr. Vol. 1 at 418 - 421).

According to Mr. Varner, there is no requirement in the 1996 Act or the FCC's rules for BellSouth to combine network elements on behalf of CLECs such as ITC^DeltaCom, nor is there any requirement for BellSouth to combine UNEs with tariffed services such as a loop combined with special access transport. BellSouth's position is that it is not required to provide loop/port combinations to ITC^DeltaCom and that such a requirement will be poor public policy, because the combination of the local loop and the switch port would replicate local exchange service and create an opportunity for price arbitrage. (Varner, Tr. Vol. 1 at 418). The FCC's rules 51.315(c) through

51.315(f), which required ILECs to combine UNEs for CLECs, remain vacated today. Although FCC rule 51.315(b) which prohibits ILECs from separating currently combined UNEs is still in effect, until the FCC finalizes its rule 51.319 proceeding, there is no required set of UNEs that must be available, either individually, or on a currently combined basis. Nonetheless, Mr. Varner testified that BellSouth has agreed, and indeed committed to the FCC, to continue offering every individual UNE currently offered until Rule 51.319 is resolved. (Varner, Tr. Vol. 1 at 418 - 420). Mr. Varner also testified that BellSouth had agreed to provision the existing "extended loop" arrangements until ITC^DeltaCom made collocation arrangements to replace the existing "extended loops." (Varner, Tr. 2 at 97)

With respect to ITC^DeltaCom"s contention that it needs UNE combinations to provide service to rural areas, first, there is no evidence that ITC^DeltaCom is making any serious attempt to serve rural customers today. Second, as Mr. Varner testified, "[r]esale is the way [that Congress set up as an alternative means to serve customers] for ... [ITC^DeltaCom] to go to the rural areas when they have a relatively few customers to use as a temporary measure until they build a market and decide to put in a switch or whatever other infrastructure they [want] to put in. ... Their inability to have [UNE] combinations doesn't preclude them from serving these small volume [i.e. rural] situations." (Varner, Tr. Vol. 2 at 239-240). Finally, the Commission is aware of the FCC's announcement, on September 15, 1999, regarding its decisions in the Rule 319 proceeding. Specifically, in its press release, the FCC indicated that it will initiate further proceedings on the question of the ability of carriers to use unbundled network elements as a substitute for the incumbent LEC's special access services. The FCC also issued a Further Notice of Proposed Rulemaking on this issue, and, therefore, this issue is still open.

Based upon this issue, the positions of the parties, and the evidence of record, the Commission finds that the FCC Rules presently in effect do not require BellSouth to provide combinations of unbundled network elements to ITC^DeltaCom in the form of the so called "extended loop" consisting of a UNE loop combined with UNE dedicated transport The "extended loop" which ITC^DeltaCom has in place consists of a UNE loop combined with BellSouth's tariffed special access transport service and was provided to ITC^DeltaCom in error under the prior interconnection agreement. However, as BellSouth admitted providing ITC^DeltaCom with numerous "extended loops" in error and as ITC^DeltaCom is presently serving customers over those "extended loops," the Commission finds that BellSouth should continue to provide the existing "extended loops" to ITC^DeltaCom at existing rates until ITC^DeltaCom can arrange to convert these "extended loops" to collocation arrangements. The Commission's decision is supported by BellSouth's agreement to continue to provision these existing "extended loop" arrangements until such time as ITC^DeltaCom obtains collocation arrangements. Further, the Commission concludes that no additional "extended loops," consisting of the UNE loop and UNE dedicated transport, should be required to be provided until further rulings of the FCC or the courts require such provision. Additionally, BellSouth is not required to provide ITC^DeltaCom with the loop/port combination of UNEs. Neither the 1996 Act nor the FCC's rules as presently in effect require incumbent LECs to combine network elements on behalf of CLECs such as ITC^DeltaCom. To the extent that the FCC resolves any of these issues in its Rule 319 proceeding, the Commission will revisit these issues upon the request by a party.

Ordering Paragraph:

BellSouth shall continue to provide ITC^DeltaCom with the existing "extended loops" at existing rates. However, BellSouth is not required to provide additional "extended loops" under the new interconnection agreement. Nor is BellSouth required to provide ITC^DeltaCom with the "loop/port" combination of UNEs under the new interconnection agreement.

Issue 2(c)(i)
Should BellSouth be required to provide NXX testing functionality to ITC^DeltaCom? If so, how and at what rate?

ITC^DeltaCom Position:

Yes. BellSouth has this ability to provide service to its own customers. Parity requires it to provide the service to ITC^DeltaCom. See Section 251(c)(3) of the Act. It should be provided at FCC compliant TELRIC Rates. Use of an FX is cost prohibitive and does not represent a methodology of parity with BellSouth. See testimony of witness Moses at 26.

BellSouth Position:

BellSouth is not required to provide NXX testing functionality to ITC^DeltaCom. Nonetheless, 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 (which involves the use of a foreign exchange ("FX" line). ITC^DeltaCom is unwilling to pay for the FX line to accomplish its testing.

Discussion:

ITC^DeltaCom's witness Moses described problems encountered by ITC^DeltaCom with BellSouth incorrectly loading NXX codes. (Moses, Tr. Vol. 2 at 12 –13) ITC^DeltaCom has requested a method which allows BellSouth to provide NXX testing capabilities to CLECs at a reasonable cost based price. ITC^DeltaCom's proposal is to order remote call forwarding at cost based rates, rather than tariffed rates. ITC^DeltaCom has tested this method by purchasing from the GSST (General Subscriber Service Tariff) at full retail price remote call forwarding for the sole purpose of testing NXX codes loaded by BellSouth. (Moses, Tr. Vol. 2 at 113 –115) ITC^DeltaCom recommends that BellSouth provide remote call forwarding functionality at the rate that BellSouth provided remote call forwarding for interim number portability which is $2.73 per month per call forward number. Additionally, ITC^DeltaCom requests that it be able to purchase the software function for Remote Call Forward with Remote Access without having to buy a business line as specified in the GSST. (Moses, Tr. Vol. 2 at 114 -115)

BellSouth's position is that it has met its obligations under the 1996 Act and the FCC's rules by offering the foreign exchange line option to ITC^DeltaCom. This is the same means by which BellSouth accomplishes NXX testing for its own purposes. Mr. Keith Milner, on behalf of BellSouth, testified that at least as early as May 1998, BellSouth advised ITC^DeltaCom that it could accomplish the desired NXX testing by installing a foreign exchange line to the BellSouth offices in which ITC^DeltaCom desired to conduct test calls. Mr. Milner testified that this suggestion was based on the fact that BellSouth itself utilizes FX lines to test its own switch provisioning. Mr. Milner testified that in May, 1998, BellSouth had implemented 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. (Milner, Tr. Vol. 1 at 666 - 668). Mr. Milner testified that, since it began its 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. (Milner, Tr. Vol. 1 at 668).

Upon consideration of the issue, the positions of the parties, and the record from the hearing, the Commission concludes that ITC^DeltaCom should be provided with NXX testing capabilities that are both economically and technically viable. BellSouth has testified that FX lines are the method by which BellSouth tests its own switch provisioning and has suggested this method to ITC^DeltaCom. ITC^DeltaCom has suggested that the FX line is not the most efficient available mechanism to test NXXs and certainly not the most economical either. ITC^DeltaCom has investigated using remote call forwarding by purchasing remote call forwarding from the GSST at full retail rates. The Commission concludes that BellSouth should provide ITC^DeltaCom with a free FX line for NXX functional testing until such time as BellSouth can provide ITC^DeltaCom with remote call forwarding at TELRIC rates by which ITC^DeltaCom can accomplish its NXX testing.

Ordering Paragraph:

The Commission directs BellSouth to provide ITC^DeltaCom with a free FX line for NXX functional testing until such time as remote call forwarding is available at TELRIC rates.

Issue 2(c)(ii)
What should be the installation interval for the following loop cutovers:
(a) Single
(b) Multiple

ITC^DeltaCom Position:

(a) Per the existing interconnection agreement, the standard time expected from disconnection of a live exchange service to the connection of the UNE to ITC^DeltaCom collocation arrangement is 15 minutes.

(b) Per the existing interconnection agreement, the standard time expected from disconnection of a live exchange service to the connection of the UNE to the ITC^DeltaCom collocation arrangement is 15 minutes.

BellSouth Position:

(a) BellSouth has proposed a loop cutover installation interval time of fifteen (15) minutes for a single circuit conversion.

(b) With respect to multiple loop cutovers or circuit conversions, BellSouth has proposed to use fifteen (15) minutes as the maximum interval time for one loop with multiple loop cutovers being accomplished in increments of time per loop or circuit conversion of less than fifteen (15) minutes. The loop cutover process is a multiple step process that requires a great deal of mutual cooperation and coordination between BellSouth and the CLEC. Thus, it is appropriate for different installation intervals to be established based upon the number of loops to be cutover to the CLEC.

Discussion:

ITC^DeltaCom contends that BellSouth is obligated to provide all loop conversions in an interval time of fifteen minutes. (Moses, Tr. Vol. 2 at 118). ITC^DeltaCom contends that the multiloop cutover should be done one loop at a time, with each loop taking less than 15 minutes. (Moses, Tr. Vol. 2 at 119). BellSouth witness Milner testified that the loop cutover process is a multi-step process that requires a great deal of mutual cooperation and coordination between BellSouth and the CLEC. Mr. Milner's testimony set forth the thirteen steps involved in a single loop cutover. According to BellSouth, fifteen minutes is the target time interval for a single loop cutover with multiple loop cutovers done in increments of 15 minutes. In other words, BellSouth will commit to intervals of sixty minutes for up to ten loops in a group and for 120 minutes for orders up to thirty loops. (Milner, Tr. Vol. 2 at 120). BellSouth also testified that it takes measures such as doing cutovers after hours to minimize customer disruption (Milner, Tr. Vol. 2 at 120).

BellSouth also pointed out that it is not in total control of the loop cutover process and, thus, not in total control of the time intervals. If a CLEC fails to perform a function in a timely fashion, the delay directly impacts the overall cutover time. (Milner, Tr. Vol. 2 at 121). Therefore, any measurement of average loop cutover times will reflect the efficiency and skill level of both BellSouth and the CLEC. Thus, while BellSouth endeavors to complete loop cutovers in as timely and efficient a manner as possible, BellSouth contends that it cannot be entirely responsible for meeting the stated interval given the heavy involvement of the CLEC in the process.

Upon consideration of this issue, the positions of the parties, and the evidence of record, the Commission finds that the loop cutover installation time for a single loop conversion should be 15 minutes. Both parties testified that 15 minutes was an appropriate time interval for a single loop conversion. With respect to multiple loop cutovers. the Commission finds BellSouth's proposed interval times of sixty minutes for up to ten loops in a group and of 120 minutes for orders up to thirty loops in a group reasonable and appropriate. These intervals for multiple cutovers recognize that efficiencies are gained through the provisioning of multiple loops. It is unreasonable to expect BellSouth to provision multiple loop cutovers in the same time interval as for a single loop cutover (i.e. 15 minutes). Moreover, the Commission recognizes the greater interval for multiple loop cutovers takes into consideration the fact that delays in the cutover process may arise from sources outside BellSouth's control. Further, the Commission encourages BellSouth to minimize customer outage time during loop cutovers.

Ordering Paragraph:

The parties shall include provisions in the interconnection agreement that require the loop cutover installation time for a single loop conversion to be completed within 15 minutes. Further for multiple cutovers, the interconnection agreement shall require interval times of sixty minutes for up to ten loops in a group and of 120 minutes for orders up to thirty loops in a group.

Issue 2(c)(iii)

Should SL1 orders without order coordination be specified by BellSouth with either an a.m. or p.m. designation? [NOTE: ITC^DeltaCom believes that this issue should be worded as follows: BellSouth has offered order coordination; should SL1 orders without order coordination be specified by BellSouth with an a.m. or p.m. designation?]

ITC^DeltaCom Position:

Yes. BellSouth has this ability for its own customers. Parity requires it do so for ITC^DeltaCom. ITC^DeltaCom must be at parity with BellSouth—not BellSouth's retail customers. See Section 251(c)(3) for fee parity requirements of the Act. *Also See First Report and Order,* cc Docket 96-98 at ¶ 525.

BellSouth Position:

BellSouth is willing to continue offering order coordination service with SL1 orders. BellSouth will agree to accept a customer's request for an A.M. or P.M. designation when access to the customer's premises is required. In those instances where access to the customer's premises is not required, or if access is required but the customer is indifferent as to the time of day, BellSouth should not be required to designate A.M. or P.M. installation. This process is comparable to the scheduling BellSouth offers to its retail customers, thus placing ITC^DeltaCom at parity with BellSouth. (Exhibit "A" attached to this Issues Matrix contains BellSouth's proposed contract language on this issue.)

Discussion:

ITC^DeltaCom wants every SL1 order without order coordination to have an A.M. or P.M. designation. (Moses, Tr. Vol. 2 at 124). ITC^DeltaCom contends the designation is necessary so that ITC^DeltaCom can schedule its technician. (Moses, Tr. Vol. 2 at 125). BellSouth testified that it understands ITC^DeltaCom's desire to make switching to ITC^DeltaCom service easy for its customers and, thus, is willing to accept a customer's request for an A.M. or P.M. designation in those cases in which access to the customer's premises is required and the customer expresses a preference as to A.M. or P.M. appointment. (Varner, Tr. Vol. 2 at 123). In instances in which access to the customer's premises is not required, or access is required but the customer is indifferent as to A.M. or P.M., BellSouth argues it should not be obligated to make an A.M. or P.M. designation. (Varner, Tr. Vol. 2 at 123). In these instances, according to BellSouth, no end user customer need is met by the A.M. or P.M. designation. The designation will, however, require BellSouth to tie up resources and incur additional costs to meet scheduling requirements for customers who are indifferent as to when their service is actually turned on. BellSouth witness Varner testified that the treatment BellSouth is proposing for ITC^DeltaCom's customers is comparable to the scheduling BellSouth offers its retail customers and thus, BellSouth's proposal satisfies the parity and nondiscrimination requirements of the Act. (Varner, Tr. Vol. 2 at 123).

Upon consideration of this issue, the positions of the parties, and the evidence of record, the Commission finds that BellSouth should only be required to utilize an A.M. or

P.M. designation in situations in which access to the customer's premises is required and the customer expresses a preference as to A.M. or P.M. BellSouth will then be providing ITC^DeltaCom A.M. or P.M. designation under the same circumstances as it does for providing service to its own end-user customers.

Ordering Paragraph:

BellSouth is only required to designate A.M. or P.M. designation in situations in which access to the customer's premises is required and the customer expresses a preference as to A.M. or P.M.

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?

ITC^DeltaCom Position:
Yes. The rate depends upon the labor required or caused. It should be determined on an individual case basis. This policy was previously approved by the SCPSC in the existing interconnection agreement. It was compliant with the Act then, and it remains so.

BellSouth Position:
ITC^DeltaCom's proposal is nothing more than a penalty, liquidated damages or financial "guarantee" provision which is not appropriate for arbitration. (See BellSouth's position on Issue 1(b)). In the event ITC^DeltaCom experiences problems as a result of loop cutover delays, ITC^DeltaCom has adequate remedies under the law. Moreover, to track costs and assess blame for each instance of delay would be unduly burdensome and expensive, particularly when it is unclear which party is at fault.

Discussion:

ITC^DeltaCom contends that if one party is responsible for delaying loop cutover, the responsible party must pay the other's labor costs. ITC^DeltaCom contends that the payment of labor costs will work as an incentive to BellSouth. (Moses, Tr. Vol. 2 at 127).

ITC^DeltaCom also offers that a similar provision is in the interconnection agreement under which the parties have operated for the past two years, and ITC^DeltaCom recommends that the Commission order the continuation of the provision in the interconnection agreement which is the subject of the instant arbitration proceeding. (Hyde, adopted by Moses, Tr. Vol. 1 at 174 -175) BellSouth contends that because ITC^DeltaCom's proposal constitutes either a penalty, liquidated damages clause, or a financial "guarantee", the issue should not be arbitrated. According to BellSouth, neither Section 251 nor 252 of the Act obligate BellSouth to pay penalties for alleged breaches of the agreement. (Varner, Tr. Vol. 2 at 128). Moreover, the Commission "lacks the jurisdiction to impose penalties or fines" in the context of an arbitration proceeding. (*See* Order No. 97-189, Docket No. 96-358-C, 3/10/97, at 6). Even if the Commission could award penalties, the incorporation of ITC^DeltaCom's proposal into the agreement is unnecessary. South Carolina law and Commission procedures are available and adequate to address any breach of contract issue should it arise.

BellSouth further contends that ITC^DeltaCom's proposal is unworkable. (Varner, Tr. Vol. 1 at 422). Cutovers are complicated, and both parties to the cutover as well as the end user customer are heavily involved in the process. Consequently, if a cutover is delayed, fault is difficult, if not impossible, to apportion. (Moses, Tr. Vol. 2 at 126; Varner, Tr. Vol. 2 at 127). BellSouth witness Varner testified that ITC^DeltaCom's proposal would, in all likelihood, create more litigation expenses arguing over fault than either party would incur in labor charges. To track costs for each instance would be a burdensome and unnecessary business practice. For a further discussion of this issue, see the Commission's discussion of Issue 1(a).

