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Legal Department

MEREDITH E. MAYS
Senior Regulatory Counsel

BellSouth Telecommunications, Inc.
150 South Monroe Street
Room 400
Tallahassee, Florida 32301
(404) 335-0750

November 17, 2003

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COMMISSION
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Ms. Blanca S. Bayó
Director, Division of the Commission Clerk
And Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Docket No. 030300-TP (Petition of the Florida Public Telecommunications Association for Expedited Review of BellSouth Telecommunications Inc.'s Tariffs With Respect to Rates for Payphone Line Access, Usage, and Features)

Dear Ms. Bayó:

Enclosed is an original and fifteen copies of BellSouth Telecommunications, Inc.'s Direct Testimony of Daonne D. Caldwell, Exhibit Nos. DDC-1 (proprietary), DDC-2 (proprietary), DDC-3 and Kathy K. Blake, Exhibit Nos. KKB-1 and KKB-2, which we ask that you file in the captioned matter.

A copy of this letter is enclosed. Please mark it to indicate that the original was filed and return the copy to me. Copies have been served to the parties shown on the attached Certificate of Service.

Sincerely,

Meredith E. Mays
Meredith E. Mays (UM)

AUS _____
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CTR _____
ECR _____
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OPC _____
MMS _____
SEC T
OTH _____

cc: All Parties of Record
Marshall M. Criser III
R. Douglas Lackey
513490

Caldwell
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Blake
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**CERTIFICATE OF SERVICE
DOCKET NO. 030300-TP**

I HEREBY CERTIFY that a true and correct copy of the foregoing was served via
Electronic Mail and FedEx this 17th day of November, 2003 to the following:

Linda Dodson
Staff Counsel
David L. Dowds
**Division of Competitive Markets &
Enforcement**
Florida Public Service
Commission
Division of Legal Services
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850
Tel. No.: 850 413-6216
ldodson@psc.state.fl.us
ddowds@psc.state.fl.us

Peter M. Dunbar, Esq. +
Brian A. Newman, Esq.
Pennington, Moore, Wilkinson, Bell
& Dunbar, P.A.
215 South Monroe Street
2nd Floor (32301)
P.O. Box 10095
Tallahassee, FL 32302-2095
Tel. No. (850) 222-3533
Fax. No. (850) 222-2126
peter@penningtonlawfirm.com

David S. Tobin, Esq. +
Tobin & Reyes, P.A.
7251 West Palmetto Park Road
Suite 205
Boca Raton, FL 33433
Tel. No. (561) 620-0656
Fax. No. (561) 620-0657
dst@tobinreyes.com


Meredith E. Mays (KA)

(+) signed Protective Agreement

1 **BELLSOUTH TELECOMMUNICATIONS, INC.**
2 **DIRECT TESTIMONY OF D. DAONNE CALDWELL**
3 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**
4 **DOCKET NO. 030300-TP**
5 **NOVEMBER 17, 2003**

6
7 **Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.**

8
9 A. My name is D. Daonne Caldwell. My business address is 675 W. Peachtree St.,
10 N.E., Atlanta, Georgia. I am a Director in the Finance Department of BellSouth
11 Telecommunications, Inc. (hereinafter referred to as "BellSouth"). My area of
12 responsibility relates to the development of economic costs.

13
14 **Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF YOUR EDUCATIONAL**
15 **BACKGROUND AND WORK EXPERIENCE.**

16
17 A. I attended the University of Mississippi, graduating with a Master of Science
18 Degree in mathematics. I have attended numerous Bell Communications
19 Research, Inc. ("Bellcore") courses and outside seminars relating to service cost
20 studies and economic principles.

21
22 My initial employment was with South Central Bell in 1976 in the Tupelo,
23 Mississippi, Engineering Department where I was responsible for Outside Plant
24 Planning. In 1983, I transferred to BellSouth Services, Inc. in Birmingham,
25 Alabama, and was responsible for the Centralized Results System Database. I

1 moved to the Pricing and Economics Department in 1984 where I developed
2 methodology for service cost studies until 1986 when I accepted a rotational
3 assignment with Bellcore. While at Bellcore, I was responsible for development
4 and instruction of the Service Cost Studies Curriculum including courses, such as,
5 “Concepts of Service Cost Studies”, “Network Service Costs”, “Nonrecurring
6 Costs”, and “Cost Studies for New Technologies”. In 1990, I returned to
7 BellSouth and was appointed to a position in the cost organization, now a part of
8 the Finance Department, with the responsibility of managing the development of
9 cost studies for transport facilities, both loop and interoffice. My current
10 responsibilities encompass testifying in cost-related dockets, cost methodology
11 development, and the coordination of cost study filings.

