# COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN INQUIRY INTO THE DEVELOP-	)	
MENT OF DEAVERAGED RATES	)	ADMINISTRATIVE
FOR UNBUNDLED NETWORK	)	CASE NO. 382
ELEMENTS	)	

#### ORDER

Pursuant to 47 U.S.C. § 252(d), 47 C.F.R. 505(b) and (d), and KRS Chapter 278, the Commission herein rules on the methodology proposed by BellSouth Telecommunications, Inc. ("BellSouth") to establish unbundled network element ("UNE") rates and on the rates produced by this methodology. The rates established are attached hereto and incorporated herein as Appendix A. The deaveraged zones to which these rates apply are attached hereto and incorporated herein as Appendix B.

#### BACKGROUND

The Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 ("Act") established a policy of orderly transition to competition in the local telecommunications market. As required by the Act, the Federal Communications Commission ("FCC") issued a series of decisions and rulemakings. In one such rulemaking, the FCC prescribed rules requiring the pricing of network elements, interconnection, and methods of obtaining access to unbundled elements, including physical collocation and

virtual collocation.<sup>1</sup> Prior to the Act, this Commission had begun investigating local exchange competition.<sup>2</sup> Through arbitration proceedings, we have established, inter alia, methodologies, interconnection prices, and UNE prices.<sup>3</sup>

In this proceeding, the Commission completes the task of establishing UNE prices for BellSouth and determines the appropriate methodology of establishing different "rates for interconnection and unbundled network elements in at least three geographic areas pursuant to Section 51.507(f) of the [Federal Communications] Commission's rules."

On December 10, 1999, the Commission initiated this proceeding to implement, in Kentucky, 47 C.F.R. 51.507(f), the FCC regulation requiring by May 1, 2000 geographic deaveraging for UNEs sold to competing carriers. On January 19, 2000, a Joint Stipulation regarding UNE deaveraging was filed on behalf of AT&T Communications of the South Central States, Inc. ("AT&T"), BellSouth, Cincinnati Bell Telephone ("CBT"), GTE South Incorporated ("GTE") n/k/a Verizon South, Inc.

<sup>&</sup>lt;sup>1</sup> Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, FCC 96-325 (released August 8, 1996) (First Report and Order).

<sup>&</sup>lt;sup>2</sup> Administrative Case No. 360, Inquiry Into Universal Service and Funding Issues.

<sup>&</sup>lt;sup>3</sup> <u>See generally</u> Case Nos. 96-431, Petition by MCI for Arbitration of Terms and Conditions of a Proposed Agreement with BellSouth Telecommunications, Inc. Concerning Interconnection and Resale under the Telecommunications Act of 1996 and 96-478, The Interconnection Agreement Negotiations Between AT&T Communications of the South Central States, Inc. and BellSouth Telecommunications, Inc. Pursuant to 47 U.S.C.

<sup>&</sup>lt;sup>4</sup> Federal-State Joint Board on Universal Service, CC Docket 96-45, FCC 99-306 (released November 2, 1999) (Ninth Report and Order and Eighteenth Order on Reconsideration), ¶ 120.

("Verizon"), MCI WorldCom Communications and MCImetro Access Transmission Service, Inc. ("WorldCom") [formerly MCI WorldCom], and TCG of Ohio ("TCG"). The Joint Stipulation specified certain deaveraged rates without adopting a particular methodology. This stipulation was adopted by Order on March 24, 2000 and implemented May 1, 2000.<sup>5</sup> It applies only to a limited number of commonly-sought network elements.<sup>6</sup>

On April 25, 2000, the Commission issued an Order affirming the positions enumerated in its December 10, 1999 Order and establishing a tentative procedural schedule for the three major incumbent local exchange carriers ("ILECs"), BellSouth, Verizon, and CBT. During informal conferences held July 11-12, 2000 to discuss the Commission's proposals and the impending filings of the major ILECs, it became apparent that each of the carriers was reluctant to accept the FCC Synthesis Model. Instead, they presented cost analyses developed within their own companies. In addition, BellSouth asserted it was responding to multiple concerns in a comparable proceeding before the Florida Public Service Commission ("Florida Commission"). As a result of these discussions, the procedural schedule was deferred to permit BellSouth to continue its discussions with the Florida Commission and to implement those modifications into the filing before this Commission. Also, the parties asked the

<sup>&</sup>lt;sup>5</sup> The Joint Stipulation's deaveraged rates for BellSouth were based upon a three-zone split of the ascending wirecenter costs from the Commission's decision in Administrative Case No. 360 dated May 22, 1998. The three-zones consisted of those costs below the statewide average, those above the statewide average, and those greater than double the statewide average.