Upon consideration of this issue, the positions of the parties, and the evidence of record, the Commission finds each party should be responsible for its own labor costs. The Commission recognizes that the cutover is a complicated process and that many difficulties arise in tracking labor costs. The record shows that it is sometimes simply impossible to apportion fault in situations in which cutovers are delayed. In the generic proceeding on performance measurements established by this Order, the Commission will entertain proposals on "performance guarantees," penalties, and liquidated damages provisions. The instant issue may be addressed by parties during the generic proceeding on performance measures.

Ordering Paragraph:

The interconnection agreement should not contain a provision for a party being responsible for the other party's reasonable labor costs for delaying a cutover. Each party will incur its own labor costs, and therefore pay for its own labor costs.

Issue 2(c)(v)

Should BellSouth be required to designate specific UNE center personnel for coordinating orders placed by ITC^DeltaCom?

ITC^DeltaCom Position:

Yes. ITC^DeltaCom will accept a designated single point of contact person. BellSouth should identify the individual to ITC^DeltaCom.

BellSouth Position:

BellSouth should not be required to specifically dedicate its personnel to serve only ITC^DeltaCom or any other individual CLEC. BellSouth incurs significant costs in connection with providing personnel to handle all CLEC orders for services and UNEs. BellSouth reviews anticipated and historical staffing requirements and assigns work activity in the most efficient manner possible in order to complete all necessary work functions for all CLECs.

Discussion:

ITC^DeltaCom contends that it is entitled to designated personnel at the UNE center to handle its UNE cutovers and proposes that "as people work together they work better together." (Moses, Tr. Vol. 2 at 130). ITC^DeltaCom contends that it will have a better working relationship with designated personnel with more accountability, more understanding, and more flexibility. (Moses, Tr. Vol. 2 at 130 - 131).

BellSouth contends that there is no requirement in the Act that obligates BellSouth to designate specific personnel for cutovers for ITC^DeltaCom. BellSouth's obligation under the 1996 Act is to provide nondiscriminatory access to UNEs, which BellSouth does today. BellSouth witness Milner testified that the most efficient way for BellSouth to meet its obligation under the 1996 Act for ITC^DeltaCom and all other CLECs is for BellSouth to carefully monitor workload requirements and to assign personnel as necessary to meet those requirements. (Milner, Tr. Vol. 2 at 131 – 132). BellSouth today must monitor total workload results and forecast future workload requirements and the personnel needed to meet those requirements based on historic trends, business forecasts, and the experience of local managers and technicians. Mr. Milner testified that BellSouth incurs real costs in connection with providing personnel to handle all CLEC orders for services and UNEs; therefore, BellSouth should retain the flexibility needed to meet its service and contractual obligations without any requirement to dedicate specific personnel to particular functions. (Milner, Tr. Vol. 2 at 132). ITC^DeltaCom appeared to indicate that it would cover BellSouth's costs for designating personnel, but then quickly backed off that commitment by arguing "that it is very possible for BellSouth to realize economies of scale also in designating personnel to one of its larger purchasers." (Rozycki, Tr. Vol. 2 at 134).

Upon consideration of this issue, the positions of the parties, and the evidence of record, the Commission finds that BellSouth is not obligated to designate specific UNE center personnel for coordinating orders placed by ITC^DeltaCom, and the Commission will not require BellSouth to provide specific UNE personnel for coordinating orders placed by individual CLECs. Requiring such a designation could interfere with BellSouth from managing its workload in the most cost effective and efficient manner, thereby hindering BellSouth in accomplishing the very goal that the provision is meant to achieve, that is giving the best possible service to all CLECs.

Ordering Paragraph:

BellSouth is not required to specifically designate personnel to serve ITC^DeltaCom or to coordinate orders placed by ITC^DeltaCom.

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?

ITC^DeltaCom Position:

Yes. Where the root cause was not DeltaCom's network, BellSouth should bear such costs. BellSouth should reimburse DeltaCom for any additional costs associated with isolating the trouble to BellSouth's facilities and/or equipment.

BellSouth Position:

The party responsible for the repairs should bear the costs associated with those repairs. (See FCC First Report and Order at ¶258, CC Docket 96-98 (8-8-96)). BellSouth has agreed to be responsible for such costs that are incurred due to BellSouth's network. However, BellSouth should not be responsible for costs due to ITC^DeltaCom's network.

BellSouth and ITC^DeltaCom should each be responsible for its own costs incurred in determining the cause of any trouble. Thus, this issue is not appropriate for arbitration. (Exhibit "A" attached to this Issues Matrix contains BellSouth's proposed contract language on this issue.)

Discussion:

According to Mr. Moses for ITC^DeltaCom, the party who has the trouble in the network should pay the cost of repairing the trouble in the network. ITC^DeltaCom asserts that the trouble arises if ITC^DeltaCom has to isolate a trouble to BellSouth's network a second time; ITC^DeltaCom contends it is entitled to reimbursement for the costs incurred in the second trouble isolation. Mr. Moses also stated that if BellSouth isolates trouble with ITC^DeltaCom's network multiple times that BellSouth should be compensated for the additional testing and diagnosis. (Moses, Tr. Vol. 2 at 143). BellSouth testified that the party responsible for the repairs should bear the costs associated with those repairs. According to Mr. Varner, when ITC^DeltaCom leases facilities from BellSouth, the cost of those facilities includes the costs associated with maintenance and repair as specified in the FCC's First Report and Order, paragraph 258. ITC^DeltaCom should, however, be responsible for maintenance and repair on its own facilities. (Varner, Tr. Vol. 2 at 144).

With initial trouble isolation, ITC^DeltaCom should be responsible for the initial trouble report. When determined by ITC^DeltaCom that the trouble resides on BellSouth's network, BellSouth will assume repair responsibilities via a trouble report. BellSouth further testified that BellSouth should not reimburse ITC^DeltaCom for any additional costs ITC^DeltaCom incurs in isolating the trouble to BellSouth's network. Likewise, if a BellSouth end user experiences trouble calling an ITC^DeltaCom customer, BellSouth does not bill ITC^DeltaCom for the costs incurred to isolate a trouble to ITC^DeltaCom's network. (Varner, Tr. Vol. 1 at 423).

BellSouth contends that the reimbursement system proposed by ITC^DeltaCom would be unwieldy, and is not required by the Act. Each party should bear its own costs – such a system is fair and manageable. (Varner, Tr. Vol. 1 at 423).

Based upon the issue, the positions of the parties, and the evidence of record, the Commission finds 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 shall bear the cost of the repairs and shall reimburse the other party for the additional cost incurred in isolating the trouble. At the hearing, the parties seemed to agree to this result, and the Commission finds it acceptable.

Ordering Paragraph:

With respect to repair charges or troubles caused or originated outside of the party's network, each party shall 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 shall bear the cost of the repairs and shall reimburse the other party for the additional cost incurred in isolating the trouble.

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?

ITC^DeltaCom Position:
Yes. BellSouth should maintain these loops at industry standard quality levels. Maintenance should be priced at FCC compliant TELRIC rates. See Section 251(c)(3) of the Act.

BellSouth Position:
BellSouth will provide maintenance and repair for HDSL and ADSL compatible loops as the parties may agree. However, the loop modifications requested by ITC^DeltaCom (and other CLECs) are not a UNE offering. Thus, if BellSouth is providing a loop that has been modified from its original technical standards at the request of ITC^DeltaCom, such as HDSL or ADSL compatibility, then BellSouth cannot guarantee that the modified loop will meet the technical standards of a non-modified loop.

Discussion:

ITC^DeltaCom contends that if it buys a UNE that is HDSL compatible, it should remain HDSL compatible -- in other words, BellSouth has an obligation to maintain it as HDSL compatible. (Moses, Tr. Vol. 2 at 146). BellSouth contends that ITC^DeltaCom has failed to draw a distinction between the services BellSouth provides to its end-user customers. According to BellSouth witness, Mr. Milner, BellSouth does not provide HDSL and ADSL "facilities" as UNEs to ITC^DeltaCom or to any other CLEC. What BellSouth does provide is a federally-tariffed wholesale ADSL service to certain wholesale customers, such as ISPs (Internet Service Providers). BellSouth's ADSL wholesale service, however, is a separate and distinct offering from BellSouth's ADSL or HDSL UNE compatible loop offering. The UNE offering is a unique network capability offered to CLECs via the service inquiry process. (Milner, Tr. Vol. 2 at 147). Mr. Milner explained that "in terms of HDSL and ADSL compatible loops (the UNE offering), if it breaks then we fix that. If we do something to make it not compatible, then we'll fix that too. The costs for the maintenance are recovered through our recurring charges for ADSL and HDSL compatible loops." (Milner, Tr. Vol. 2 at 147).

BellSouth further testified that while BellSouth offers an ADSL compatible loop, all of BellSouth's loops are not ADSL compatible. (Milner, Tr. Vol. 1 at 674 – 676). ADSL service requires that certain technical standards be met. BellSouth's ADSL compatible loops meet those technical standards, but other BellSouth loops do not. Many significant activities are required to transform a voice grade loop into an ADSL compatible loop, including service inquiry, design engineering, and connection and testing activities. If BellSouth provides ITC^DeltaCom with a modified loop (i.e. BellSouth has transformed a voice grade loop from its original technical standards to meet the standards requested by ITC^DeltaCom and/or required for ADSL and HDSL), BellSouth cannot guarantee that the modified loop will meet the technical standards of a non-modified loop. (Milner, Tr. Vol. 1 at 675).

Based upon the issue, the positions of the parties, and the evidence from the hearing, the Commission finds that original technical standards on HDSL and ADSL compatible loops should be maintained. BellSouth acknowledged at the hearing that it will repair its ADSL and HDSL UNE compatible loops and that the costs of repair and maintenance are recovered through the recurring charges for ADSL and HDSL compatible loops. For non-standard or modified HDSL and ADSL compatible loops, the Commission requires BellSouth to provide the same standards as BellSouth uses on its network. The Commission believes that this result will ensure that the loops used by ITC^DeltaCom will meet the specifications required.

Ordering Paragraph:

The Commission requires that original technical standards on HDSL and ADSL compatible loops should be maintained. Further for non-standard or modified HDSL and ADSL compatible loops, the Commission requires BellSouth to provide the same standards as BellSouth uses on its network. Costs for repair and maintenance are recovered through the recurring charges for these UNEs which were established in Docket No. 97-374-C.

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 nonrecurring charges?**

ITC^DeltaCom Position:

(a) Yes. Customer transfers should be completed smoothly and efficiently.

(b) Yes. Performance guarantees are also required to ensure scheduled cutover dates are not missed repeatedly.

BellSouth Position:

(a) No. BellSouth does not agree that coordination 48 hours prior to the due date is necessary on every type of UNE conversion. However, with respect to SL2 type loops only, BellSouth will agree to use its best efforts to schedule a conversion date and time 24 to 48 hours prior to the conversion.

(b) No. BellSouth does not agree to waive the applicable nonrecurring charges whenever a cutover is delayed, particularly when any number of variables and circumstances may cause a delay in the schedule. Thus, this issue is not appropriate for arbitration. (See BellSouth's position on Issue 1(b)).

Discussion:

ITC^DeltaCom contends that the parties must coordinate on all UNE conversions 48 hours in advance of the conversion. (Moses, Tr. Vol. 2 at 150). Mr. Moses testified that coordination will benefit both parties as well as the customer and will help enable ITC^DeltaCom to provide more cost-effective and efficient service. (Moses, Tr. Vol. 2 at 152 – 153). BellSouth opposes ITC^DeltaCom's proposal that BellSouth be required to coordinate with ITC^DeltaCom 48 hours prior to the due date of a UNE conversion because BellSouth contends the proposal is overbroad. (Milner, Tr. Vol. 2 at 151). For example, according to BellSouth, by requiring coordination 48 hours in advance for *all* UNEs, ITC^DeltaCom includes SL1 loops, a UNE that is not normally subject to coordination. BellSouth witness Milner says ITC^DeltaCom's proposal will create unnecessary work and costs with no corresponding gain in improved provisioning. (Milner, Tr. Vol. 2 at 152). Recognizing the importance of coordination, however, BellSouth has agreed with regards to SL2 loops to exert its best efforts to schedule a conversion date and time 24 to 48 hours prior to a conversion. (Milner, Tr. Vol. 1 at 678).

BellSouth also states that it should not be obligated to waive applicable nonrecurring charges if a scheduled cutover date is delayed. First, BellSouth contends that waiving nonrecurring charges constitutes a penalty and, thus, is outside the jurisdiction of this Commission. (Varner, Tr. Vol. 1 at 427). BellSouth points out that the Commission held in the AT&T arbitration, the Commission "lacks the jurisdiction to impose penalties or fines" in the context of an arbitration proceeding. (*See* Order No. 97-

189, Docket No. 96-358-C, 3/10/97, at 6). Moreover, BellSouth contends that it is not required under the Act or under FCC rules to waive nonrecurring charges in such a situation. According to BellSouth, the Act does not obligate BellSouth to pay penalties, and thus, imposing penalties would be outside the scope of the Act and therefore inappropriate. Furthermore, BellSouth witness Varner pointed out that both parties may have reasonable circumstances which might cause a delay in the schedule. There is no mechanism in place to track all delays, nor to identify the responsible party. According to BellSouth, such a tracking system would be unworkable according to BellSouth because in many cases, both parties contribute to delays. (Varner, Tr. Vol. 1 at 427). Moreover, any attempt to allocate fault would, of necessity, be largely arbitrary.

Based upon this issue, the positions of the parties, and the hearing record, the Commission finds BellSouth and ITC^DeltaCom shall coordinate all cutovers 24 hours in advance of the scheduled cutover. The parties have operated under an informal agreement of coordination for SL2 cutovers since the Spring of 1999, and the Commission ordered provision expands and memorializes that informal agreement as part of the interconnection agreement. The Commission hopes that 24 hour coordination will ensure efficient and smoothly accomplished customer cutovers.

Additionally and consistent with the Commission's decision on Issue 1(b), the Commission finds that BellSouth should waive the non-recurring charges if BellSouth's assigned due date is missed as a result of BellSouth's error. This provision regarding the waiver of nonrecurring charges is on an interim basis until the Commission has concluded its generic proceeding on performance measures and performance guarantees.

Ordering Paragraph:

The Commission requires BellSouth and ITC^DeltaCom to coordinate all cutovers 24 hours in advance of the scheduled cutover. Additionally, BellSouth shall waive the non-recurring charges if BellSouth's assigned due date is missed as a result of BellSouth's error. This provision regarding the waiver of nonrecurring charges is on an interim basis until the Commission has concluded its generic proceeding on performance measures and performance guarantees.

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?

ITC^DeltaCom Position:
BellSouth must establish procedures for LNP cutovers pursuant to which BellSouth must confirm with ITC^DeltaCom that every port subject to a disconnect order is worked at one time. ITC^DeltaCom's proposed procedures are identified in Attachment 5, Section 2.6 of the proposed interconnection agreement.

BellSouth Position:
BellSouth agrees with ITC^DeltaCom that coordination between itself and ITC^DeltaCom is extremely important for LNP order cutovers. BellSouth and ITC^DeltaCom have agreed to proposed language whereby BellSouth will ensure that a disconnect order is completed for all ported numbers once the Number Portability Administration Center ("NPAC") notification of ITC^DeltaCom's Activate Subscription Version has been received by BellSouth. The issue to which BellSouth cannot agree is the timeframes proposed by ITC^DeltaCom. The proposed timeframes are not reasonable and should not be adopted by the Commission.

Discussion:

ITC^DeltaCom is seeking the implementation of quality control assurances for LNP. (Moses, Tr. Vol. 2 at 155). The major difference in the parties' proposals is a question of how much checking of work steps will be done. (Milner, Tr. Vol. 2 at 155). According to Mr. Milner, "[w]e have agreed with DeltaCom that we will put language in place that we believe will ensure that those disconnect orders are worked in a timely manner." (Id.) Given that ITC^DeltaCom had not even reviewed the most recent proposals on this issue, their position on this issue seems fairly tenuous. (Moses, Tr. Vol. 2 at 156).

Based upon this issue, the positions of the parties, and the evidence of record, the Commission denies ITC^DeltaCom's proposed LNP procedures set forth in Attachment 5, Section 2.6 of ITC^DeltaCom's proposed interconnection agreement as the proposed language contains timeframes that are unreasonable and should not be required. For LNP cutover procedures, the Commission requires that (a) if BellSouth receives a disconnect order by 12:00 noon that BellSouth will work that conversion that same day, and (b) if BellSouth receives a disconnect order after 12:00 noon that BellSouth will work that conversion by close of business the next day. The Commission finds these timeframes to be reasonable.

Ordering Paragraph:

For LNP cutover procedures, the Commission requires that (a) if BellSouth receives a disconnect order by 12:00 noon that BellSouth will work that conversion that same day, and (b) if BellSouth receives a disconnect order after 12:00 noon that BellSouth will work that conversion by close of business the next day.

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

ITC^DeltaCom Position:

Flow-through should be defined in the parties' interconnection agreement. The definition of flow through should include pre-ordering functions. Specifically, ITC^DeltaCom seeks the following definition be included in the agreement: "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."

BellSouth Position:

It is not necessary for the interconnection agreement to contain a definition of "flow through," nor is ITC^DeltaCom's proposed definition appropriate. ITC^DeltaCom's definition of flow-through is contrary to the manner in which the term is commonly used by the Federal Communications Commission. 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.