12

13 **Q. HAVE YOU HAD ANY PREVIOUS EXPERIENCE IN TESTIFYING?**

14

15 A. Yes. I have testified in arbitration hearings, generic cost dockets, and Universal
16 Service Fund proceedings, providing evidence on cost-related issues before the
17 state public service commissions in Alabama, Florida, Georgia, Kentucky,
18 Louisiana, Mississippi, and South Carolina, the Tennessee Regulatory Authority,
19 and the Utilities Commission in North Carolina.

20

21 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

22

23 A. The purpose of my testimony is to describe the cost methodology used in the cost
24 study for Public Telephone Access Service (“PTAS”) in Florida. Exhibit DDC-1
25 attached to this testimony is the cost study in electronic (CD-ROM) and paper

1 format¹. Since payphone service is a competitive offering, the costs are
2 considered proprietary. Additionally, the cost studies include demand projections,
3 vendor-specific data, and discount rates that BellSouth considers proprietary.
4 Exhibit DDC-2 provides a summary of the cost results.

5

6 **Q. WHY WERE THE COST STUDIES PERFORMED?**

7

8 A. BellSouth reviewed its PTAS rates in connection with this proceeding and in light
9 of the FCC's guidance as set forth in the *Wisconsin Order*.²

10

11 **Q. WITH RESPECT TO COST DEVELOPMENT, WHAT WAS THE IMPACT**
12 **OF THE FCC'S ORDER?**

13

14 A. The underlying cost methodology that was used previously in support of payphone
15 rates did not change. The FCC ruled that: "States often use 'total service long run
16 incremental cost' (TSLRIC) methodology in setting rates for intrastate services. It
17 is consistent with the *Local Competition Order* for a state to use its accustomed
18 TSLRIC methodology (or another forward-looking methodology) to develop the
19 direct costs of payphone line service costs." (*Wisconsin Order*, ¶49)

20

21 Payphone service has been given a "quasi-retail" status where cost-based rates are

22

23 ¹ The entire cost study has not been printed, however, all input and
output files are contained on the CD.

24 ² See Memorandum Opinion and Order, *In the Matter of Wisconsin Public*
Service Commission, Bureau/CPD No. 00-01, Order No. FCC 02-25, 17 FCC
25 Rcd. 2051 (rel. January 31, 2002) ("*Wisconsin Order*").

1 established to “promote competition among payphone service providers and
2 promote the widespread deployment of payphone service to the benefit of the
3 general public.” (*Wisconsin Order*, ¶2) These cost-based rates, per the FCC’s
4 Order, would be equal to the TSLRIC plus overhead loadings. Traditionally,
5 BellSouth’s retail cost studies do not attempt to allocate shared and common costs
6 nor calculate overhead loadings. The FCC’s Order, however, required
7 consideration of these types of costs and outlined “a flexible approach to
8 calculating BOCs’ overhead allocation for intrastate payphone line rates.”
9 (*Wisconsin Order*, ¶58)

10

11 **Q. WHAT COST METHODOLOGY IS USED IN THE COST STUDY FILED**
12 **IN THIS PROCEEDING?**

13

14 A. Consistent with the FCC’s Order, BellSouth utilized TSLRIC methodology.
15 Additionally, this Commission has previously defined the cost standard to be used
16 in preparing cost support for retail services as TSLRIC based Section 364.3381 (2),
17 Florida Statutes. Specifically, the Commission has defined TSLRIC as “the costs
18 to the firm, both volume sensitive and volume insensitive, that will be avoided by
19 discontinuing, or incurred by offering an entire product or service, holding all other
20 products or services offered by the firm constant.” (Commission Order PSC-96-
21 1579-FOF-TP, page 25) This was the methodology adhered to by BellSouth. In
22 fact, these are the same types of incremental cost studies that BellSouth has filed in
23 tariff filings and other proceedings before this Commission.