<sup>&</sup>lt;sup>6</sup> As part of its proposal in Case No. 99-434, BellSouth again requested that the Commission base deaveraged UNE rates on rate groups. The Commission subsequently adopted these new rates in its Order dated April 12, 2001.

Commission to determine UNE prices based upon the written record without a public hearing.

On October 2, 2000, each of the major ILECs filed cost analyses with the Commission. Verizon filed its cost analyses based upon the use of a company-specific Integrated Cost Model ("ICM") reflecting its own engineering standards, current and forward-looking technologies and data and network topology to derive total element long run incremental cost ("TELRIC") and total service long run incremental cost ("TSLRIC"), for its basic network functions. CBT urged the Commission to accept company-specific inputs, and it filed traditional TELRIC cost studies for recurring and nonrecurring network elements.

Concurrently, BellSouth filed new TELRIC studies for the unbundled elements defined by the FCC<sup>9</sup> and for combinations of unbundled elements. BellSouth used a series of company-specific models, special studies, and subject matter experts to determine forward-looking, efficient architecture, as well as engineering and provisioning procedures required to provide the functionality of each of the UNEs and UNE combinations.<sup>10</sup>

<sup>&</sup>lt;sup>7</sup> See Verizon's October 2, 2000 filing ICM.4.1b Model Methodology-Conceptional Framework-ICM Overview dated July 29, 2000.

<sup>&</sup>lt;sup>8</sup> CBT Comments filed October 2, 2000, at 5.

<sup>&</sup>lt;sup>9</sup> FCC 99-238, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket 96-98 (released November 5, 1999) (Third Report and Order and Fourth Further Notice of Proposed Rulemaking), (hereinafter, "UNE Remand Order").

For a discussion <u>see</u> Kentucky Executive Summary, Statement of Purpose and Overview of the Documentation of the Cost Model CD (filed by BellSouth).

Though BellSouth, Verizon, and CBT each had models and proposals pending review, it was apparent that investigating each of these three distinct cost study methodologies simultaneously would be a formidable task. Therefore, the Commission decided to review initially BellSouth's cost studies to establish UNE rates for BellSouth. BellSouth's UNE rates will be established first because BellSouth has interconnection agreements with its major competitive LECs ("CLECs") that have recently ended. Moreover, BellSouth has indicated it plans to petition the FCC for authority to enter the interstate market<sup>11</sup> and, therefore, wishes to establish FCC-compliant UNE rates. The Commission will revisit Verizon's<sup>12</sup> and CBT's unbundled network elements costs and prices in the near future.

On November 17, 2000, BellSouth filed direct testimony in support of its cost studies. On April 12, 2001, the Commission issued a procedural Order inviting BellSouth to supplement its original testimony and any other interested parties to file testimony. On May 2, 2001, BellSouth filed supplemental testimony and updated its models and cost studies. WorldCom and the Southeastern Competitive Carriers Association ("SECCA") filed rebuttal testimony on June 22, 2001. Also on June 22, 2001, BellSouth filed additional supplemental and surrebuttal testimony and updated its cost models to recognize a programming modification.

<sup>&</sup>lt;sup>11</sup> Case No. 2001-105, Investigation Concerning the Propriety of InterLATA Services by BellSouth Telecommunications, Inc., Pursuant to the Telecommunications Act of 1996.

<sup>&</sup>lt;sup>12</sup> ALLTEL Corporation has filed an application to purchase the assets of Verizon's Kentucky operations (Case No. 2001-399). Accordingly, the party of record in the UNE review at issue may be ALLTEL rather than Verizon.

On July 26-27, 2001, Staff from the Kentucky Commission and the Alabama Public Service Commission traveled to the Florida Commission's offices in Tallahassee, Florida, to discuss the Florida UNE price order entered May 25, 2001 and to consult with staff of other commissions concerning cost study models, inputs and expected results.

In addition, there were three rounds of data requests and responses. On August 20, 2001, BellSouth updated its response to the Commission to provide a cost analysis based upon the parameters determined in the Florida Commission's UNE price order.

Several parties requested that the Commission decide the case on the written record. In response, the Commission required any interested party to request a hearing by August 1, 2001. No such request was filed. Briefs were submitted on August 17, 2001. Consequently, the case concerning BellSouth UNEs is ripe for final decision.

## **DISCUSSION**

In addition to reviewing the record of this proceeding, the Commission has reviewed the records and decisions of other commissions in the BellSouth region regarding the development of UNE rates. In each of these jurisdictions, BellSouth has filed information that is directly relevant to our decision here, for each state commission is responsible for establishing UNE rates.

BellSouth has made a parallel filing with the Florida Commission using the same models it filed in Kentucky. In fact, BellSouth filed its new cost studies nearly simultaneously in Kentucky, Louisiana, Alabama, Mississippi and South Carolina in 2000. More recently, BellSouth filed new cost studies in Georgia to true-up the interim

rates in that state based upon the BellSouth Telecommunications Loop Model and related cost calculators.