Discussion:

ITC^DeltaCom wants a definition of flow-through included in the agreement to clarify the meaning of flow-through and to include an obligation on BellSouth to provide complete electronic pre-ordering, ordering, and provisioning of all UNEs and resale services. (Thomas, Tr. Vol. 2 at 157). BellSouth, on the other hand, contends that there is no need to incorporate any definition of flow-through into the interconnection agreement. (Pate, Tr Vol. 2 at 160). The FCC has established the meaning of flow-through in its orders, and has approved, at least informally, BellSouth's calculation of flow-through in its Service Quality Measurements, which is derived from the FCC's definition of flow-through. BellSouth's position is that adding a definition to the Agreement is redundant and unnecessary, particularly when ITC^DeltaCom is seeking to alter the FCC's definition of flow-through. (Pate, Tr. Vol. 1 at 620; Vol. 2 at 159).

BellSouth states that to the extent the Commission determines that a definition of flow-through should be incorporated into the agreement, the Commission should adopt BellSouth's definition. (Pate, Tr. Vol. 2 at 159 – 160). In Paragraph 107 of its Second Louisiana Order in CC Docket No. 98-121, the FCC stated 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." (Pate, Tr. Vol. 1 at 622). BellSouth's definition of flow-through mirrors the FCC's definition and therefore is appropriate. (Pate, Tr. Vol. 2 at 159). Under BellSouth's definition, flow-through for a CLEC Local Service Request (LSR) begins when the complete and correct electronically-submitted LSR is sent via one of the CLEC ordering interfaces (*i.e.* EDI, TAG or LENS), flows through the mechanical edit checking and local exchange service order generation system ("LESOG"), is mechanically transformed into a service order by LESOG, and is accepted by the Service Order Control System ("SOCS") without any human intervention. BellSouth believes these steps mirror the steps that the FCC envisioned encompassed in flow through. Contrary to ITC^DeltaCom's position, BellSouth contends pre-ordering is not part of this process, nor is electronic notification of order status and jeopardies. (Pate, Tr. Vol. 1 at 622).

BellSouth objects to ITC^DeltaCom's attempt to broaden the definition of flow-through to create an obligation on BellSouth to provide complete electronic pre-ordering,

ordering, and provisioning of all UNEs and resale services. (Pate, Tr. Vol. 1 at 624). According to BellSouth, the Act obligates BellSouth to provide CLECs with access to the required functions and information through CLEC electronic interfaces in substantially the same time and manner as BellSouth does for itself. Such access provides efficient CLECs with a meaningful opportunity to compete. BellSouth provides CLECs with access to electronic pre-ordering, ordering and provisioning in substantially the same time and manner as BellSouth has for itself. (Pate, Tr. Vol. 1 at 624).

BellSouth witness Pate testified that the key point is that BellSouth does not place all of its orders electronically. (Pate, Tr. Vol. 1 at 626). According to Pate, many of BellSouth's retail services, primarily large business complex services, involve substantial manual handling by BellSouth's account teams for BellSouth's own retail customers. Nondiscriminatory access requires only that CLECs be given access in substantially the same time and manner as BellSouth, not that CLECs place all orders electronically. BellSouth testified that 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. BellSouth believes that 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. BellSouth contends that because the same manual processes are in place for both CLECs and BellSouth retail orders, the processes are competitively neutral and are therefore in compliance with both the Act and the FCC rules. (Pate, Tr. Vol. 1 at 626-27).

BellSouth further contends that neither the Act nor the FCC rules require that an interconnection agreement contain a definition of flow-through. BellSouth requests that to the extent, the Commission determines that such a definition is appropriate, the Commission should adopt BellSouth's definition because it is the only one that comports with the requirements of the Act and the FCC. BellSouth contends that ITC^DeltaCom's definition is overly broad, and places obligations on BellSouth that are above and beyond those set forth in the Act and thus, it is not an appropriate or necessary definition for an interconnection agreement.

Based upon this issue, the positions of the parties, and the evidence from the hearing, the Commission finds that it is necessary to include a definition of flow-through in the interconnection agreement. Of the two definitions, BellSouth's definition of flow-through comports with the requirements of the Act and the FCC. Therefore, the Commission adopts the definition of flow-through as proposed by BellSouth and which is contained in the FCC Second Louisiana Order, at ¶ 107, CC Docket 98-121 (8-13-98).

<u>Ordering Paragraph:</u>

The Commission requires the inclusion of the definition of "flow-through" in the interconnection agreement and requires that the definition of flow-through as contained in the FCC Second Louisiana Order, at ¶ 107, CC Docket 98-121 (8-13-98) be used.

<u>Issue 3:</u>
[Question 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")?

[Question 2] What should be the rate for reciprocal compensation per minute of use, and how should it be applied?

ITC^DeltaCom Position:

[Question 1] BellSouth should be required to pay reciprocal compensation for ISP-bound traffic. The appropriate inter-carrier compensation mechanism for ISP-bound traffic is reciprocal compensation because the caller's provider should bear the costs of the call to the ISP.

[Question 2] ITC^DeltaCom is entitled to the tandem termination rate for reciprocal compensation because ITC^DeltaCom's switch serves the same geographic area as BellSouth's tandem switch, and performs the same functions as BellSouth's tandem switch.

BellSouth Position:

[Question 1] Under 47 U.S.C. § 251(b)(5) and 47 C.F.R. § 51.701, reciprocal compensation is applicable only to local traffic. "Local" trunks may actually carry access or toll traffic in addition to local traffic, and thus reciprocal compensation is not applicable to all traffic that travels over local trunks. ISP-bound traffic, even if it is carried over local trunks, is not local traffic and is not subject to the reciprocal compensation obligations of the Act. In addition to being contrary to the law, treating ISP-bound traffic as local for purposes of reciprocal compensation is contrary to sound public policy. The Commission need not address this issue at this time because the FCC has jurisdiction over ISP-bound traffic and the FCC decision in this matter will preempt any decision the Commission renders in this docket.

[Question 2] 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 local traffic and were established by this Commission in the cost orders in Docket No. 97-374-C. If a call is not handled by a switch on a tandem basis, it is not appropriate to pay reciprocal compensation for the tandem switching function.

Discussion:

[Question 1]

This issue requires the Commission to address the economic principles and public policy concerns underlying reciprocal compensation for ISP-bound traffic for the purposes of this interconnection agreement on a going forward basis. The parties appear to agree that the FCC has deemed ISP-bound traffic to be jurisdictionally interstate. The question pending before the Commission is how, or whether, to provide for compensation for ISP-bound traffic. ITC^DeltaCom contends that, despite the fact that the FCC found that ISP-bound traffic is in large part jurisdictionally interstate, the Commission should order that reciprocal compensation be paid for ISP-bound traffic. (Starkey, Tr. Vol. 1 at 238 - 241). ITC^DeltaCom contends that treating ISP-bound traffic as if it were local for purposes of reciprocal compensation is sound public policy (Starkey, Tr. Vol. at 241). BellSouth, on the other hand, contends that reciprocal compensation is a mechanism that applies only to the exchange of *local* traffic. (Varner, Tr. Vol. 1 at 434). As recently reiterated by the FCC in its Declaratory Ruling FCC 99-38 in CC Docket Nos. 96-98 and 99-69 adopted February 25, 1999, released February 26, 1999, (*"Declaratory Ruling"*) and, as even ITC^DeltaCom admits, ISP-bound traffic is jurisdictionally interstate. (Starkey, Tr. Vol. 1 at 239) Thus, according to BellSouth, it is not included in the Act's requirements regarding reciprocal compensation. BellSouth seeks an order that states that reciprocal compensation only should be applied to traffic that meets the FCC's definition of "local traffic."

ITC^DeltaCom argues that BellSouth should pay reciprocal compensation for all traffic that travels over "local" trunks. ITC^DeltaCom witness Starkey testified that a call originating on the BellSouth network and directed to the ITC^DeltaCom network travels the same path, requires the same use of faciltities and generates the same level of cost regardless of whether the call is dialed to an ITC^DeltaCom local residential customer or to an ISP provider. (Starkey, Tr. Vol. 1 at 245) Thus, Mr. Starkey asserts that the rates associated with recovering the costs for both calls should be the same since both calls travel the same path and the same equipment to reach their destination. (Starkey, Tr. Vol. 1 at 246)

BellSouth responds to ITC^DeltaCom's proposal by arguing that such a reciprocal compensation mechanism is inappropriate. According to BellSouth, "local" trunks may properly route or carry access or toll traffic in addition to local traffic. (Varner, Tr. Vol. 1 at 429). Simply because a local trunk carries ISP-bound traffic, which is jurisdictionally interstate, reciprocal compensation is not applicable. BellSouth witness Varner testified that the test for the application of reciprocal compensation payments should not be the type of trunk used to transport the traffic; rather the test is the end-to-end nature of the call, as the FCC has reaffirmed. (Varner, Tr. Vol. 1 at 429-30).

In considering this issue, the Commission recognizes the FCC's *Declaratory Ruling*. In that *Declaratory Ruling*, the FCC concluded that ISP-bound traffic is non-local interstate traffic. FCC 99-38, footnote 87. In reaching its conclusion, the FCC acknowledged that it has construed the reciprocal compensation mechanism of Section 251(b)(5) to apply only to the transport and termination of local traffic. FCC 98-38, ¶ 7. The FCC carefully examined the nature of ISP-bound traffic and noted 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 destinations, specifically at a Internet website that is often located in another state." FCC 98-38, ¶ 12. Further, the FCC acknowledged that "an Internet communication does not necessarily have a point of 'termination' in the traditional sense." FCC 98-38, ¶ 18. The FCC clearly stated that state commissions could decide to impose reciprocal compensation obligations in an arbitration proceeding and also stated that state commissions were "free not to require the payment of reciprocal compensation for this traffic." FCC 98-38, ¶ 26.

Based upon the evidence before it, the positions advocated by the parties, and the Declaratory Ruling of the FCC, the Commission finds that reciprocal compensation should not apply to ISP-bound traffic. The FCC in its *Declaratory Ruling* concluded that ISP-bound traffic is non-local interstate traffic and clearly left the determination of whether to impose reciprocal compensation obligations in an arbitration proceeding to the state commissions. FCC 98-38, footnote 87 and ¶ 26.This Commission concludes that ISP-bound traffic is not subject to reciprocal compensation. While it may be true that ISP-bound traffic travels similar paths across the same facilities as local calls to residential customers as advanced by ITC^DeltaCom, it is also clear that ISP-bound calls do not terminate at the ISP. In the example given by witness Starkey for ITC^DeltaCom, the local call to the residential customer clearly terminates on the ITC^DeltaCom network. ISP-bound traffic, on the other hand, does not terminate at the ISP's server but continues to the ultimate Internet destination which is often located in another state. *See* FCC 99-38, ¶ 12. As ISP-bound traffic does not terminate at the ISP's server on the local network, this Commission finds that ISP-bound traffic is non- local traffic. Further, since Section 251 of the 1996 Act requires that reciprocal compensation be paid for local traffic, the Commission further finds that the 1996 Act imposes no obligation on parties to pay reciprocal compensation for ISP-bound traffic.

The Commission is also aware that the FCC has initiated further proceedings regarding the issue of ISP-bound traffic and reciprocal compensation. Of course, this

Commission will revisit this issue if the FCC issues a ruling impacting the decision rendered herein.

[Question 2] :

With regard to the appropriate rate for reciprocal compensation, Mr. Starkey for ITC^DeltaCom stated that the rate should be based upon the last approved reciprocal compensation rate in South Carolina which is $.009 per minute. (Starkey, Tr. Vol. 2 at 179) Mr. Varner for BellSouth testified that the rate should be the same rate between the parties but further stated that the rate should only apply to those elements that are actually used to transport and terminate traffic. (Varner, Tr. Vol. 2 at 180) BellSouth contends that it is not appropriate for ITC^DeltaCom to charge BellSouth for tandem switching functions it does not perform. According to BellSouth, if a call is not handled by a switch on a tandem basis, it is not appropriate to pay reciprocal compensation for the tandem switching function. (Varner, Tr. Vol. 1 at 433). According to ITC^DeltaCom, it is entitled to the tandem switching rate because its switch serves the same geographic area as BellSouth's tandem switch. (Starkey, Tr. Vol. 1 at 255). ITC^DeltaCom further contends that its switch performs many of the same functions that BellSouth's tandem performs (Starkey, Tr. Vol. 1 at 257).

In determining the appropriate reciprocal compensation rate, the Commission notes that the previously approved interconnection agreement contained a reciprocal compensation rate of $.009 per minute for termination of local traffic. This Commission found that rate to be compliant with the requirements of Section 252(d) of the 1996 Act. The Commission finds that nothing has changed in the past two years that causes the

Commission to conclude that the underlying costs associated with transport and termination have changed. The Commission concludes that the $.009 per minute is appropriate and approves the previously approved rate of $.009 per minute as the rate for reciprocal compensation for the new interconnection agreement.

Ordering Paragraph:

[Question 1] 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.

[Question 2] The Commission approves a reciprocal compensation rate of $.009 per minute for local traffic and directs the parties to include this rate in the interconnection agreement. However, as explained above, reciprocal compensation will not apply to ISP bound traffic.

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?

ITC^DeltaCom Position:

Following an order for a disconnect, BellSouth should be required to reconnect the service to ITC^DeltaCom's customer within 48 hours. According to ITC^DeltaCom, the issue often arises in situations in which a customer pays an outstanding bill and has been disconnected for failure to pay, or when a reconnect must be made quickly as in the case of slamming.

BellSouth Position:

BellSouth cannot reserve facilities for 48 hours following an order for a disconnect. As a practical matter, once a UNE facility has been disconnected for any reason, that facility is subject to immediate reuse, whether by CLECs or by BellSouth's end users. BellSouth should not be required to maintain facilities for any set period of time once service has been disconnected. Nonetheless, BellSouth will agree to use its best efforts to reconnect service within 24 hours.

Discussion:

ITC^DeltaCom witness, Mr. Moses testified that BellSouth should be obligated to reconnect a customer within 48 hours of a disconnect. (Moses, Tr. Vol. 2 at 181) According to BellSouth, ITC^DeltaCom's proposal is unworkable, unfair, and is not required under the Act. BellSouth witness Milner testified that once a UNE facility has been disconnected for any reason, that facility is subject to immediate reuse. (Milner, Tr. Vol. 2 at 186) In an area experiencing a shortage of facilities, it would not be unusual for a facility used by a CLEC or by a BellSouth retail unit to be reassigned within minutes to complete another order for another CLEC or BellSouth retail end-user. (Milner, Tr. Vol. 1 at 680). Mr. Milner further testified that reservation of facilities for ITC^DeltaCom could slow provisioning intervals for all other providers. According to BellSouth, such preferential treatment for ITC^DeltaCom is antithetical to the goals of the Act. Therefore, while BellSouth will agree to use its best efforts to reconnect the service as expeditiously as possible, BellSouth cannot commit to maintain facilities after disconnect for any period of time. Mr. Milner also stressed that the "best efforts" BellSouth is willing to provide to ITC^DeltaCom is the same interval it provides to itself. (Milner, Tr. Vol. 2 at 187).

With regard to this issue and based upon the record from the hearing, the Commission finds that BellSouth is not obligated to reconnect ITC^DeltaCom customers within 48 hours. The Commission finds that such a commitment would require BellSouth reserve facilities for ITC^DeltaCom for a period of time after a UNE facility has been disconnected. Such reservation of facilities would be detrimental to provisioning efforts for other CLECs and BellSouth retail customers. While the Commission will not require BellSouth to reconnect within 48 hours for the reasons stated herein, BellSouth has stated in its position that it will use its best efforts to reconnect service within 24 hours. The Commission encourages BellSouth to meet this goal.

Ordering Paragraph:

While BellSouth is not required to reconnect ITC^DeltaCom customers within 48 hours, the Commission strongly encourages to BellSouth to meet its stated goal of using its best efforts to reconnect service within 24 hours.

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?

ITC^DeltaCom Position:
ITC^DeltaCom wants the ability to receive timely notification if a repair technician is unable or anticipates being unable to meet a scheduled repair, retrieve a list of itemized time and material changes at the time of ticket closure, provide test results, and electronically notify ITC^DeltaCom when the trouble is cleared.

BellSouth Position:
BellSouth provides ITC^DeltaCom with nondiscriminatory access to BellSouth's maintenance and repair OSS by providing electronic interfaces such as TAFI and the ECTA Gateway, as well as other manual interfaces. Among other things, these interfaces allow ITC^DeltaCom 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. These systems are the same maintenance and repair systems used by BellSouth retail units. TAFI does not provide itemized time and material charges for BellSouth's own retail units, and thus BellSouth is not obligated to provide them for ITC^DeltaCom or any other CLEC.

Discussion:

ITC^DeltaCom contends that it is entitled to an itemized list of time and material charges upon completion of repair work. ITC^DeltaCom contended that it needs timely billing information in order to verify the charges that it incurs for maintenance performed by BellSouth. ITC^DeltaCom contends that without the information, it cannot provide the level of service its customers expect, accurately bill its end-user, and verify BellSouth charges. Moreover, it contends BellSouth is not providing nondiscriminatory access to OSS. (Thomas Tr. Vol. 1 at 222).

BellSouth contends that the Act requires that BellSouth provide nondiscriminatory access to its OSS. In other words, BellSouth must 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.