24

25 The models that were used to develop the recurring costs for PTAS have been filed

1 with this Commission in Docket No. 990649-TP, conducted to establish cost-based
2 rates for unbundled network elements (“UNEs”) and interconnection and in
3 Docket No. 030869-TL, initiated to review BellSouth’s proposed rate rebalancing
4 effort. Specifically the BSTLM[®] was used to develop the loop costs based on
5 payphone locations; the SST[®] was used for switch-related costs; and the BellSouth
6 Cost Calculator[®] converted investments into recurring costs. Furthermore, the
7 factors (with the exception of the overhead loading factor) that were used are
8 consistent with those currently under review in Docket No. 030869-TL.

9
10 As this Commission is aware, the BSTLM is a proxy model that reflects the least
11 cost, most efficient network configuration in accordance with the FCC’s pricing
12 rules for UNEs. Thus, costs based upon the hypothetical network produced by the
13 BSTLM, a network in which only the minimum cable route is considered and
14 most-technically advanced equipment is placed, result in an understatement of the
15 real-world loop-related costs. In other words, the costs BellSouth actually incurs,
16 even from a forward-looking perspective, exceed those produced by the BSTLM.

17
18 **Q. PLEASE EXPLAIN THE TSLRIC METHODOLOGY IN MORE DETAIL.**

19
20 A. TSLRIC methodology uses incremental costing techniques to identify the
21 additional costs associated with providing a service. Incremental costs are based
22 on cost causation and include all of the costs directly generated by expanding

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1 production, or alternatively, costs that would be saved if the production levels were
2 reduced. The production unit could be an entire service, or a unit of a service. For
3 PTAS, if the level of production increased (i.e., the demand increases), additional
4 costs would be incurred for loops, switch terminations, and interoffice
5 connections, i.e. the physical network components of the service.

6
7 Direct costs may be volume sensitive and/or volume insensitive. Volume sensitive
8 costs are considered to be Long Run Incremental Costs (“LRIC”). LRIC identifies
9 the price floor, i.e. the level below which rates cannot be set and still cover their
10 direct costs. TSLRIC includes both volume sensitive and volume insensitive costs.
11 TSLRIC studies are the basis for testing for cross-subsidization. Additionally,
12 long run incremental cost studies ensure that the time period studied is sufficient to
13 capture all forward-looking costs affected by the business decision being studied.
14 Another corollary to the long-run principle is that all costs are variable in the long
15 run. The implication here is that all resources will exhaust and new purchases
16 must be made to meet demand for the service or product.

17

18 **Q. YOU STATED THAT THE FCC ALLOWED “A FLEXIBLE APPROACH”**
19 **TO DETERMINING OVERHEADS. PLEASE EXPLAIN HOW**
20 **BELLSOUTH DETERMINED ITS OVERHEAD FACTOR.**

21

22 A. While TSLRIC methodology recognizes only the direct, forward-looking, long-run
23 incremental cost of providing a service, BellSouth incurs substantial costs beyond
24 that in order to function effectively – shared and common costs or “overheads”. A
25 shared cost is incurred when producing two or more services but is not a direct cost

1 caused uniquely by any one of those services. Common costs are costs that are
2 incurred by a firm to produce all of its services, but cannot be directly attributed to
3 (i.e., are not caused uniquely by) any single service or service combination that
4 includes fewer than all of the services provided. Examples of overheads are
5 executive, accounting, vendor licensing fees, and legal costs. Such costs do not
6 change with changes in the firm's service mix or volume of output. Thus, these
7 costs are not included at the individual service level since only direct costs are
8 considered in a TSLRIC analysis.

9
10 Shared and common costs, however, are true costs to the company and should not
11 be ignored. In fact, if a company were to consistently set their rates at TSLRIC,
12 the company would soon fail. Thus, in setting rates, consideration must be given
13 to a reasonable level of contribution toward the overhead costs of the corporation.

14
15 In its order, the FCC described several options with respect to the development of
16 an overhead factor. BellSouth chose to "use ARMIS data relating to the plant
17 categories used to provide payphone services in calculating an upper limit on
18 overhead loadings." (*Wisconsin Order*, ¶54) As the FCC explained, this is
19 consistent with the FCC's evaluation of the reasonableness of Open Network
20 Architecture ("ONA") tariffs. BellSouth's overhead calculations are contained in
21 Exhibit DDC-1.