After a thorough review of its record, the Commission has determined that its decisions regarding many engineering issues correspond with findings on comparable issues in Florida. On June 4, 1999, the Florida Commission initiated a case to address the deaveraged pricing of UNEs, the pricing of UNE combinations, and nonrecurring charges.<sup>13</sup> The Florida Commission issued an order on May 25, 2001.<sup>14</sup> Subsequently, the Florida Commission ruled on motions for reconsideration.<sup>15</sup>

# COST MODELS

The Act envisions a competitive local exchange market driven in part by cost-based rates for UNEs. Consequently, as an ILEC and major regional Bell operating company ("RBOC") BellSouth must produce cost studies to enable state commissions in its region to determine the costs associated with certain components or elements of its telecommunications network. Historically, BellSouth has prepared Long Run Incremental Cost ("LRIC") studies, often based on sampling, to support tariff prices for telecommunications services. BellSouth also conducted TSLRIC studies that have

Docket No. 990649-TP Investigation into Pricing of Unbundled Network Elements (Fla. PSC).

<sup>&</sup>lt;sup>14</sup> <u>Id.</u>, Order No. PSC-01-1181-FOF-TP dated May 25, 2001. A copy of this Order has been placed into the record of this proceeding.

Order on Motions for Reconsideration and Motion to Conform Analysis (October 18, 2001). A copy of this Order has been placed into the record of this proceeding. In addition, on November 19, 2001 MCI filed an appeal with the Florida Supreme Court with reference to the above orders. BellSouth was required in Florida's May 25, 2001 order to refile certain components of its cost studies within 120 days of its issuance. The revised cost studies were filed with the Florida Commission on September 24, 2001.

addressed not only the volume sensitive costs of LRIC studies, but also have taken into account directly attributable volume insensitive costs. TSLRIC studies have traditionally been used to ensure that a service was not being subsidized.

On October 2, 2000, BellSouth filed TELRIC studies, including shared and common costs, for its UNEs, utilizing newly developed models to determine element costs. Modeling plays an important step in developing forward-looking prices based on both recurring and nonrecurring costs for UNEs and UNE combinations. BellSouth has used several models to develop UNE costs for this docket.

There is little, if any, dispute regarding the use of the models submitted by BellSouth. During the informal conferences, parties' questions concerning the models and modeling content were limited. BellSouth responded to them and supplied updates where feasible. In fact, BellSouth's initial filing did not occur until modifications were made after other state commissions' inquiries and many updates stem from modifications or inquiries in other BellSouth jurisdictions.

The Commission notes that the Florida Commission has required BellSouth to refile revisions to its cost study addressing xDSL-capable loops, network interface devices, and cable engineering and installation placements. In addition, the Florida Commission required parties to refile proposals addressing network reliability and security concerns pertaining to access to subloop elements.

Following is a brief discussion of the principal models BellSouth utilizes in determining the cost of UNEs, combinations of UNEs, and deaveraged costs.<sup>16</sup>

#### Loop Investment Model

BellSouth, in conjunction with INDETEC International, Inc., CostQuest Associates, and Stopwatch Maps, has developed a BellSouth proxy model for loop investment calculations called the BellSouth Telecommunications Loop Model ("BSTLM"). This new model is designed to support the cost development for both unbundled loop elements and service-specific loops. Furthermore, the BSTLM is the only model currently available that distinguishes among the different types of loops, such as 2-wire, 4-wire, Integrated Services Digital Network ("ISDN"), Asymmetrical Digital Subscriber Line ("ADSL")-compatible, and High Bit Rate Digital Subscriber Line ("HDSL")-compatible. Sampling was the technique BellSouth used in the past to determine the forward-looking costs for loops on a statewide average basis. The BSTLM overcomes many of the limitations of sampling and can also geographically deaverage UNE costs.

The new model incorporates geocoded BellSouth customer service addresses and the types and quantities of services provided at each location. When combined with BellSouth-specific input values, the model produces loop investments that reflect the

<sup>&</sup>lt;sup>16</sup> Each of the models was provided to the Commission in CD-ROM format with BellSouth's initial filing on October 2, 2000. Updated CDs have been supplied in some cases, but generally these models have remained unchanged. The latest updates containing all models were provided June 22, 2001. The models are more fully described in the testimony of D. Daonne Caldwell, and a detailed discussion of their functions are found in the narrative files contained on the individual CDs.

forward-looking, most efficient costs of providing service in BellSouth's territory in Kentucky at a more detailed level than a statewide average.