BellSouth contends that it provides ITC^DeltaCom and the other CLECs with nondiscriminatory access to its maintenance and repair OSS by providing TAFI and ECTA Gateway. (Pate, Tr. Vol. 1 at 634). BellSouth witness Pate explained that CLEC TAFI is the same maintenance and trouble repair system used by BellSouth's own retail service 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. (Pate, Tr. Vol. 1 at 635). Mr. Pate further explained that ECTA uses the T1/M1 national standard for local exchange trouble reporting and notification. 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; to modify a report; to obtain status information during the life of the report; and to cancel a report. (Pate, Tr. Vol. 1 at 636). BellSouth contends that TAFI and ECTA are the same maintenance and repair systems used by BellSouth retail units.

According to BellSouth, it is not obligated to provide ITC^DeltaCom with an itemized time and material charges report because such information is not available to BellSouth's retail units. BellSouth contends that it cannot be required to give a CLEC more than it gives to itself. If the itemized time and material charges are something ITC^DeltaCom feels it needs, BellSouth testified that ITC^DeltaCom can submit a request to BellSouth and BellSouth will investigate the feasibility of instituting such a report for ITC^DeltaCom outside the context of an interconnection agreement. According to BellSouth, the Act does not require BellSouth to develop this capability for ITC^DeltaCom, and does not require BellSouth to provide it at cost-based rates, and, thus, the Commission should not grant ITC^DeltaCom request for relief.

Upon consideration of this issue and the record from the hearing, the Commission finds that BellSouth is providing ITC^DeltaCom nondiscriminatory access to its maintenance and repair OSS by providing ITC^DeltaCom access to TAFI and ECTA, which are the same maintenance and repair systems, used by BellSouth's retail units. As BellSouth is providing access to the same systems which it uses itself, BellSouth is not obligated to provide ITC^DeltaCom any functionalities that are not currently available in

TAFI and/or ECTA. If ITC^DeltaCom desires additional information than the information offered through either TAFI and/or ECTA, ITC^DeltaCom and BellSouth may negotiate a separate agreement outside this arbitration.

Ordering Paragraph:

BellSouth is providing repair information on a nondiscriminatory basis as BellSouth is providing access through OSS to the same maintenance and repair systems used by BellSouth's retail units. BellSouth shall not be required to provide additional repair information. However, the parties may negotiate a separate agreement outside this arbitration should ITC^DeltaCom desire additional information than that which is currently offered.

Issue 4(a):
Should BellSouth provide cageless collocation to ITC^DeltaCom 30 days after a firm order is placed?

ITC^DeltaCom Position:
ITC^DeltaCom is entitled to provisioning of cageless collocation in 30 days after a firm order is placed. Cageless collocation should be provisioned at intervals shorter than standard physical collocation and similar to virtual collocation.

BellSouth Position:
BellSouth is not required by the Act or the FCC to provide cageless collocation within 30 days after a firm order has been placed. In addition, given the numerous factors and activities required to fulfill a collocation request, it is neither practical nor feasible to require BellSouth to complete the collocation request within 30 days.

Discussion:

ITC^DeltaCom contends that because cageless collocation is similar to virtual collocation, it should be provisioned in 30 days or less. (Wood, Tr. Vol. 1 at 331).

ITC^DeltaCom witness Wood assumes that provisioning cageless collocation should be similar to provisioning virtual collocation and, thus, the intervals should be similar. (Wood, Tr. Vol. 1 at 331). ITC^DeltaCom contends that BellSouth will save time because it will not need to determine if room exists within its central office for the construction of a physically separated space, design the enclosure or have it constructed. (Wood, Tr. Vol. 1 at 332).

BellSouth contends that it has no legal or regulatory duty to provision cageless collocation in 30 days or less. (Thierry, Tr. Vol. 1 at 581). Moreover, BellSouth contends that its provisioning interval for collocation is not controlled by the time required to construct an arrangement enclosure, as ITC^DeltaCom implies. (Thierry, Tr. Vol. 1 at 581). Rather, according to BellSouth witness Thierry, the overall provisioning time is controlled by 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 cable racking and the number of cross-connects requested. Because these provisioning activities are performed, to the extent possible, in parallel, as opposed to serially, the absence of enclosure construction has little, if any, bearing on the provisioning interval. (Thierry, Tr. Vol. 1 at 581-2).

Moreover, Mr. Wood also contends that the interval for cageless collocation should be shorter than that for virtual collocation because of the "lack of administrative tasks associated with the exchange of ownership of the equipment." (Wood, Tr. Vol. at 332). BellSouth contends that "administrative tasks" are not included in the provisioning interval for virtual collocation, and thus have no bearing on the provisioning interval for cageless collocation. (Thierry, Tr. Vol. 1 at 583).

BellSouth commits to complete its construction and provisioning activities as soon as possible but, at a maximum, within 90 business days under normal conditions or 130 business days under extraordinary conditions. (Thierry, Tr. Vol. 1 at 581). BellSouth contends that these intervals are appropriate, and provide CLECs a reasonable opportunity to compete. Thus, according to BellSouth, its proposed intervals meet the requirements of Section 251 of the Act.

Upon consideration of this issue, the positions of the parties, and the evidence of record, the Commission finds that BellSouth should provide cageless collocation within 90 days from receipt of a bona fide firm order. In reaching this decision, the Commission considered the 30 days proposed by ITC^DeltaCom and concluded that 30 days did not allow adequate time for BellSouth to complete its provisioning activities as explained by witness Thierry. On the other hand, the time intervals proposed by BellSouth appear to the Commission to be unusually generous, as 90 business days is over 4 months while 130 business days stretches to over 6 months. In order to provide a CLEC a meaningful opportunity to compete, the CLEC must be allowed access to the market. The Commission finds that 90 calendar days, which is approximately 3 months, should balance the interests between the parties on this issue.

Ordering Paragraph:

The Commission hereby orders BellSouth to complete its construction and provisioning activities for cageless collocation as soon as possible, but no later than 90 calendar days from receipt of a bona fide firm order. The Commission believes that this interval will provide CLECs a meaningful opportunity to compete and therefore meet the requirements of the Act.

Issue 5:
Should the parties continue operating under existing local interconnection arrangements?

ITC^DeltaCom Position:
[NOTE: ITC^DeltaCom believes that Issue 5 should be worded as follows: (BellSouth disagrees with this wording)]
(a) Should the current interconnection agreement language continue regarding cross-connect fees, reconfiguration changes or network redesigns and NXX translations?
(b) What should be the definition of the terms local traffic and trunking options?
(c) What parameters should be established to govern routing ITC^DeltaCom's originating traffic and each party's exchange or transit traffic?
(d) Should the parties implement a procedure for binding forecasts?

As the issue is proposed by ITC^DeltaCom, the answers are:
(a) Yes. BellSouth should continue to charge for cross-connect reconfiguration/network redesign and NXX translations in the same way it does under the agreement previously approved by the Authority.
(b) Local traffic and trunking option should be defined in the same way they are defined in the current agreement.
(c) The same parameters should be applied as those in the existing interconnection agreement.
(d) The parties must implement binding forecasts.

BellSouth Position:
As to Issue 5 as it is phrased, the parties should not continue operating under existing local interconnection arrangements. The purpose of negotiations is to incorporate new language, terms and obligations into an interconnection agreement in recognition of new technologies, changed circumstances, and changes in applicable law. BellSouth has negotiated with ITC^DeltaCom in good faith and will continue to do so in an effort to reach a new agreement regarding local interconnection.

Discussion:

The redrafted Issue 5, as set forth in "ITC^DeltaCom's Position" above includes several subtopics. For most of the subtopics, ITC^DeltaCom sought to continue the language from the 1997 interconnection agreement in the new interconnection agreement with regard to these subtopics. Mr. Moses stated that the previous interconnection agreement approved by this Commission contained provisions regarding cross-connect fee, reconfiguration charges or network redesigns, and NXX translations. Mr. Moses also testified that the 1997 interconnection agreement defined the terms "local traffic" and "trunking options" as well as established parameters to govern routing ITC^DeltaCom's originating traffic and each party's exchange of transit traffic. With regard to all of these items contained in the 1997 interconnection agreement, Mr. Moses testified that ITC^DeltaCom desired the same terms as contained in the 1997 interconnection agreement. (Moses, Tr. Vol. 2 at 206 –207) While the issue of binding forecasts was not included in the previous interconnection agreement, Mr. Moses also stated that the Commission should implement a procedure for binding forecasts. (Moses, Tr. Vol. 2 at 207) Mr. Moses also acknowledged that it was not ITC^DeltaCom's position that the entire 1997 interconnection agreement be continued but just the issues that the existing agreement contained upon which the parties could not agree. (Moses, Tr. Vol. 2 at 208)

Mr. Varner for BellSouth stated that BellSouth did not want to continue with the definition of "local traffic" as contained in the 1997 interconnection agreement. (Varner, Tr. Vol. 2 at 209) Mr. Varner also testified that the issue of binding forecasts was not contained in the 1997 interconnection agreement and further stated that he did not believe that BellSouth was obligated to do binding forecasts. (Varner, Tr. 2 at 211)

With respect to binding forecasts, ITC^DeltaCom desires binding forecasts to ensure that BellSouth can provision the capacity that ITC^DeltaCom believes it will need to serve its customers. Mr. Moses proposes that ITC^DeltaCom enter into a binding forecast with BellSouth as part of the interconnection agreement. (Moses, Tr. Vol. 1 at 148) Such an arrangement would presumably guarantee ITC^DeltaCom a certain level of capacity on BellSouth's network. Additionally, ITC^DeltaCom would reimburse BellSouth's costs even if the capacity were not actually used by ITC^DeltaCom. (Moses, Tr. Vol. 1 at 148)

Although not required under the Act or by FCC rules, BellSouth testified that it is currently analyzing the possibility of providing a service whereby BellSouth commits to provisioning the necessary network buildout and support when a CLEC agrees to enter into a binding forecast of its traffic requirements. While BellSouth stated that it has not yet completed the analysis needed to determine if this is a feasible offering, BellSouth testified that it is willing to discuss the specifics of such an arrangement with ITC^DeltaCom outside of this arbitration, because the issue is not a part of this proceeding. (Varner, Tr. Vol. 1 at 402)

Upon consideration of this issue, the positions of the parties, and the evidence from the record, the Commission concludes that the parties will use the language from the 1997 agreement as it relates to the 4 subtopics identified in Issue 5, unless otherwise negotiated and agreed between the parties, to the extent that (1) the 1997 contract contains language related to these issues, (2) the parties have not agreed to other language in the course of their negotiations, and (3) such language is not contrary to any Commission or FCC rule or order, including this Order. The Commission will allow the limited use of terms from the 1997 interconnection agreement as set forth above. The parties have negotiated for many months on this interconnection agreement, and the Commission does not want to infringe upon the agreements that the parties have thus far reached.

Ordering Paragraph:

Unless otherwise negotiated and agreed between the parties with respect to ITC^DeltaCom's restated issues (a), (b), (c), and (d) set forth under the heading of "ITC^DeltaCom Position" above, the parties will use the language from the 1997 interconnection agreement as it relates to these four issues, to the extent that (1) the 1997 contract contains language related to these issues, (2) the parties have not agreed to other language in the course of their negotiations, and (3) such language is not contrary to any Commission or FCC order, including this Order.

Issue 6(a):
Should BellSouth be permitted to impose charges for BellSouth's OSS on ITC^DeltaCom?

ITC^DeltaCom Position:
BellSouth is not entitled to charge for development costs for OSS. If the Commission imposes development charges, such charges should be spread over all end user customers.

BellSouth Position:
This issue is not appropriate for arbitration because the Commission has already determined in a generic UNE cost proceeding the appropriate OSS rates for ITC^DeltaCom or any other CLEC. As determined previously by this Commission, under the Act and the FCC's orders and rules BellSouth is entitled to recover the reasonable charges it incurs in developing, providing, and maintaining the interfaces that make BellSouth's OSS accessible to CLECs.

Discussion:

ITC^DeltaCom contends that compensation for the use of BellSouth's OSS must be contingent upon fully implemented systems "that are functioning properly " (Wood, Tr. Vol. 1 at 320). ITC^DeltaCom also contends that it is not obligated to compensate BellSouth for the development costs incurred in creating BellSouth's CLEC OSS. (Wood, Tr. Vol. 1 at 320)

According to Mr. Wood, requiring CLECs to pay for OSS development would constitute a significant barrier to entry. (Wood, Tr. Vol. 1 at 320) ITC^DeltaCom contends that if BellSouth is compensated for the costs it incurs, it has no incentive to provide OSS capabilities efficiently and in a nondiscriminatory manner. (Wood, Tr. Vol. 1 at 322) Mr. Wood proposes that the equitable solution to recovery of OSS costs is that each carrier, including ILECs and CLECs, should bear its own costs in developing and implementing effective and efficient OSS systems. (Wood, Tr. Vol. 1 at 325) Additionally, Mr. Wood asserts that the only truly competitive neutral mechanism for recovery of OSS transition costs is for each carrier to be fully responsible for its own OSS. Alternatively, Mr. Wood offers that the most competitively neutral mechanism, should the Commission conclude that some portion of BellSouth's OSS transition costs are to be paid for by the CLECs, would be a per customer charge that includes all retail customers in the denominator of the calculation and which amortizes the costs over the appropriate economic life of the assets. (Wood, Tr. Vol. 1 at 328)

BellSouth contends that it is entitled, under both the Act and the FCC's orders and rules, to recover its costs in providing access to OSS to CLECs. According to BellSouth, this issue has been addressed in numerous forums. For example, in AT&T's appeal of the Kentucky Commission's decisions on UNE cost rates from AT&T's arbitration proceeding, the U.S.D.C. for the Eastern District of Kentucky confirmed that BellSouth is entitled to recover its costs for developing operations support systems. (C.A. No. 97-79, 9/9/98) The District Court's Order at 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." More importantly, BellSouth pointed out that this Commission has previously found BellSouth's OSS cost recovery proposal to be consistent with its prior ruling in the AT&T arbitration case (Docket No. 96-358-C) which stated that the costs would be shared equitably among all the parties that benefited from the interfaces. BellSouth witness Varner testified that the rates that BellSouth proposes to charge ITC^DeltaCom, or any other CLEC, for use of OSS in South Carolina are the rates adopted by the Commission in its Cost Orders and contained in Exhibit AJV-1 to Mr. Varner's testimony (Hearing Exhibit 10). (Varner, Tr. Vol. 1 at 474).

BellSouth contends that Mr. Wood's criticisms of BellSouth's methodology for determining its OSS costs are without merit. According to BellSouth, this Commission has already addressed the validity of the OSS costs in its Cost Orders. Mr. Varner testified that Mr. Wood ignores the fact that the costs BellSouth presented in the Generic UNE Cost docket reflect only those costs directly attributable to establishing interfaces for use by CLECs. According to BellSouth, Mr. Wood's statement on page 13 of his testimony that "the new OSS implemented by BellSouth will benefit its own retail customers" is simply false. These interfaces are merely another layer to an existing legacy system, not an improvement to that legacy system. Thus, the OSS development and improvement can only benefit the CLEC. (Varner, Tr. Vol. 1 at 475)

Moreover, Dr. Taylor contends on behalf of BellSouth that Mr. Wood's analysis is improper because it ignores the economic principle of cost causation. According to Dr. Taylor, cost causation determines the source of a cost and assesses charges on that source for effecting full cost recovery. Because BellSouth has had 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. Dr. Taylor testified that if cost causation principles are not applied, entrants will demand excessively capital-intensive systems, and costs to telecommunications users will be higher than necessary. (Taylor, Tr. Vol. 1 at 537-39)

BellSouth contends that the Commission should reaffirm its previous holdings that BellSouth is entitled to recover its OSS development costs from the cost-causer – namely, the CLECs for whom the interfaces were developed. According to BellSouth, such an action is consistent with the Act and with FCC orders and rules.

Upon consideration of this issue, the positions of the parties, and the evidence from the hearing, the Commission finds that its previously issued Cost Orders in Docket No. 97-374-C are controlling. The Commission finds that its previously approved UNE rates should apply to the new interconnection agreement. This arbitration proceeding is not the proper forum for challenging UNE rates previously established. Moreover, under the principles of cost causation, the costs incurred in developing CLEC OSS should be recovered from the cost- causer – namely, the CLEC.

Ordering Paragraph:

The interconnection agreement shall incorporate rates for OSS as established by

Order No. 98-214 (June 1, 1998) in Docket No. 97-374-C. This Commission affirms its previous ruling that BellSouth is entitled to recover its OSS development costs, as well as costs incurred in the use of the OSS, from ITC^DeltaCom, and other CLECs who utilize the OSS.

Issue 6(b):

What are the appropriate recurring and non-recurring rates and charges for:

(a) two-wire ADSL/HDSL compatible loops?
(b) four-wire ADSL/HDSL compatible loops?
(c) two-wire SL1 loops?
(d) two-wire SL2 loops?
(e) two-wire SL2 Order Coordination for Specified Conversion Time?

ITC^DeltaCom Position:

ITC^DeltaCom contends that the Commission needs to set new rates for each of the referenced items that will be FCC compliant TELRIC rates.

BellSouth Position:

This issue is not appropriate for arbitration because this Commission has previously determined rates for the referenced items in a generic UNE cost proceeding. The UNE rates adopted by this Commission should be the rates incorporated into the parties' interconnection agreement. The exception to this position is for item (b), four-wire ADSL/HDSL compatible loops, because the ADSL functionality is not applicable to four-wire loops.