22

23 **Q. DESCRIBE THE UNDERLYING NETWORK COMPONENTS OF PTAS.**

24

25 A. PTAS is comprised of an exchange line, i.e., a connection from the payphone

1 location to a central office, provided by BellSouth at the request of the payphone
2 provider for telecommunications use by the general public at accessible locations.
3 In order to allow a payphone customer access to the network, all of the following
4 network components are required: a loop, a physical point of presence in the
5 switch (termination), and interoffice connections. In order to make and complete
6 calls, the payphone user also utilizes components of BellSouth's signaling system
7 ("SS7") network, tandem switches, and end-office switch functionality.
8 Additionally, PTAS costs reflect costs associated with blocking and screening
9 functionalities of the switch. Costs associated with these pieces of equipment are
10 directly caused by the payphone provider's request for this service and thus, are
11 appropriately included in the cost analyses conducted by BellSouth. Exhibit
12 DDC-3 illustrates the basic network components considered in the cost study.

13

14 The local loop is the facility that extends from the main distributing frame
15 ("MDF") in the BellSouth central office to the customer's premises. The loop
16 costs reflect the MDF, all the outside plant components required for transmission,
17 such as copper cable, fiber cable, electronic equipment, poles, conduit, etc., as well
18 as all cable up to and including the connection at the customer's premises, the
19 network interface device ("NID").

20

21 The line termination is the facility used to connect the local loop to a BellSouth
22 end office switch. The line termination costs include the jumper to the switch and
23 the non-traffic sensitive termination in the switch, for example the line card in the
24 DMS100 switch.

25

1 Usage costs include the traffic sensitive switching cost of the end office for both
2 intra-office and inter-office calls. Additionally, tandem switching, interoffice
3 transport, and signaling costs are considered in the flat-rate usage costs considered
4 in Exhibit DDC-1. Customer usage characteristics specific to payphone users
5 (e.g., calls per month and minutes per call) were used to convert “per minute of
6 use” elements to a flat-rate monthly cost.

7
8 Central office blocking and screening is a feature in the switch required for PTAS.
9 Blocking and screening costs are both recurring and nonrecurring. The recurring
10 costs are the incremental costs over and above a Plain Old Telephone Service
11 (“POTS”) call for using the switch processor and the Right-to-Use (“RTU”) fees
12 paid to vendors. The nonrecurring costs are the labor costs for performing the
13 translations in the switch.

14

15 **Q. HOW DID BELLSOUTH CALCULATE COSTS THAT ARE SPECIFIC TO**
16 **PTAS?**

17

18 A. As I mentioned previously, only PTAS locations were included in the BSTLM’s
19 output calculation. This does not mean that BellSouth ignored economies of scale
20 by considering only a limited number of customer locations. In fact, all single line
21 residence and single line business locations were considered in developing the
22 equipment and investment requirements for the total narrowband network.
23 However, only loops serving PTAS locations were included in the output report
24 that generated the loop investments. Thus, the loop length, a cost driver, was
25 specific to PTAS loops.

1

2 Another cost that is PTAS-specific is the flat rate usage. Customer usage
3 characteristics – calls per month and minutes per call – reflect coin customers. The
4 central office blocking and screening costs are based upon busy hour usage that is
5 consistent with usage characteristics.

6

7 Central office termination costs reflect a line side, non-ISDN termination,
8 appropriate for PTAS.

9

10 **Q. WHAT TYPES OF COSTS ARE REFLECTED IN THE COST STUDIES?**

11

12 A. Cost studies normally reflect both recurring and nonrecurring costs. Recurring
13 costs include both capital and non-capital costs. Capital costs are associated with
14 the purchase of an item of plant, i.e., an investment. In addition to the material
15 price of the equipment, capitalized labor is also considered part of the investment
16 in accordance with Part 32 of the FCC's Code of Federal Regulations which states:
17 "In accounting for construction costs, the utility shall charge to the telephone plant
18 accounts, all direct and indirect costs." Included in the direct and indirect costs are
19 the "wages and expenses of employees directly engaged in or in direct charge of
20 construction work." Thus, BellSouth has appropriately included these labor-
21 related costs (construction costs) in the calculation of the investment; i.e., as part
22 of the capitalized plant account. BellSouth considers these labor-related costs in
23 its study through the use of in-plant factors that augment the material price to
24 recognize the associated labor and incidental material required to install the piece
25 of equipment. By including these costs as part of the investment, they are

1 recovered over the useful life of the plant. The costs associated with the
2 investment (material plus installation costs) are expressed on a recurring (monthly)
3 basis and are comprised of capital costs (depreciation, cost of money, and income
4 tax) and operating expenses (plant-specific expenses, such as maintenance, ad
5 valorem taxes and gross receipts taxes).

