

**ATTACHMENT B**

**BellSouth Telecommunications, Inc.  
FPSC Docket No. 030300-TP  
Request for Confidential Classification  
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12/8/03**

**REQUEST FOR CONFIDENTIAL CLASSIFICATION OF EXHIBITS DDC-1 AND DDC-2  
TO THE DIRECT TESTIMONY OF D. DAONNE CALDWELL FILED ON NOVEMBER  
17, 2003, IN FPSC DOCKET 030300-TP**

**TWO REDACTED COPIES**

**FLORIDA DOCKET NO. 030300-TP**

**PTAS STUDY**

**CALDWELL EXHIBIT DDC-1**

**PUBLIC**

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PTAS STUDY  
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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*.<sup>1</sup> 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.

<sup>1</sup> *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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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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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	<b>Total</b>	<b>\$24.36</b>

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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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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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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<sup>o</sup>, 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<sup>o</sup> (Simplified Switching Tool), the BellSouth Telecommunications Loop Model (BSTLM)<sup>o</sup>, 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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<sup>o</sup> SST - 2000 BellSouth Corporation  
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<sup>o</sup> BSTLM - 1999 INDETEC International,  
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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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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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COST STUDIES**

**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**

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████  
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**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**

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████  
████  
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████  
████

**Fiat 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	$LN4 * LN2 * LN14$

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**Total Switching Usage Cost per Line per Month**

Sum (LN19...LN24)

**Florida**

████

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COST STUDIES**

**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	[REDACTED]	[REDACTED]	[REDACTED]
B.3.1	Central Office Blocking and Screening	[REDACTED]	[REDACTED]	[REDACTED]
C.1.1	End Office Switching Function Per MOU	[REDACTED]	[REDACTED]	[REDACTED]
C.1.2	End Office Trunk Port - Shared, Per MOU	[REDACTED]	[REDACTED]	[REDACTED]
C.2.1	Tandem Switching Function Per MOU	[REDACTED]	[REDACTED]	[REDACTED]
C.2.2	Tandem Trunk Port - Shared, Per MOU	[REDACTED]	[REDACTED]	[REDACTED]
D.1.1	Common Transport - Per Mile, Per MOU	[REDACTED]	[REDACTED]	[REDACTED]
D.1.2	Common Transport - Facilities Termination Per MOU	[REDACTED]	[REDACTED]	[REDACTED]
P.1.2	Exchange Port - 2-Wire Coin Port	[REDACTED]	[REDACTED]	[REDACTED]

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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	<b>Total</b>	<b>\$24.36</b>