Discussion:

ITC^DeltaCom contends that the Commission needs to establish new rates for the specified elements because the rates the Commission established in Docket No. 97-374-C are not FCC compliant TELRIC cost studies. (Wood, Tr. Vol. 1 at 347 – 348) Mr. Wood contends that because the cost studies were adopted while the FCC pricing rules were vacated, the studies are not compliant with the FCC's cost methodology. (Wood, Tr. Vol. 1 at 349) Mr. Wood contends that "[a]s a result of the reinstatement of the FCC rules, certain inputs, assumptions, and methodologies inherent in the BellSouth cost studies do not comply with the current law" (Wood, Tr. Vol. 1 at 350)

BellSouth contends that Issue 6(b) is one of several issues in this proceeding that does not need to be arbitrated because the Commission has already decided the issues. According to Mr. Varner, the appropriate rates for the UNEs identified by ITC^DeltaCom are the rates specified in the Commission's cost orders. (Varner, Tr. Vol. 1 at 476) BellSouth contends that an arbitration proceeding is not the appropriate place for a single CLEC to challenge the rates that were established in a generic, open cost proceeding. The Commission simply should adopt the rates established in its generic cost proceeding, and order that the parties incorporate such rates into the agreement.

ITC^DeltaCom challenges the rates established by the Commission on the grounds that the rates are not TELRIC-based rates. BellSouth contends that despite Mr. Wood's extensive testimony on the subject, he produced no evidence to contradict Ms. Caldwell's testimony that the studies BellSouth presented in conjunction with the Commission's cost proceeding were FCC-compliant TELRIC cost studies. Mr. Wood criticized the studies because they did not provide for geographic deaveraging of rates. (Wood, Tr. Vol. 2 at 232) BellSouth contends that this criticism is irrelevant because the FCC has stayed the implementation of geographic deaveraging until after the implementation of universal service and thus geographic deaveraging is not required at this point in time. According to BellSouth, until the FCC reinstates the geographic deaveraging requirement, there is no obligation for BellSouth, or this Commission, to deaverage cost studies or rates. BellSouth contends that there is no reason for the

Commission to alter its finding in the cost proceeding that "BellSouth has submitted detailed cost studies, which we believe, as modified, comply with all applicable legal standards." (Caldwell, Tr. Vol. 1 at 568)

ITC^DeltaCom witness, Mr. Moses, challenged BellSouth's nonrecurring charge for ADSL compatible loops. BellSouth contends that Mr. Moses' position was based on a fundamental misunderstanding of the difference between ADSL wholesale service and ADSL compatible loops. (Varner, Tr. Vol. 1 at 476) Mr. Varner explained BellSouth's ADSL offerings as follows: BellSouth's ADSL service, contained in BellSouth's FCC Tariff No. 1, is a non-designed interstate transport service which is an overlay to the customer's existing service, i.e., basic residence or business service, which the customer orders and pays for separately. ADSL service provides the ability to offer high-speed data service over the same line that is used to provide an existing end user's basic local exchange service. It is offered on a wholesale basis typically to Internet Service Providers ("ISPs"). These ISPs in turn resell the service to end users and charge the end users for the high speed data access. For example, BellSouth.net has one ADSL service option for which it charges $59.95 per month plus an installation charge of $199.00. The end user obtains voice grade basic local exchange service, vertical features, and access to toll services from BellSouth or from a reseller of BellSouth's basic local service. (Varner, Tr. Vol. 1 at 477)

Mr. Varner further testified that by comparison, an ADSL compatible loop is a connection from the BellSouth wire center to the end user's premises that is technically capable of providing both ADSL and basic local exchange service. This loop is an unbundled capability sold to a CLEC. The CLEC generally installs equipment in BellSouth's central office to provide the voice and data service over this loop. A CLEC utilizing an ADSL compatible loop would provide its end user with basic local exchange service, vertical features, access to toll service, and ADSL service. It is also important to note that a CLEC's purchase of an ADSL compatible loop ensures that the loop will remain ADSL compatible. With BellSouth's wholesale ADSL service, there is a possibility that certain network reconfigurations could cause the line to lose its ability to support ADSL service. (Varner, Tr. Vol. 1 at 477-78)

Mr. Varner contended that the $100 installation charge to which Mr. Moses referred is for overlaying ADSL tariffed service onto the customer's existing service. That charge, according to BellSouth, does not represent installation of an additional physical facility. The cost-based non-recurring price for the ADSL compatible loop recovers the cost associated with service inquiry, service order, engineering, connect and test, and travel activities. Because ADSL compatible loops are designed, they require production of a Design Layout Record (DLR), as well as involvement of special services work groups. ADSL service does not generally require a premises visit unless the Network Interface Device ("NID") needs to be replaced. By comparison, the ADSL compatible loop offering always requires a designed physical loop facility and always requires dispatch of a BellSouth technician to the customer's premises. (Varner, Tr. Vol. 1 at 478)

BellSouth contends that ITC^DeltaCom has inappropriately attempted to represent one rate element of BellSouth's wholesale ADSL tariff offering as an exact substitute for the nonrecurring installation rate for an ADSL compatible loop. This is an "apples to oranges" comparison, according to BellSouth. Based on the information presented above, BellSouth requested that the Commission require that ITC^DeltaCom purchase ADSL compatible loops at the cost-based rates specified in the Commission's Cost Orders as shown on Exhibit AJV-1 to Mr. Varner's testimony (Hearing Exhibit #10).

BellSouth contends that the studies adopted by the Commission in Docket No. 97-374-C were FCC-compliant TELRIC studies. Mr. Varner testified that the Commission, therefore, should order that the parties adopt the rates set for the identified elements in the generic cost proceeding and incorporate such rates into the interconnection agreement.

Upon consideration of this issue and the positions of the parties, the Commission finds that its previously issued Costs Orders in Docket No. 97-374-C are controlling. The Commission finds that its previously approved UNE rates should apply to the new interconnection agreement. This arbitration proceeding is not the proper forum for challenging UNE rates previously established. The Commission finds that the rates in Docket No. 97-374-C were derived using TELRIC cost methodology and thus are appropriate.

Ordering Paragraph:

The Commission finds that the rates previously established in Docket No. 97-374-C are appropriate and should be utilized in the instant proceeding. The interconnection agreement shall incorporate the rates established in Docket No. 97-374-C for each of the identified elements.

Issue 6(c):
Should BellSouth be permitted to charge ITC^DeltaCom a disconnection charge when BellSouth does not incur any costs associated with such disconnection?

ITC^DeltaCom Position:
BellSouth does not incur any costs associated with disconnection and therefore there should be no charge for disconnection.

BellSouth Position:
This issue is not appropriate for arbitration because this Commission has previously determined, in its generic UNE cost proceeding, that the disconnect costs which are included in the nonrecurring rates, are appropriate. BellSouth should recover disconnection costs in cases in which it incurs costs associated with disconnection.

Discussion:

ITC^DeltaCom contends that BellSouth is not entitled to charge an up-front disconnection charge when no physical disconnection of facilities occurs. (Wood, Tr. Vol. 1 at 335) Mr. Wood also contended that BellSouth should not charge a disconnect charge when the customer selects another local provider because "the disconnect from the initial local service provider and the connect to the new local service provider are a single activity." (Wood, Tr. Vol. 1 at 335)

BellSouth contends that ITC^DeltaCom is burdening this Commission with an issue that the Commission has already decided. BellSouth testified that in Docket No. 97-374-C (the generic UNE cost proceeding), the Commission made a decision on disconnect costs, the precise question ITC^DeltaCom is raising in Issue 6(c). According to BellSouth, the Commission allowed BellSouth to recover its disconnect costs in the initial installation price of the UNE, just as an end user customer pays for disconnect costs in the installation price of a BellSouth retail service. BellSouth contends that Mr.

Wood is seeking to have this Commission reverse its decision now, despite the fact that ITC^DeltaCom apparently did not deem the issue important enough to participate in the UNE cost proceeding where this decision and other UNE pricing decisions were made. (Varner, Tr. Vol. 1 at 478-479; Caldwell, Tr. Vol. 1 at 566-67)

BellSouth testified that the Commission's decision on disconnect costs was the right decision. According to BellSouth, it incurs costs to disconnect services provided to CLECs, and it is appropriate to recover those costs in prices charged to CLECs. Any applicable costs to disconnect UNEs are included in the rates adopted by the Commission in its Cost Orders and are reflected in the rates contained in Exhibit AJV-1 to Mr. Varner's testimony (Hearing Exhibit #10).

Upon consideration of this issue and the positions of the parties, the Commission finds that its previous Costs Orders in Docket No. 97-374-C are controlling. The Commission finds that its previously approved UNE rates should apply to the new interconnection agreement. In Docket No. 97-374-C, the Commission, in establishing the installation price of the UNE, found it appropriate to allow recovery of the disconnect costs. The Commission does not believe that the present arbitration proceeding is the proper forum for challenging UNE rates previously established. The Commission finds that the rates in Docket No. 97-374-C were derived using TELRIC cost methodology and thus are appropriate.

Ordering Paragraph:

BellSouth is entitled to charge ITC^DeltaCom a disconnection charge in cases in which BellSouth incurs costs associated with such disconnection. Any applicable costs to disconnect UNEs are included in the rates adopted by the Commission in Docket No. 97-374-C and should be incorporated into the parties' interconnection agreement.

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?

ITC^DeltaCom Position:

Until BellSouth produces, and the Commission adopts, the results of a cost study for cageless collocation consistent with the FCC's TELRIC pricing rules, interim rates should be based on BellSouth's rates for virtual collocation with appropriate adjustments to remove costs associated with installation, maintenance and repair of ITC^DeltaCom's equipment.

BellSouth Position:

The Commission has previously determined, in Docket No. 97-374-C (generic UNE cost proceeding) the recurring and nonrecurring rates that are applicable for physical collocation, which are the same rates applicable to cageless and shared collocation. Thus, with respect to these previously determined rates, there is no need for further review. There are, however, some additional collocation elements that ITC^DeltaCom may request for such collocation: specifically, fiber cross-connects and fiber point of termination ("POT") bays. BellSouth has submitted cost studies and proposed rates for these elements, consistent with the Commission's Order in Docket No. 97-374-C. Finally, BellSouth is also proposing an interim rate for card key security access to collocation space, until such time as permanent rates can be established.

Discussion:

ITC^DeltaCom contends that BellSouth does not have rates for cageless and shared collocation. (Wood, Tr. Vol. 1 at 329) Thus, ITC^DeltaCom contends that until appropriate rates are adopted, BellSouth should use BellSouth's rates for virtual collocation with appropriate adjustments to remove costs associated with installation, maintenance and repair of ITC^DeltaCom's equipment. (Wood, Tr. Vol. 1 at 329-330)

BellSouth contends that the Commission adopted rates for physical collocation in Docket No. 97-374-C. According to BellSouth, BellSouth's physical collocation rates, as established by the Commission, appropriately apply to physical collocation whether an arrangement is enclosed (caged) or unenclosed (cageless) or whether collocation is shared. Mr. Varner testified that rates have been established for floor space on a per square foot basis and for power on a per amp basis. Cross-connect charges apply on a per connection basis, and entrance cable installation charges apply only if the CLEC requests such installation. Because BellSouth structured the physical collocation elements in such a manner, BellSouth contends that all of the piece parts required for cageless collocation have established rates. (Varner, Tr. Vol. 1 at 480)

BellSouth further testified that since Docket No. 97-374-C, CLECs have requested additional elements related to physical collocation, specifically wire cages and fiber cross-connects. BellSouth witness Varner explained that BellSouth did cost studies for these rates consistent with the Commission's cost orders in the generic UNE cost proceeding. (Varner, Tr. Vol. 1 at 480) According to BellSouth witness Ms. Caldwell, the cost studies presented by BellSouth reflect 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 network capability. These costs typically include five major categories of activity: service inquiries, service order, engineering, connect and test, and technician time. (Caldwell, Tr. Vol. 1 at 565)

Ms. Caldwell testified that the Commission should accept BellSouth's cost studies because the methodology is identical to that adopted by the Commission in the generic UNE cost proceeding. In that proceeding the Commission ruled that "BellSouth has submitted detailed cost studies, which we believe, as modified, comply with all applicable legal standards." (Order, Docket No. 97-374-C, at 40) Contrary to ITC^DeltaCom's position, Ms. Caldwell explained, the recent Supreme Court ruling does not alter the appropriateness of BellSouth's cost studies, because BellSouth adhered to the guidelines of a TELRIC study when it filed its cost studies in Docket No. 97-374-C. Specifically, Ms. Caldwell testified that BellSouth adhered to the following guidelines which are still in place:

- Costs should reflect forward-looking 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 developed on state-specific characteristics and data;
- Costs should be complete, reflecting the full costs of installation as well as the inclusion of shared and common costs. (Caldwell, Tr. Vol. 1 at 568-69)

Moreover, according to Ms. Caldwell, BellSouth incorporated the adjustments to BellSouth's inputs that the Commission ordered in Docket No. 97-374-C. BellSouth utilized a 10.86% cost of capital, the approved depreciation rates, and the Commission's 4.79% common cost factor. Furthermore, BellSouth used the adjusted fall-out factors of 5%. Thus, BellSouth contends that the cost studies filed by BellSouth in this proceeding comport with the adjustments the Commission ordered in the cost proceeding. (Caldwell, Tr. Vol. 1 at 570-71)

Additionally, Mr. Varner testified that it is necessary for BellSouth to offer an interim rate for Security Access System in order to meet the requirements of the FCC's recent Advanced Services Order as it relates to the provision of collocation. The Commission is aware that this security offering is an optional feature that the FCC has required. According to Mr. Varner, BellSouth proposes an interim rate, subject to true-up, equal to the rate approved by the Florida Public Service Commission on April 29, 1998, for Physical Collocation – Security Access System until a cost study for South Carolina can be completed. The proposed interim rate is contained in Exhibit AJV-1 (Hearing Exhibit No. 10). (Varner, Tr. Vol. 1 at 480)

For these reasons, BellSouth contends that the Commission should order the parties to adopt the rates for physical collocation previously established by the Commission in Docket No. 97-374-C for cageless and shared collocation. Moreover, BellSouth contends that the Commission should adopt the rates for wire cages and fiber cross connects proposed by BellSouth in this proceeding as well as adopt the interim rate proposed for Security Access. Finally, BellSouth contends that the Commission should adopt for Security Access System an interim rate, subject to true-up, equal to the rate approved by the Florida Public Service Commission on April 29, 1998, for Physical Collocation – Security Access System until a cost study for South Carolina can be completed.

Upon consideration of this issue and the positions of the parties, the Commission finds it appropriate to use the elements of physical collocation established in Docket No. 97-374-C as the rates for cageless and shared collocation. The Commission finds these rates apply to physical collocation whether the collocation arrangement is caged or cageless or whether the collocation is shared as the rates have been established for floor space on a square foot basis and for power on a per amp basis. Further, the Commission finds that the rates proposed for wire cages and fiber cross connects should be approved as these rates were calculated using cost studies with methodology identical to that adopted by the Commission in the generic UNE cost proceeding. The Commission has previously found these studies to be TELRIC cost studies that comply with all federal and state regulations and orders. The Commission also finds the interim rate proposed by BellSouth for the Security Access System to be reasonable and adopts the interim rate, subject to true-up upon completion of a cost study for South Carolina.

Ordering Paragraph:

The parties shall adopt the rates for the elements of physical collocation previously established by this Commission in Docket No. 97-374-C as the rates for cageless and shared collocation, and shall incorporate such rates into the parties' interconnection agreement. The parties shall also adopt BellSouth's proposed rates for wire cages and fiber cross connects. Further for Security Access System, the parties shall utilize as an interim rate, subject to true-up upon completion of a cost study for South Carolina, the rate approved by the Florida Public Service Commission on April 29, 1998, for Physical Collocation – Security Access System.

Issue 6(e):
Should BellSouth be permitted to charge for ITC^DeltaCom conversions of customers from resale to unbundled network elements? If so, what is the appropriate charge?

ITC^DeltaCom Position:
BellSouth should be required to convert a customer's bundled local service to an unbundled element or service and assign such unbundled element or service to ITC^DeltaCom with no penalties, rollover, termination or conversion charges to ITC^DeltaCom or the customer.

BellSouth Position:
BellSouth is not obligated under the Act or FCC rules to convert a CLEC's customer from resale to UNEs at no cost. BellSouth is entitled to recover its reasonable costs *if it performs this function.* More importantly, ITC^DeltaCom, and other CLECs, should not be permitted to convert resale service to UNEs because this conversion would in essence require BellSouth to provide a combination of UNEs, which the Act does not obligate it to provide. Moreover, the UNEs that ILECs must provide on an individual, much less combined basis will not be defined until the FCC all parts of completes its Rule 319 proceeding.