6
7 Nonrecurring costs, on the other hand, reflect activities associated with
8 provisioning the service after the equipment has been installed. In this case,
9 translations to activate blocking and screening capabilities are performed after the
10 switch has been installed and thus, are nonrecurring in nature. These nonrecurring
11 costs have been converted to a recurring cost based on a forecast of lines and an
12 estimated location life.

13

14 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

15

16 A. Yes.

17

18

19

20

21

22

23

24

25

FLORIDA DOCKET NO. 030300-TP

PTAS STUDY

CALDWELL EXHIBIT DDC-1

PUBLIC

**FLORIDA DOCKET NO. 030300-TP
PTAS STUDY
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INTRODUCTION
SERVICE DESCRIPTION
FLAT RATE USAGE CALCULATION
BELLSOUTH COST CALCULATOR® OUTPUTS
DEVELOPMENT OF OVERHEAD COST FACTOR

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**FLORIDA DOCKET NO. 030300-TP
PTAS STUDY
SECTION 1
EXECUTIVE SUMMARY**

STATEMENT OF PURPOSE

BellSouth Telecommunications, Inc. (BellSouth) is providing Total Service Long Run Incremental Cost (TSLRIC) studies, which also reflect a reasonable allocation of overhead costs for Public Telephone Access Service (PTAS). The cost study complies with the Federal Communication Commission's (FCC's) Memorandum Opinion and Order dated January 31, 2002, which outlines the methodology to be used in support of the New Services Test.

Specifically, the FCC's Order directs that: "It is consistent with the *Local Competition Order* for a state to use its accustomed TSLRIC methodology (or another forward-looking methodology) to develop the direct costs of payphone line service costs." ¶49

With respect to the development of the overhead costs, the FCC's Order states: "it is also consistent with our past application of the price cap new services test, and permissible in this context, for states to determine overhead assignments using the methodology that the Commission used to evaluate the reasonableness of ONA tariffs in the *ONA Tariff Order*.¹ In that investigation, the Commission used ARMIS data to calculate an upper limit for both the ratio of direct cost to direct investment and the ratio of overhead cost to total cost. Analogously, states could use ARMIS data relating to the plant categories used to provide payphone services in calculating an upper limit on overhead loadings." ¶54 This is the methodology used by Bellsouth in the development of its overhead costs.

OVERVIEW

Historically, BellSouth prepared Long Run Incremental Cost (LRIC) studies to support tariff prices for telecommunications services. The LRIC result, which considered only the volume sensitive costs, constituted the price floor for the service in question, and was one of a number of factors considered when establishing the price for a service. BellSouth also conducted Total Service Long Run Incremental Cost (TSLRIC) studies that addressed not only the volume sensitive costs but also considered the directly attributable volume insensitive costs. TSLRIC studies were used to ensure that the service was not being subsidized and is the methodology utilized in this filing.

¹ *In the Matter of Open Network Architecture Tariffs of Bell Operating Companies*, CC Docket No. 92-91, Order, 9 FCC Rcd 440, 458-59, para. 50, and 477-80, Attach. C (Dec. 15, 1993) (*ONA Tariff Order*).

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**FLORIDA DOCKET NO. 030300-TP
PTAS STUDY
SECTION 1
EXECUTIVE SUMMARY**

In order to develop the economic costs associated with PTAS, BellSouth initiated the basic study process as follows.

1. BellSouth determined the forward-looking, efficient architecture, engineering, and provisioning procedures associated with PTAS. This was accomplished through the use of models, special studies, and the involvement of key BellSouth personnel, such as cost analysts, product managers, and network employees.
2. Costs associated with the material and equipment required were developed.
3. BellSouth ensured that the costs associated with supporting structures and installation of material and equipment were appropriately included.
4. BellSouth determined the cost of PTAS by converting the installed investment into its capital costs and operating expenses, and included an appropriate amount of overhead costs and taxes.

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**FLORIDA DOCKET NO. 030300-TP
PTAS STUDY
SECTION 1
EXECUTIVE SUMMARY**

FLORIDA

<u>Line</u>	<u>Description</u>	<u>PTAS</u>
1	Loop	████████
2		
3	Termination	████████
4		
5	Usage	████████
6		
7	Blocking and Screening	████████
8		
9		
10		
11	Total	\$24.36

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**FLORIDA DOCKET NO. 030300-TP
PTAS STUDY
SECTION 2
COST METHODOLOGY**

TOTAL SERVICE LONG RUN INCREMENTAL COST (TSLRIC)

BellSouth follows TSLRIC methodology in developing costs for retail service offerings. The basic guidelines that form the foundation for a TSLRIC study are:

- 1) The studies should reflect a long-run perspective. Long run implies a sufficient 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.
- 3) The increment being studied should be the entire quantity of service.
- 4) Any function necessary to produce a service must have an associated cost. In essence, no sunk costs should be included.
- 5) While common overheads are not part of a long run incremental cost study, the FCC's Order allowed for consideration of a reasonable overhead in cost support associated with the New Services Test.
- 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 payphone service 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 generic steps for developing recurring cost can be summarized as shown below. The unique technical characteristics and physical makeup of each payphone service cost element must be taken into consideration.

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**FLORIDA DOCKET NO. 030300-TP
PTAS STUDY
SECTION 2
COST METHODOLOGY**

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

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 and thus reflect all applicable discounts.

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 on-going spare capacity.

Step 5: Weight the material prices, as appropriate, to determine the average material price for a typical element by field reporting code (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 in-plant 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, RTU fees, land, buildings, poles and conduit as appropriate.

Step 9: Convert the investments by FRC to annual costs by applying account specific 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. (Not all elements are expressed on a monthly basis. For example, elements charged on a per minute of use basis are not divided by 12.)

Step 10: Apply the gross receipts tax factor.

Step 11: Apply the overhead cost allocation factor.

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**FLORIDA DOCKET NO. 030300-TP
PTAS STUDY
SECTION 2
COST METHODOLOGY**

NONRECURRING COSTS

Nonrecurring costs are one-time expenses associated with provisioning a service. 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 direct labor rate for the work group performing the function.

STUDY PROCESSING

The BellSouth Cost Calculator[®], a model developed by BellSouth, produces long run incremental cost studies adhering to either a TSLRIC or TELRIC (Total Element Long Run Incremental Cost) methodology depending on set-up and input parameters. The model was designed to accept variable inputs that are applied according to a user-controlled matrix. The BellSouth Cost Calculator was used to produce the TSLRIC studies included in this filing.

Underlying the BellSouth Cost Calculator inputs are fundamental cost models, e.g., SCIS/MO (Switching Cost Information System/Model Office), SST[®] (Simplified Switching Tool), the BellSouth Telecommunications Loop Model (BSTLM)[®], and price calculators, e.g., the SONET and DLC (Digital Loop Carrier) Price Calculators. These models or price calculators produce some of the investment and expense inputs for the individual components being studied. For example, SCIS/MO outputs are used both for the payphone termination and usage calculations.

Additionally, these are the same models and inputs that were presented to the Commission in August, 2000, during the most recent generic unbundled network element (UNE) cost proceedings in Docket No. 990649-TP. The BSTLM however was updated to include year 2000 material prices.

Some of the outputs from the BellSouth Cost Calculator are expressed on a per minute of use (MOU) basis. Thus, additional work papers, outside the BellSouth Cost Calculator, were required to determine costs on a flat rated basis. These work papers follow the Summary of Results in Section 1.

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**FLORIDA DOCKET NO. 030300-TP
PTAS STUDY
SECTION 2
COST METHODOLOGY**

As discussed previously, BellSouth utilized the FCC-approved option of using the methodology outlined in the ONA proceeding for the calculation of the overhead costs. The 2001 regulated expense and investment amounts were extracted from the ARMIS 43-03 Report for BellSouth Telecommunications, Inc. Capital Cost Factors (Composite of Depreciation, Return, Income Tax, & Ad Valorem Tax components) used to convert 2001 investment into 2001 capital costs. The actual calculation of this overhead factor is included in Section 3.

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**FLORIDA DOCKET NO. 030300-TP
PTAS STUDY
SECTION 3
COST STUDIES**

INTRODUCTION

Section 3 contains a service description, flat rate usage calculation, BellSouth Cost Calculator outputs and a worksheet showing the development of the Overhead Cost Factor.

The studies included in this filing are all based on a three (3) year study period (2003-2005). All direct long run costs associated with providing the services are identified and included in the cost studies. Additionally, a reasonable allocation of overhead costs has been considered.