Discussion:

ITC^DeltaCom contends that it is entitled to convert any services it purchased as resale services to individual UNEs for no charge. (Wood, Tr. Vol. 2 at 255 – 256) ITC^DeltaCom further contends that if BellSouth is permitted to charge for this conversion, the rate must be cost-based. (Wood, Tr. Vol. 2 at 255) BellSouth contends that contrary to what ITC^DeltaCom is seeking in this proceeding, a CLEC cannot convert resale service to individual UNEs; rather, the resale service would be converted to a *combination* of UNEs. BellSouth contends that it is not obligated under the Act to combine UNEs for CLECs at the sum of the individual UNE prices. According to BellSouth, converting resale to combined UNEs at the sum of the UNE prices simply would be an end run around the Act's division between resale and UNEs and would create an unjustified windfall for the CLEC. (Varner, Tr. Vol. 1 at 481) After the Rule 319 proceeding,[2] when the individual UNEs are defined, resold services that are converted to UNE combinations will, by definition, recreate a BellSouth retail service. According to BellSouth, UNE combinations that replicate resale should be priced at resale rates. In summary, Mr. Varner testified that if ITC DeltaCom wants "individual UNEs, they could buy them. There's no such thing as converting in that case." (Varner, Tr. Vol. 2 at 258)

Upon consideration of this issue and the positions of the parties, the Commission concludes that there may be instances where a customer may be properly converted from resale to a UNE based platform. When such a conversion occurs, there may, or may not, be network changes associated with the conversion. BellSouth is entitled to recover its reasonable costs incurred in converting the customer from resale to unbundled network elements Where there are no network changes associated with the conversion, the Commission is aware that there may be administrative costs for which BellSouth is entitled to recovery. Therefore, BellSouth should be allowed to recover administrative costs associated with a conversion where no network changes are required. If a

[2] The Commission is aware of the FCC's September 5, 1999, press release on the Rule 319 proceeding. The FCC's written order may impact this proceeding.

conversion requires network changes, BellSouth should be allowed recovery of the costs associated with those network changes.

Ordering Paragraph:

If ITC^DeltaCom converts customers from resale to unbundled network elements and if no network changes are required, BellSouth should be allowed to recover its administrative costs associated with that conversion. If ITC^DeltaCom converts customers from resale to unbundled network elements and if network changes are required to make the conversion, BellSouth shall be allowed to recover the costs for the network changes.

Issue 7(b)(ii):
What procedures should be adopted for meet point billing?

ITC^DeltaCom Position:
MECAB and MECAD methods do not require ITC^DeltaCom to file NECA FCC Tariff No. 4 and thus ITC^DeltaCom should not be required to accept BellSouth's proposed default meet point billing parameters.

BellSouth Position:
BellSouth seeks to have ITC^DeltaCom conform with the standard industry procedures, to the extent possible, that have been in place for ILECs and IXCs since 1986. These procedures are documented in the Multiple Exchange Carrier Access Billing ("MECAB") and Multiple Exchange Carrier Ordering Document ("MECOD"), each of which was developed by the Ordering and Billing Forum ("OBF") and are contained in the OBF Guidelines.

Alternatively, BellSouth proposes that default parameters be used in lieu of the National Exchange Carriers Association ("NECA") FCC Tariff No. 4 which is the foundation for the MECAB and MECOD methods. Under this proposal, all meet point arrangements will be billed on a multi-tariff, multi-bill method with the border interconnection percentage ("BIP") fixed at 95% BellSouth and 5% ITC^DeltaCom. The interim method would be discontinued once ITC^DeltaCom becomes a member of NECA and begins to use the NECA infrastructure (e.g. MECAB and MECOD methods) or when the industry develops a (better) alternative solution.

Discussion:

The parties agree that the only issue regarding meet point billing that remains between the parties is the means by which the parties will notify other interconnecting companies of the meet point billing arrangements made between BellSouth and ITC^DeltaCom. Meet point billing arrangements are the means by which companies inform other interconnecting carriers of the terms of the companies' interconnection arrangement. In other words, if both BellSouth and ITC^DeltaCom are providing services to AT&T, AT&T needs a means by which it can verify its bill for those services and confirm the division of services between ITC^DeltaCom and BellSouth. (Scollard, Tr. Vol. 1 at 597-98) Over the years, the industry has used the infrastructure surrounding the NECA FCC Tariff No. 4 to provide the requisite information. (Scollard, Tr. Vol. 1 at 598)

ITC^DeltaCom contends that it should not be required to become a member of NECA in order to conduct meet point billing. ITC^DeltaCom contends such an arrangement is not necessary because ITC^DeltaCom does not jointly provide dedicated facilities with BellSouth. (Moses, Tr. Vol. 2 at 264) BellSouth contends that ITC^DeltaCom's proposal is unworkable because the relevant issue is how a third party will find out the terms of the arrangement between BellSouth and ITC^DeltaCom; the terms of the actual arrangement between BellSouth and ITC^DeltaCom are irrelevant to this issue. (Scollard, Tr. Vol. 2 at 265) According to BellSouth, the MECAB and MECOD methods are based on the industry guidelines and will efficiently handle the information needs of all impacted companies. BellSouth believes that ITC^DeltaCom's refusal to become a member of NECA will create a myriad of administrative complications. In an effort to compromise, however, BellSouth has proposed to ITC^DeltaCom an interim arrangement that can be used in lieu of NECA processes. As explained by BellSouth witness Scollard, 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. Under this proposal, all impacted companies will have a reasonable opportunity to have the information necessary to validate the bills received from both BellSouth and ITC^DeltaCom. BellSouth testified that this interim method would be discontinued once ITC^DeltaCom begins to use the NECA infrastructure or when the industry develops an alternative solution. (Scollard, Tr. Vol. 1 at 598-99)

BellSouth contends that ITC^DeltaCom's refusal to conform to industry practice will not just impact its relationship with BellSouth, but will impact the business of all the carriers who do business with both BellSouth and ITC^DeltaCom. For these reasons, BellSouth asked the Commission to order ITC^DeltaCom to accept BellSouth's proposals for meet point billing.

Upon consideration of this issue and the positions of the parties, the Commission finds that meet point billing is not necessary. The record establishes that ITC^DeltaCom provides 100% of the transport facilities to the BellSouth tandem. Therefore, the meet point billing percentage is 100% ITC^DeltaCom and 0% BellSouth. Thus the Commission concludes there is no need to adopt procedures for transport meet point billing in the interconnection agreement.

Ordering Paragraph:

The Commission finds that there is no need to file meet point billing percentage. Since ITC^DeltaCom provides 100% of the transport facilities to the BellSouth tandem, there is no need to adopt meet point billing procedures in the interconnection agreement.

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?

ITC^DeltaCom Position:
The party seeking the audit should pay under all circumstances.

BellSouth Position:
BellSouth agrees that the party requesting an audit should be responsible for the costs of the audit, except in the event the audit reveals that either party is found to have overstated the PLU or PIU by 20 percentage points or more, in which case that party should be required to reimburse the other party for the costs of the audit. This proposal does not constitute a penalty because the costs are those actually incurred in performing the audit.

Discussion:

ITC^DeltaCom contends that in all cases, the party that requests an audit should be the party that pays for the audit. (Rozycki, Tr. Vol. 2 at 267) BellSouth contends that a party who overstates the PLU or PIU by 20 percentage points or more should pay for the cost of the audit. (Varner, Tr. Vol. 2 at 268) BellSouth contends that its proposal is supported by industry practice. Mr. Varner testified that PLU and PIU reporting are an integral part of parties' interconnection with one another's networks, and is done essentially on the honor system. In an ideal world, according to BellSouth, neither party would need to audit the reports of the other. BellSouth contends that if, however, one party overstates PLU or PIU by more than 20 percentage points, questions about reliability and good faith are raised. In those circumstances, according to BellSouth, audits will need to be conducted and costs will be incurred. BellSouth testified that those costs should be paid by the cost causer, i.e. the party that overstates the PLU or PIU. BellSouth contends that this proposal is not, as ITC^DeltaCom contends, akin to a penalty provision because BellSouth is proposing only that actual costs incurred be reimbursed. Mr. Varner testified that BellSouth is not seeking to impose a deterrent in the form of a punitive payment on ITC^DeltaCom. (Varner, Tr. Vol. 1 at 482) Thus, according to BellSouth, its proposal is not improper.

Upon consideration of this issue and the positions of the parties, the Commission concludes that the position espoused by BellSouth is reasonable. The Commission finds it reasonable that the party which requests the audit to pay for the audit. Furthermore, the Commission concludes that the provision that requires a party who overstates the PLU or PIU by more than 20 percentage points to be fair and reasonable in light of the fact that PLU and PIU reporting is done so on the honor system. The Commission finds that this position is not a penalty provision for poor performance as suggested by ITC^DeltaCom. This position of requiring a party who overstates the PLU or PIU by more than twenty percentage points is not intended as punitive but is intended to encourage the parties to accurately and honestly make their accounting reports.

Ordering Paragraph:

The Commission orders that the party seeking the audit of PLU or PIU reporting will pay for the audit, except that if the audited party is found to have overstated the PLU or PIU by 20 percentage points or more, the audited party will pay for the audit.

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?

ITC^DeltaCom Position:
The losing party to an enforcement proceeding or proceeding for breach of the interconnection agreement should pay the costs of such litigation to ensure that frivolous lawsuits are not brought and to deter BellSouth from gaming the regulatory process by forcing ITC^DeltaCom to bring enforcement actions at its own expense.

BellSouth Position:
This issue is not appropriate for arbitration. The Act does not address, much less discuss, fee provisions. There is no statutory obligation for BellSouth to agree to a "loser pays" arrangement, and thus the issue should not be arbitrated. Moreover, the inclusion of a "loser pays" provision would have a chilling effect on both parties to the agreement to the extent that even meritorious claims may not be filed.

Discussion:

ITC^DeltaCom contends that the agreement should include an attorneys' fee provision that obligates the losing party in an enforcement proceeding to pay the fees of the prevailing party. (Rozycki, Tr. Vol. 2 at 270) Mr. Rozycki stated that a "loser pays" provision will prevent a party from filing frivolous lawsuits or complaints. (Rozycki, Tr. Vol. 2 at 270) According to BellSouth, a "loser pays" provision would have a chilling effect on claims before state commissions. BellSouth believes that with the current uncertainty in the regulatory and legal landscape, there are often questions of interpretation and enforcement in which state commissions should be involved. (Varner, Tr. Vol. 2 at 271) Moreover, according to BellSouth, often there is no clear winner or loser in regulatory proceedings, so that a "loser pays" provision would in all likelihood do no more than generate additional litigation over who should pay the attorneys' fees. (Varner, Tr. Vol. 1 at 483-4)

BellSouth states that it will agree to appropriate language regarding jurisdictional issues that would allow the parties to seek damages under the Agreement from the courts. BellSouth contends that the parties should agree at the time they execute the interconnection agreement the forum in which disputes will be resolved. Such language is standard contract language which gives the parties certainty as to how and where disputes will be resolved. As explained by Mr. Varner, these provisions help prevent the potential for "forum shopping" as well as the potential for inconsistent decisions under the agreement. (Varner, Tr. Vol. 1 at 483-4)

Upon consideration of this issue and the positions of the parties, the Commission finds that a form of the "loser pays" provision should be included. Therefore, the Commission concludes that the proper "loser pays" provision should include language that the "loser pays" only in those cases where the outcome is clear and there is a clear winner in the proceeding. The Commission believes that the provision as adopted herein will have the desired effect of thwarting frivolous litigation but will not have the chilling effect on claims before state commissions as suggested by BellSouth.

Ordering Paragraph:

The Commission directs the parties to include a "loser pays" provision in the interconnection agreement, but the provision should include the caveat that the "loser pays" only in those cases where the outcome is clear and there is a clear winner and loser.

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?

ITC^DeltaCom Position:
Language covering tax liability is not necessary in the interconnection agreement. If such language must be included, the language should specify that the parties implement the contract consistent with applicable tax laws. Each party should bear its own tax liability.

BellSouth Position:
Tax issues are not addressed in Sections 251 or 252 of the Act. Thus, this issue is not subject to arbitration under Section 252 of the Act. If the Commission chooses to address this issue, the Commission should order that the parties include language in the agreement that clearly defines the respective duties of each party in the handling of tax issues

Discussion:

ITC^DeltaCom contends that it is unnecessary to have tax language in the interconnection agreement. (Rozycki, Tr. Vol. 2 at 272) It further contends that if the Commission deems such language appropriate, the language should be simple and require only that each party should obey all applicable tax laws and bear its own tax liability. BellSouth contends that neither Sections 251 nor 252 of the Act address tax liability and that consequently, this issue should be left to negotiation by the parties and should not be arbitrated. BellSouth contends that if the Commission chooses to address this issue, it should order the parties to include language in the agreement that clearly defines the respective duties and obligations of each party with respect to tax issues. (Varner, Tr. Vol. 2 at 273) BellSouth contends that its proposed tax language is based on its experiences with tax matters and liability issues in connection with the parties' obligations under interconnection agreements.

Upon consideration of this issue and the positions of the parties, the Commission concludes that each party should be responsible for its own tax liability. The Commission believes that tax liability should be assessed outside the interconnection agreement, but if the parties desire a provision in the interconnection agreement, the provision should simply provide that each party will be responsible for its own tax liability.

Ordering Paragraph:

The Commission orders that a provision regarding tax liability in the interconnection agreement, if any, should simply require each party to be responsible for its own tax liability.

Issue 8(f):
Should BellSouth be required to compensate ITC^DeltaCom for breach of material terms of the contract?

ITC^DeltaCom Position:
ITC^DeltaCom seeks performance penalties from BellSouth when BellSouth fails to meet certain performance benchmarks.

BellSouth Position:
This issue is not appropriate for Section 252 arbitration. Moreover, the South Carolina Commission has previously determined that it "lacks the jurisdiction or legislatively-granted authority to impose penalties or fines" in the context of an arbitration proceeding. Finally, ITC^DeltaCom's proposal represents a supplemental

enforcement scheme that is inappropriate and unnecessary. ITC^DeltaCom has adequate legal recourse in the event BellSouth breaches its interconnection agreement. For further information, see BellSouth's position on Issue 1(a).

Discussion:

ITC^DeltaCom requests inclusion in the interconnection agreement of a provision that recognizes a material breach of the interconnection agreement will give rise to liability. According to Mr. Rozycki, this provision is related to ITC^DeltaCom's proposed performance guarantees and will compensate ITC^DeltaCom for BellSouth's failure to comply with the interconnection agreement, particularly for a failure to comply with performance measurements. (Rozycki, Tr. Vol. 2 at 276) BellSouth contends that the issue of compensation for breach of contract, penalties or liquidated damages is not appropriate for arbitration. According to BellSouth, neither Section 251 nor 252 of the Act obligate BellSouth to pay penalties for a breach of the interconnection agreement. Moreover, BellSouth contends that the Commission has already found that it "lacks the jurisdiction to impose penalties or fines" in the context of an arbitration proceeding. (*See* Order No 97-189, Docket No. 96-358-C (AT&T arbitration), 3/10/97, at 6). Even if the Commission could award penalties, BellSouth contends that the incorporation of ITC^DeltaCom's proposal into the agreement is unnecessary. According to BellSouth, South Carolina law and Commission procedures are available and are adequate to address any breach of contract situation should it arise. (Varner, Tr. Vol. 1 at 486)

Upon consideration of this issue and the positions of the parties, the Commission adopts BellSouth's position as appropriate. This Commission has previously found in this Order, as well as in a previous arbitration order (*See* Order No. 97-189, Docket No. 96-

This Order shall remain in full force and effect until further Order of the Commission.

IT IS SO ORDERED.

BY ORDER OF THE COMMISSION:

Philip T. Bradley

Chairman

ATTEST:

Gary E. Walsh

Executive Director

(SEAL)

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
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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 for ISP-Bound Traffic	)	CC Docket No. 99-68
	)	

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 <u>any</u> 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

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[8] 47 U.S.C. §§ 251 and 252.

reciprocal compensation. Inter-carrier compensation for jointly provided interstate services is 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

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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.

regulate matters relating to interstate communications that, under the Act, are specifically reserved to the Commission.[10]

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

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[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 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.

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.

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 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.

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[12] For BellSouth, exchange rates are generally flat-rated.

[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.

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 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.

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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*.

15 Prior to revenue sharing for Feature Group A, the Commission had established guidelines applicable to primary carrier/secondary carrier agreements.

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]

C.

[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.

ISP-Bound Traffic Cannot Practically Be Separated Into Its Interstate and

Intrastate Components

that ISP-bound traffic was substantially interstate in nature. The Commission, howev

In the *Declaratory Ruling*, the Commission determined er, 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]

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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[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.

[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

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-

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> "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.

bound traffic that recognizes the interstate character of such traffic and is consistent with Commission policies and goals.

Respectfully submitted

BELLSOUTH CORPORATION
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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
Office of the Secretary
Federal Communications Commission
445 Twelfth Street, S. W.
Room TW-A325
Washington, DC 20554

*ITS
1231 20th Street, N. W.
Washington, DC 20036

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.[20] 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.[21] 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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20 *See e.g.*, RCN at 6; CompTel at 2-5; Choice Communications 2-3; Focal at 14; AOL at 10; AT&T at 8.

21 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. [22]

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.[23] 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 compensation that

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22 *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).

23 Numerous commenters urge the Commission to use the compensation mechanisms established for jointly provided access services.

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.[24] 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.[25] In its comments, BellSouth's proposed

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24 *See e.g.*, Focal at 8; RCN at 5; GSA at 12; CIX at 4; GST Telecom at 13.

25 *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.[26] 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.[27] 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.[28] 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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26 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.

27 *See e.g.,* KMC Telecom at 2-5; CTSI at 11-13.

28 *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.[29] 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.[30] In these parties' view, a minute is a minute and there should be symmetry between these types of calls.

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[29] 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.

[30] *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.[31] 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.[32] 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.[33] This proceeding is not the first time that the Commission was made

[31] *See e.g.*, NTCA at 3; TANE at 2.

[32] *See e.g.*, RCN at 11.

[33] 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.[34] 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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[34] *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.[35] 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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35 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,

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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.

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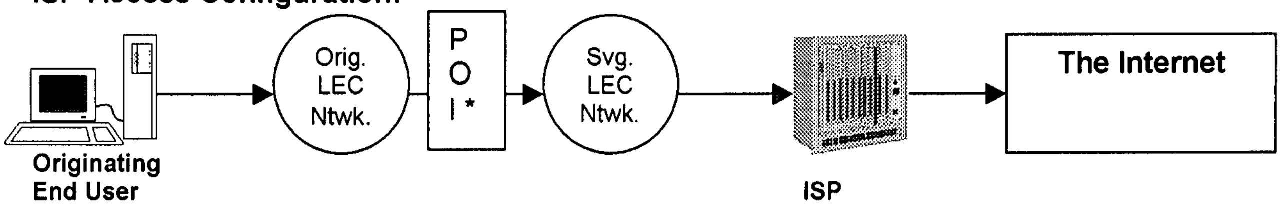
*   **VIA HAND DELIVERY**

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

<u>Summary of Proposed Interim Revenue Sharing Arrangement:</u>

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 JH-4 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 9,000 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 / 9,000 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 LEC A 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	8.06%	$17,444.70

NOTES:
(1) ISP-bound MOUs provided identified by Serving LEC & provided to Originating LEC
(2) Col. C calculated as follows: Col. B / 9,000 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 JH-4
(5) Col. F calculated as follows: Col. C * Col. D * Col. E

Calculation of Sharing Percentage

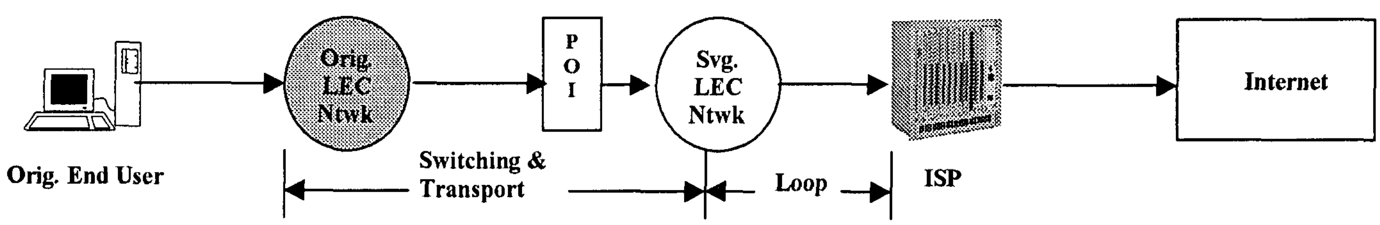
Sharing percentage is calculated by determining ratio of loop-related switching and transport facilities capital cost to total capital cost, then dividing by two since both Originating LEC and Serving LEC provide switching and transport facilities. BellSouth's sharing percentage is calculated as follows:

Loop Capital Cost	= $24.04
Associated Loop Switching Capital Cost	= 4.40
Associated Loop Transport Capital Cost	= 0.22

Total Capital Cost	= $28.66

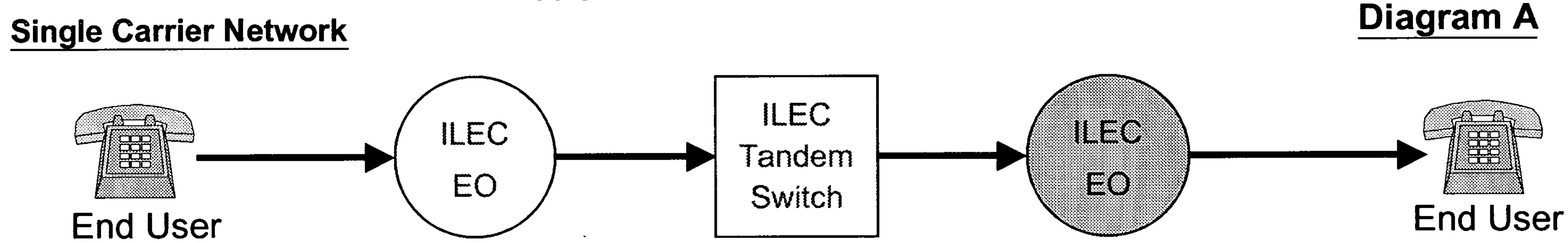
(($4.40 + $.22) ÷ $28.66) ÷ 2 = 8.06%

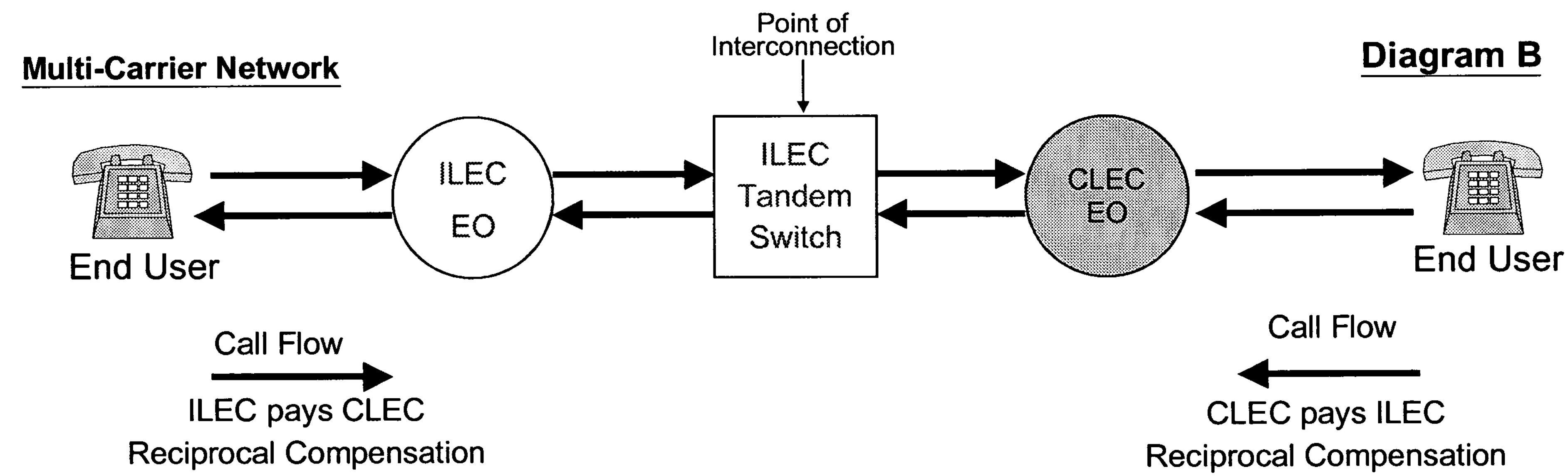
Therefore, BellSouth will apply a sharing percentage of 8.06% to calculate the compensation due it when BellSouth is an Originating LEC. Likewise, when BellSouth is the Serving LEC, BellSouth expects that a sharing percentage of 8.06% will be applied by the Originating LEC(s) when calculating compensation BellSouth owes.



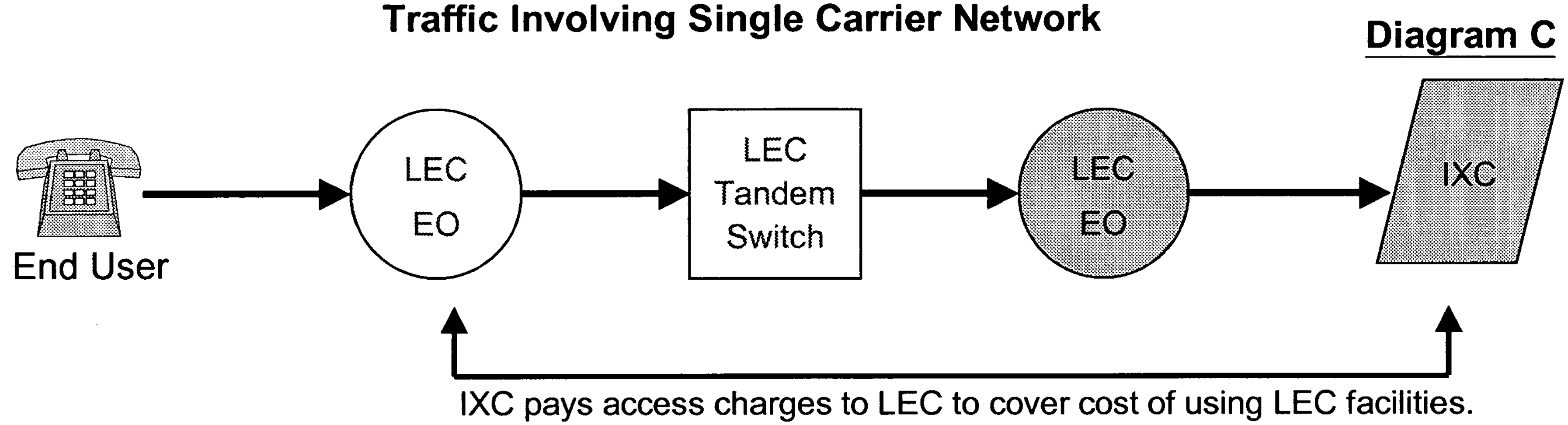
Reciprocal Compensation

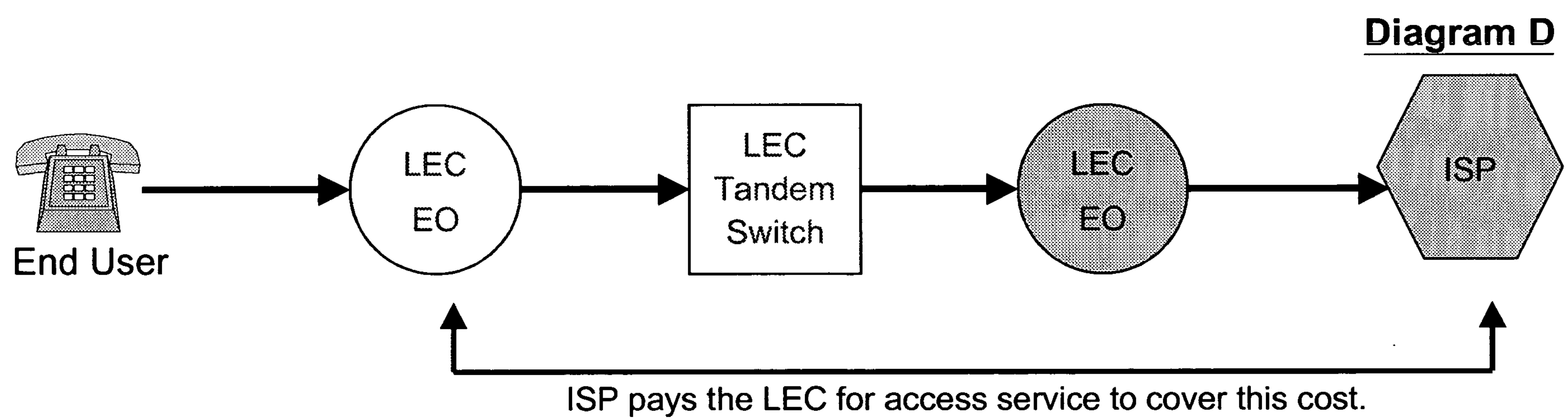
- ILEC receives monthly fee from its end user to apply towards the cost of terminating local calls





Access Service for IXC-Bound and ISP-Bound Traffic Involving Single Carrier Network





Single Network and Multi-Network Provision of Access Service

Diagram E

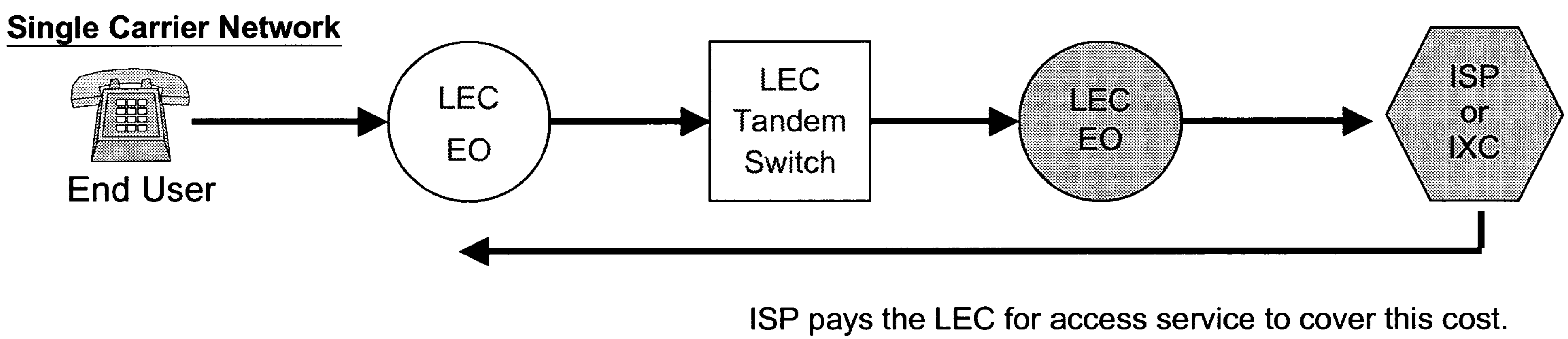
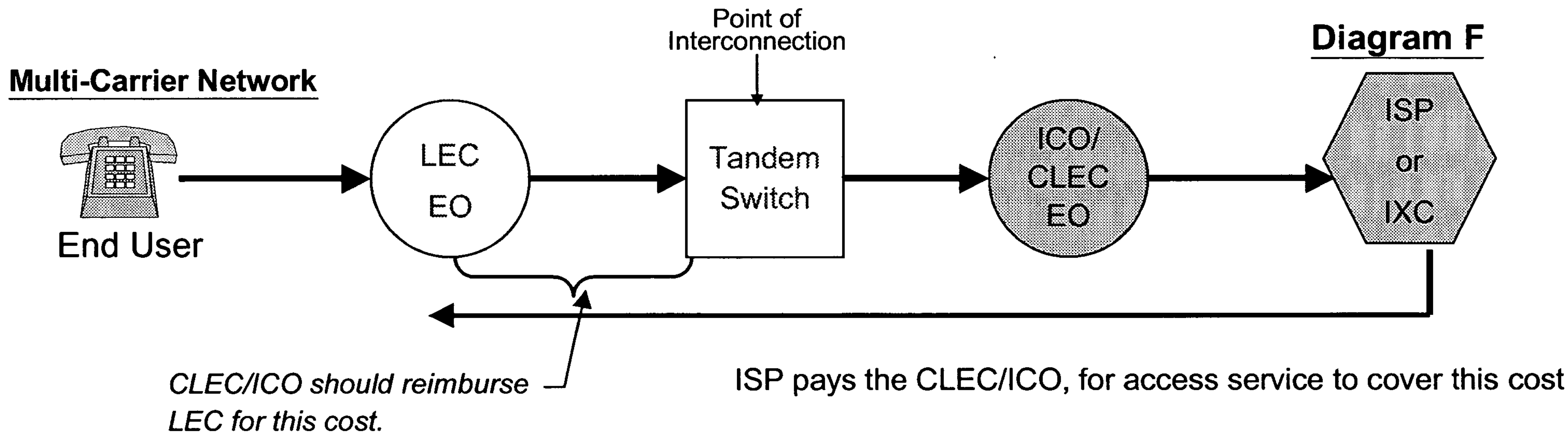


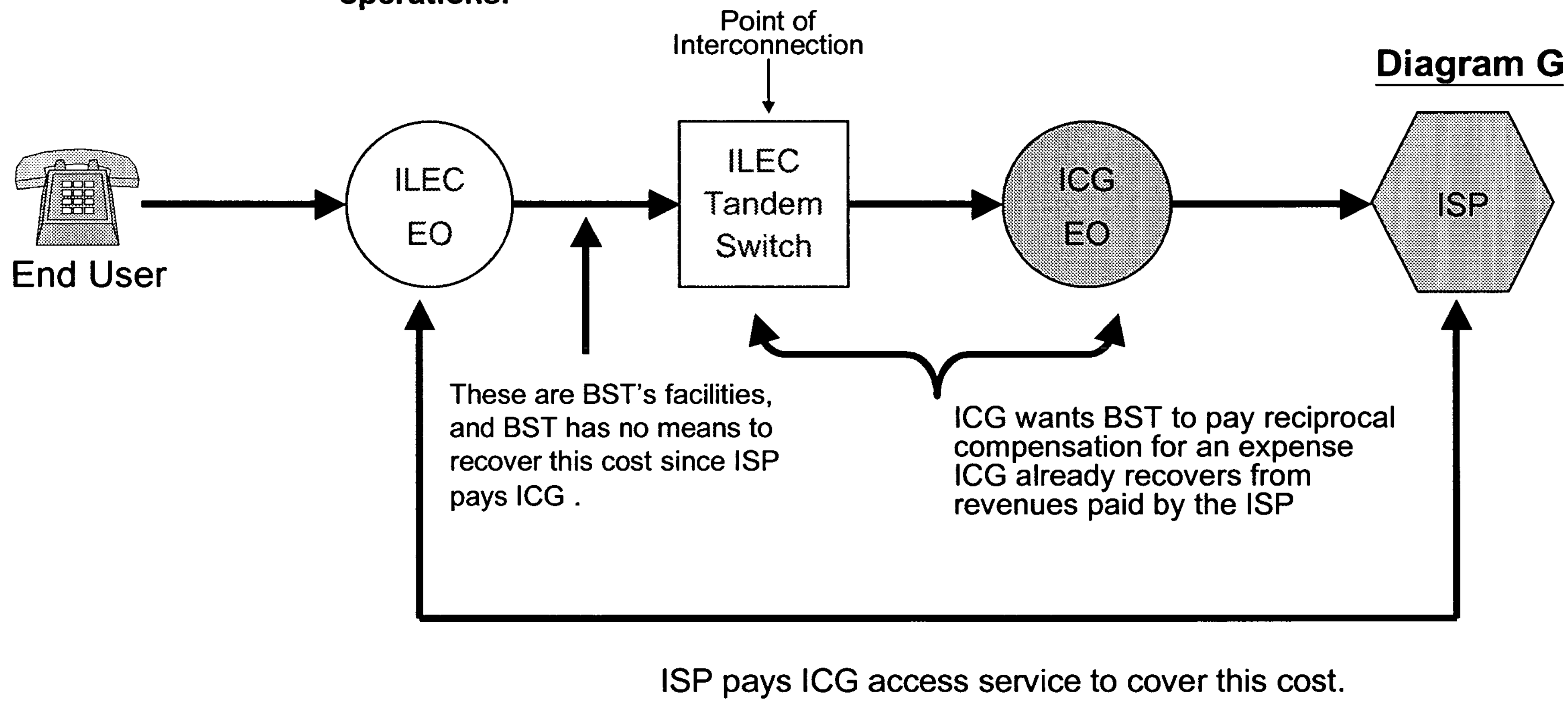
Diagram F



ICG's Position

- **ICG's position ignores the fact that ISPs purchase access service**
- **Paying ICG reciprocal compensation for ISP-bound traffic would result in ILEC end users subsidizing ICG's operations.**