Service Description

PTAS

PTAS includes the local loop, the non-traffic sensitive (NTS) line termination in the switch, central office blocking and screening, and local usage. The local loop is the facility that extends from the main distributing frame (MDF) in the BellSouth central office to the customer's premises. The facility includes all the outside plant components required for transmission, such as copper cable, fiber cable, electronic equipment, poles, conduit, etc., as well as all cable up to and including the connection at the customer's premises, the network interface device (NID). The loop results reflect coin characteristics (i.e., costs associated with coin customer locations were determined by the BSTLM). Additionally the loop costs are based upon forward-looking technologies and the most efficient method of provisioning a local loop.

The NTS line termination is the facility used to connect the local loop to a BellSouth end office switch. The facility includes the connection on the MDF, the jumper to the switch, and the non-traffic sensitive termination, for example the line card in the DMS100, in the switch. BellSouth used the Switching Cost Information System (SCIS/MO), a Telcordia cost model, to develop the vendor engineered, furnished, and installed (EF&I) investment associated with these items of plant. The SCIS model outputs reflect vendor design criteria, BellSouth discount levels, and office-level usage characteristics.

Central office blocking and screening is a feature in the switch required for PTAS. Blocking and screening costs are both recurring and nonrecurring. The recurring costs are the incremental costs over and above a Plain Old Telephone Service (POTS) call for using the switch processor. The nonrecurring costs are the labor costs for performing the translations in the switch.

Billed number screening is an SS7-based feature that blocks collect and bill-to-third-party calls. This capability is available to residential, business, and payphone customers. The recurring costs reflect the investments associated with

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launching a query to the Line Identification Database (LIDB) for billing information associated with the called number. These costs are negligible (i.e., less than \$.005 per line, per month) and thus, have not been included in the cost summary.

The local usage costs include the traffic sensitive switching cost of the end office for both intraoffice and interoffice calls within the local calling area of that end office. Additionally, local tandem switching, interoffice transport, and signaling costs are included. These costs reflect an average per minute of use of the network. These results are converted to a payphone flat-rate monthly cost by utilizing payphone specific call lengths and the typical number of payphone calls in a month.

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Usage Calculations

% Intraoffice	% Intraoffice Study (8/1998)
% Interoffice	1-LN1
% Tandem Occurrence	Local Tandem Occurrence Study (4/2000)
Local Minutes per month	UBP Report - Coin (Jan 2002 - Apr 2002)
Mileage	BCATS-ID

Florida



Per MOU Costs

End Office Switching per MOU	BellSouth Cost Calculator Output
EO Interoffice Trunk Port per MOU	BellSouth Cost Calculator Output
Tandem Switching Function per MOU	BellSouth Cost Calculator Output
Tandem Interoffice Trunk Port per MOU	BellSouth Cost Calculator Output
Common Transport - per Mile per MOU	BellSouth Cost Calculator Output
Common Transport - Facilities per MOU	BellSouth Cost Calculator Output

TSLRIC + ONA



Flat Rate, per Line, Per Month

End Office Switching	$(LN4 * LN2 * 2 + LN4 * LN1) * LN9$
EO Interoffice Trunk Port	$LN4 * LN2 * 2 * LN10$
Tandem Switching Function	$LN4 * LN2 * LN3 * LN11$
Tandem Interoffice Trunk Port	$LN4 * LN3 * LN2 * LN12 * 2$
Common Transport - per Mile	$LN4 * LN2 * LN5 * LN13$
Common Transport - Facilities	$LN4 * LN2 * LN14$



Total Switching Usage Cost per Line per Month

Sum (LN19...LN24)

Florida



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BellSouth Cost Calculator 2.6 - Element Summary Report

Study Name: Updated Coin Study using Aug 2000 loop mod and basket case factors
 State: Florida
 Scenario: State Average - coin Oct 2003
 Study Type: TSLRIC

<u>Cost Element</u>	<u>Description</u>	<u>Recurring</u>	<u>ONA Factor</u>	<u>Total Cost</u>
A.1.coin	2-Wire Analog Voice Grade Loop - Coin	████████	████████	████████
B.3.1	Central Office Blocking and Screening	████████	████████	████████
C.1.1	End Office Switching Function Per MOU	████████	████████	████████
C.1.2	End Office Trunk Port - Shared, Per MOU	████████	████████	████████
C.2.1	Tandem Switching Function Per MOU	████████	████████	████████
C.2.2	Tandem Trunk Port - Shared, Per MOU	████████	████████	████████
D.1.1	Common Transport - Per Mile, Per MOU	████████	████████	████████
D.1.2	Common Transport - Facilities Termination Per MOU	████████	████████	████████
P.1.2	Exchange Port - 2-Wire Coin Port	████████	████████	████████

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BellSouth Cost Calculator Output Sheets

These sheets are proprietary and only furnished under written agreement.