Diagram G



Kentucky Rate and Cost Analysis

Cost Ref. #	Rate Element	Cost		Proposed Rate		
		Recurring	Non-recurring	Recurring	Non-recurring	Source
N.0	Unbundled Packet Switching Frame Relay Service					
N.1	*Unbundled Packet Switching Frame Relay Service*					
N.1.1	UPS – UNI/NNI FRS 56 KBPS	27.85	236.39	27.85	236.39	Cost Study
N.1.2	UPS – UNI/NNI FRS 64 KBPS	27.85	236.39	27.85	236.39	Cost Study
N.1.3	UPS – UNI/NNI FRS 1.536 MBPS	96.82	254.97	96.82	254.97	Cost Study
N.1.4	UPS – UNI/NNI FRS 44.210 MBPS	670.72	371.95	670.72	371.95	Cost Study
N.1.5	UPS – UNI/NNI FRS – DLCI Additional		82.52		82.52	Cost Study
N.1.6	UPS – UNI/NNI FRS CIR – 0 BPS	.1071		.1071		Cost Study
N.1.7	UPS – UNI/NNI FRS CIR – 1-32 KBPS	.5354		.5354		Cost Study
N.1.8	UPS – UNI/NNI FRS CIR – 32-56 KBPS	.9369		.9369		Cost Study
N.1.9	UPS – UNI/NNI FRS CIR – 56-64 KBPS	1.07		1.07		Cost Study
N.1.10	UPS – UNI/NNI FRS CIR – 64-128 KBPS	2.14		2.14		Cost Study
N.1.11	UPS – UNI/NNI FRS CIR – 128-256 KBPS	4.28		4.28		Cost Study
N.1.12	UPS – UNI/NNI FRS CIR – 256-384 KBPS	6.42		6.42		Cost Study
N.1.13	UPS – UNI/NNI FRS CIR – 384-512 KBPS	8.57		8.57		Cost Study
N.1.14	UPS – UNI/NNI FRS CIR – 512-768 KBPS	12.85		12.85		Cost Study
N.1.15	UPS – UNI/NNI FRS CIR – 768-1.536 MBPS	25.70		25.70		Cost Study
N.1.16	UPS – UNI/NNI FRS CIR – 1.536-4 MBPS	64.25		64.25		Cost Study
N.1.17	UPS – UNI/NNI FRS CIR – 4-10 MBPS	162.76		162.76		Cost Study
N.1.18	UPS – UNI/NNI FRS CIR – 10-16 MBPS	260.20		260.20		Cost Study
N.1.19	UPS – UNI/NNI FRS CIR – 16-34 MBPS	553.39		553.39		Cost Study
N.1.20	UPS – UNI/NNI FRS CIR – 34-44.210 MBPS	719.57		719.57		Cost Study
N.1.21	UPS – UNI/NNI FRS – Feature Change		31.16		31.16	Cost Study
N.1.22	UPS – UNI/NNI FRS – Transfer of Service		13.27		13.27	Cost Study

AFFIDAVIT

STATE OF NORTH CAROLINA

COUNTY OF

BEFORE, ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared William E. Taylor, who being by me first duly sworn, deposed and said that:

He is appearing as a witness before the Kentucky Public Service Commission in Case No. 99-218 on behalf of BellSouth Telecommunications, Inc., and if present before the Commission and duly sworn, his testimony would be as set forth in the annexed testimony consisting of 26 pages and 1 exhibit (s).

William E. Taylor

William E. Taylor

SWORN TO AND
SUBSCRIBED BEFORE ME
this the 19th day
of October, 1999.

Frances G. Dix

NOTARY PUBLIC

My Commission expires:
January 4, 2003

BEFORE THE
KENTUCKY PUBLIC SERVICE COMMISSION

IN RE:	)	
PETITION FOR ARBITRATION OF ICG TELECOM	)	
GROUP, INC. WITH BELLSOUTH	)	CASE NO. 99-218
TELECOMMUNICATIONS, INC. PURSUANT TO	)	
THE TELECOMMUNICATIONS ACT OF 1996	)	

DIRECT TESTIMONY

OF

WILLIAM E. TAYLOR, Ph.D.

ON BEHALF OF

BELLSOUTH TELECOMMUNICATIONS, INC.

OCTOBER 21, 1999

n/e/r/a
Consulting Economists

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

TABLE OF CONTENTS

ON BEHALF OF BELLSOUTH TELECOMMUNICATIONS, INC.

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

BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION

CASE NO. 99-218

OCTOBER 21, 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 Kentucky Public Service Commission ("Commission"). Before the Commission, I testified in Case No. 94-121 (on telecommunications productivity growth and price cap plans) on behalf of South Central Bell Telephone Company, in Case No. 96-608 (on the probable economic benefits from BellSouth's entry into interLATA market) on behalf of BellSouth Long Distance, Inc., in Case No. 98-292 (on price regulation and earnings sharing) on behalf of Cincinnati Bell Telephone Company, and in Case No. 99-296 (on the economic merits of the Bell Atlantic-GTE merger) on behalf of Bell Atlantic Corporation and GTE Corporation.

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 ICG Telecom Group, Inc. ("ICG")—a competitive local exchange carrier ("CLEC"). The salient issues I address in my testimony concern reciprocal compensation for traffic sent to Internet service providers ("ISPs").

Q. PLEASE SUMMARIZE YOUR POSITIONS ON THOSE ISSUES.

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

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 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. INTER-CARRIER COMPENSATION FOR ISP-BOUND CALLS

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

[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.

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]

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-

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

[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.

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 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 Louisville 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 psychic way from my travel to Louisville is irrelevant for determining what the cost of that travel is or who should pay the price to recover that cost.

In general, the prices that consumers pay should reflect the costs caused by their consumption of specific goods or services.

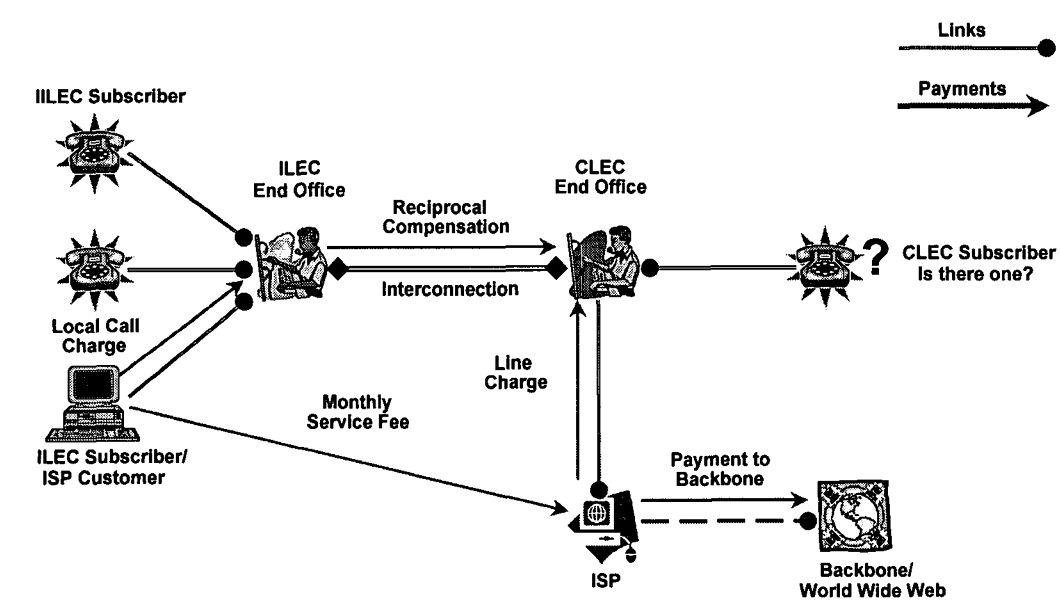
It is well known that consumers decide what to buy and how much to buy on the basis of prices they pay. Their act of buying also causes cost. To ensure that society's scarce resources are put to their best use, and that only the goods and services of highest value to society are produced and consumed, 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 network that underlies ICG's belief that an Internet call is jurisdictionally local. This view

Figure 1. Charges and Inter-Carrier Compensation (The ICG View):

Originating ILEC Pays Reciprocal Compensation to Terminating CLEC



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,[6] even when the call goes through the ISP to which it pays monthly access fees.[7]
2. The ISP itself is an end-user (not a carrier) of the CLEC and the Internet call terminates at the ISP.[8]

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,

[6] 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.

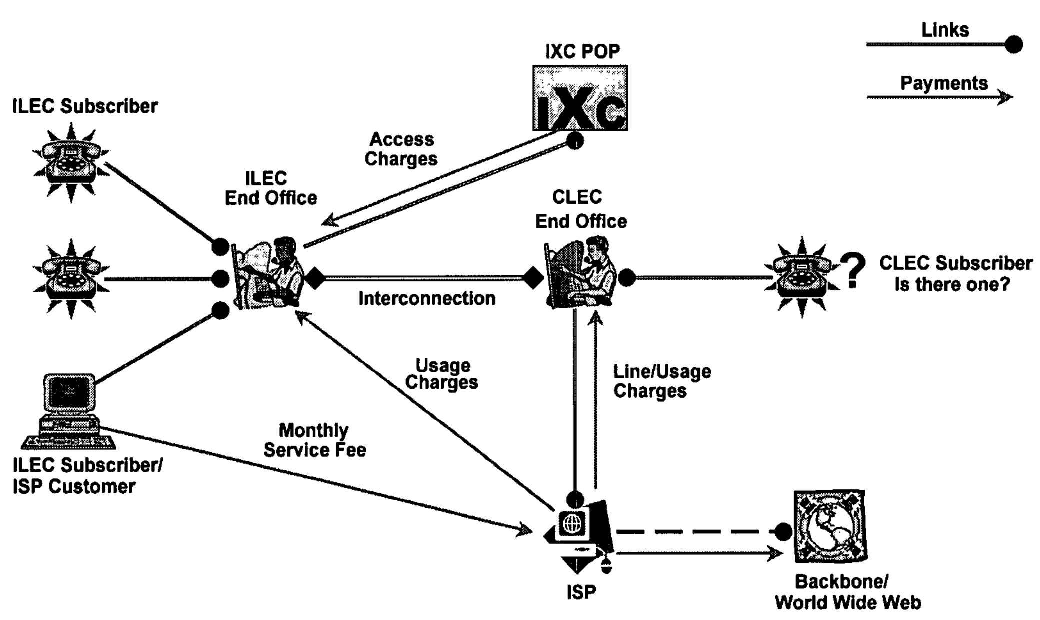
[7] An implicit assumption here is that the ISP has a point of presence in the local calling area of the Internet caller.

[8] This erroneous view of the network assumes that the CLEC *terminates* the Internet call to the ISP just as it would terminate a local call to an end-user. This would make it appear that the end-to-end Internet call is really two calls: the first call that terminates at the ISP and the second call that gets routed through the packet-switched backbone network to the Internet destination. That view is, however, clearly contrary to the FCC's position that the end-to-end Internet call is all one call. Therefore, in my discussion below of the economically proper view of the network for ISP-bound calls, I use the term "deliver" rather than "terminate" to describe the function performed by the CLEC for the ISPs it serves. Any use of the term "terminate" should henceforth be understood as referring to the erroneous view of the network for ISP-bound calls.

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

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

ISP Pays Compensation to Originating and Terminating LECs



customer of an IXC when making a long distance call. This analogy—and the proper cost causation view of Internet calling—is explained in Figure 2.

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 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-

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

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 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

[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.

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 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

[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.

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]

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

[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.

[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.

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 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?

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[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.

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 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.

[19] *Id.* Emphasis added (in part) and in original (in part).

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-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

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[20] It is assumed that the cost imposed by that customer for the packet-switched network portion of the Internet call is recovered through monthly access charges by the ISP serving that customer.

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 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 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. The revenues that the CLEC collects from the ISP for line-side connections (over which the ISP receives all Internet-bound calls) can be shared by the ILEC and the CLEC in the same proportion as their respective costs of carrying ISP-bound calls. While this may not be sufficient for the full recovery by both of their ISP traffic-related costs, the ILEC-IXC regime would at least ensure that the ILEC and the CLEC both contribute to the ISP access subsidy no more than the same proportion of their respective costs. This arrangement would be competitively neutral because the ILEC and the CLEC would both contribute to the Internet subsidy (wrought by the FCC exemption to ISPs) rather than just the ILEC that originates the ISP-bound traffic. In this regime, an ISP would have no particular incentive to become a CLEC itself, nor would the competition between the ILEC and the CLEC to serve ISPs be distorted by the incentive 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 Kentucky, 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

[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.

material; an ILEC that overpays to terminate traffic on the CLEC's network is compensated when the CLEC similarly overpays to terminate traffic on the ILEC's network. Thus, when traffic is balanced, no individual ILEC or CLEC can be 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 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 his 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 CLECs 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

[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.

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 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

[24] Massachusetts ISP Compensation Order.

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 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. UNDER RECIPROCAL COMPENSATION, WOULD ALL CARRIERS HAVE THIS INCENTIVE AND OPPORTUNITY TO MAXIMIZE THE RATIO OF "INBOUND" TO "OUTBOUND" TRAFFIC?

A. Absolutely not. There is a fundamental and significant asymmetry in the manner in which

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[25] Local Competition Order, ¶1093.

[26] Internet Traffic Order, ¶29.

[27] Massachusetts ISP Compensation Order. Emphasis added.

the ILEC and the CLEC compete for and serve customers. While the CLEC can choose the type of service it provides or the type of customer it wishes to serve, an ILEC like BellSouth is *obliged* to serve anyone that demands service. This asymmetry clearly implies that, in a regime of reciprocal compensation for ISP-bound traffic, CLECs would find it to their advantage to maximize inbound relative to outbound calling. This would most likely mean a greater emphasis on serving ISPs than on serving any other type of customer. In contrast, an ILEC that already has an embedded base of customers and must be the carrier of last resort cannot manipulate the mix of terminating and originating traffic in the manner that CLECs can.

The advantage enjoyed by CLECs in this respect is two-pronged. First, by maximizing terminating relative to originating traffic, CLECs can also maximize their revenues from reciprocal compensation. Second, by selecting customers (such as ISPs) for whom the per minute cost to handle traffic is lower than for the average local call, CLECs can ensure the greatest possible profit margin between the going termination rate and their lower "termination" cost.

Q. WOULD RECIPROCAL COMPENSATION FOR ISP-BOUND CALLS UNFAIRLY DISADVANTAGE ONLY AN ILEC LIKE BELLSOUTH IN THIS MANNER?

A. No. In my opinion, this unfair disadvantage to the ILEC could arise in all circumstances in which the ILEC, by virtue of its carrier of last resort status, experiences the regulatory and market asymmetry I described earlier relative to CLECs that are not so constrained. Even independent and rural local exchange carriers in Kentucky that have carrier of last resort status within their territories are vulnerable to CLEC manipulation of reciprocal compensation for ISP-bound traffic. In fact, the detrimental financial impact of such manipulation on these smaller incumbent local exchange carriers is likely to be relatively larger and more severe. That is because the size of reciprocal compensation payments grows with the number of minutes of ISP-bound traffic reaching the CLEC. As the ISP-bound traffic becomes essentially one-way from the small independent carrier to the ISP-specializing CLEC (with little or no hope of return traffic), that independent carrier's reciprocal compensation payments can easily become so large as to threaten its financial viability.

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.

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) and the National Science Foundation and has served as an Associate Editor of the *Journal of Econometrics*.

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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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Fall 1977 Visiting Associate Professor, Department of Economics. Taught graduate courses in econometrics.

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