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Overhead Cost Factor Development Worksheet

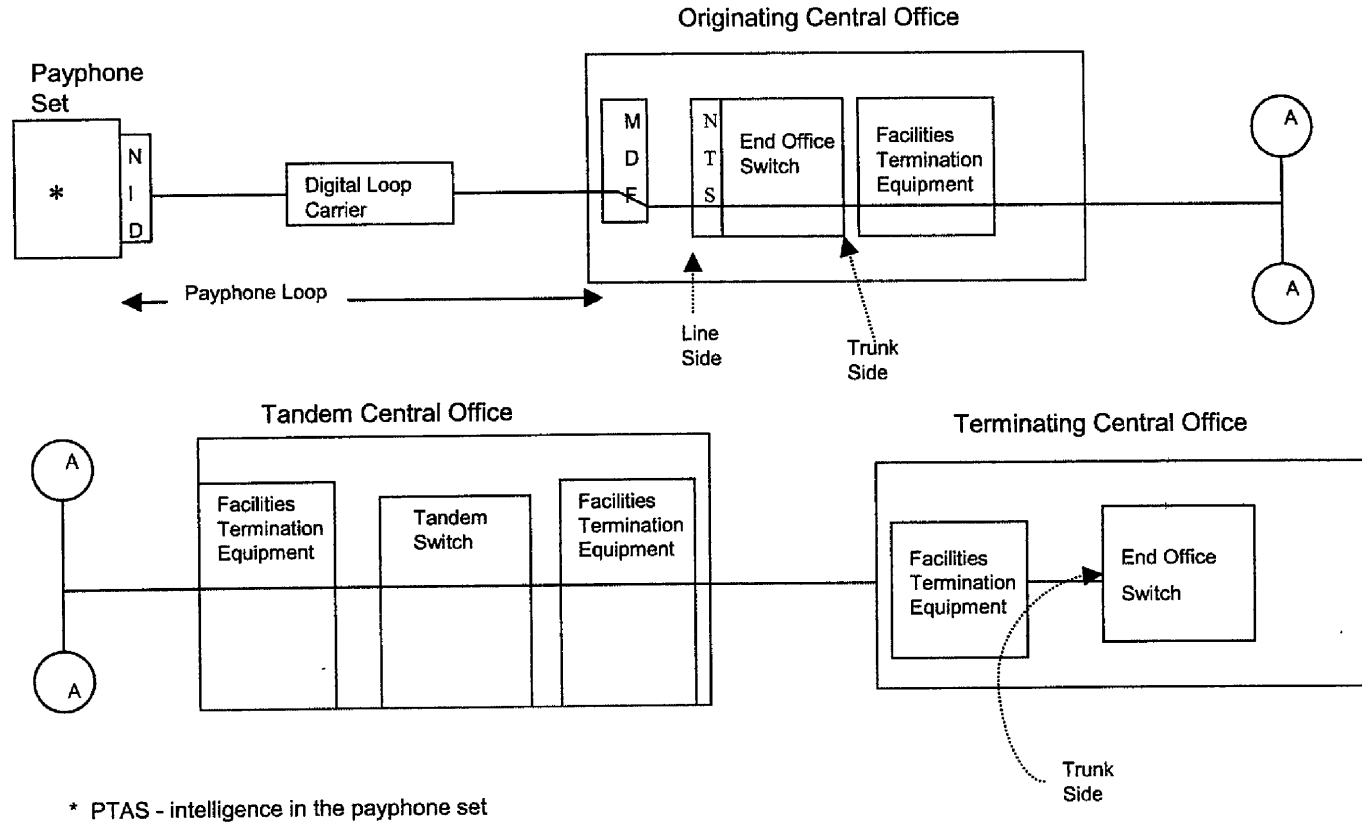
This worksheet is proprietary and only furnished under written agreement.

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SUMMARY

FLORIDA

<u>Line</u>	<u>Description</u>	<u>PTAS</u>
1	Loop	██████████
2		
3	Termination	██████████
4		
5	Usage	██████████
6		
7	Blocking and Screening	██████████
8		
9		
10		_____
11	Total	\$24.36



Payph one Service