#### Switch Investment Model

BellSouth continued to utilize Telecordia's Switching Cost Information System Model Office ("SCIS/MO") to determine the fundamental investments for exchange ports, features, unbundled switching and common transport. The switch is a multifaceted entity that performs a number of functions, from establishing a call to providing vertical features, such as three-way calling. To accurately identify the fundamental unit switch investments necessary for these individual functions, a sophisticated model, like SCIS/MO, is required. In addition, SCIS/MO develops investments unique to remote switches and investment for ISDN and System Signaling 7 functionality.

## Cost Calculator Model

The BellSouth Cost Calculator model replaces the spreadsheets used to calculate costs in past arbitration cases. This calculator converts input data (material prices/investments), recurring additives, nonrecurring additives, and work times to both recurring and nonrecurring costs. The type of cost developed (i.e., LRIC, TSLRIC, or TELRIC) is dependent upon the inputs and the selections made by the user. The BellSouth Cost Calculator is the mechanism that performs the mathematical exercise to apply the correct inflation factors, support loadings, annual cost factors, labor rates, tax factors, and shared and common factors to the inputs. Additionally, to ensure consistency between studies, the BellSouth Cost Calculator serves as the warehouse for annual cost factors, labor rates, loading factors, and inflation factors.

## Capital Cost Calculator Model

BellSouth utilizes the Capital Cost Calculator, an internal model designed by BellSouth in its Benchmark Cost Proxy Model ("BCPM"), to produce depreciation, cost of money, and income tax factors that are applied to investments to calculate capital costs. The user has the ability to modify a set of variables: debt ratio, cost of money, debt interest rate, net salvage ratio and economic life of assets.

# Specialized Cost Calculator Model

In addition to the cost calculators discussed above, BellSouth employs a number of specialized cost calculators to develop a specific material price of specialized components used in the provisioning of various network capabilities. These specialized cost calculators include, but are not limited to, the DS1 Channelization Price Calculator, the Signaling System 7 Price Calculator, the Simplified Switching Tool, the SONET Price Calculator, and the Main Distributing Frame Material Price Study.

## FORWARD-LOOKING RECURRING UNE COST STUDIES

BellSouth runs five different network scenarios in the BSTLM. First, BellSouth uses the BST2000 scenario to the development of forward-looking investment for all network elements except copper loops and UNE combinations. The BST2000 scenario reflects the fact that all unbundled loops (other than those combined with a port) served via a fiber feeder-based digital loop carrier ("DLC") system must operate on a non-integrated basis because they are not terminated directly into the BellSouth switch. Instead, the loops are terminated in a CLEC's collocation space.<sup>17</sup> The BSTLM sets the switched services to "non-switched" so the model will account for termination in a

<sup>&</sup>lt;sup>17</sup> Caldwell Direct at 16-17.

central office terminal rather than termination on a DS1 that is directly integrated into the switch.<sup>18</sup>

Second, BellSouth uses the Combo scenario to develop the material investment associated with the loops used in combinations (the 2-wire analog voice grade loop). Because combination loop/port offerings can be served via integrated DLC, this scenario sets all switched services back from the "non-switched" setting in the BST2000 to the "switched" setting. With this setting all switched services are designed using integrated DLC.<sup>19</sup>

Third, BellSouth uses the Copper Only scenario to develop the material investment of those network elements served only by unloaded copper feeder and distribution facilities. The Copper Only scenario develops costs for copper loops of any length.<sup>20</sup>

Fourth, in the BST2000 ISDN scenario, all loops considered in BST2000 are converted to ISDN loops, and ISDN customers are added. And, fifth, the Combo-ISDN run has been used to develop the costs of an ISDN loop when it is offered in combination. It is identical to the BST2000 ISDN scenario except that switched services remain as switched.<sup>21</sup>

<sup>20</sup> <u>ld.</u>

<sup>&</sup>lt;sup>18</sup> Caldwell Direct at 17.

<sup>&</sup>lt;sup>19</sup> <u>Id.</u>

<sup>&</sup>lt;sup>21</sup> Caldwell Surrebuttal at 28.

According to BellSouth, these five scenarios are necessary and reasonably employed to properly allocate facilities investments and correlate those investments to customers.

On the other hand, SECCA and WorldCom assert that the use of multiple scenarios is inappropriate. The intervenors argue that the use of the Combo scenario alone provides a reasonable basis for determining forward-looking TELRIC prices for all UNE loops. SECCA and WorldCom have proposed adjustments to model inputs that, in their opinion, would allow a unified process for developing TELRIC-based costs for all UNEs avoiding the use of multiple scenarios. SECCA and WorldCom contend that the BST2000 scenario is based only on the use of obsolete universal digital loop carrier ("UDLC") technology.<sup>22</sup> They also argue that the Copper Only scenario is built only to provide xDSL service on an all-copper network, using obsolete technology and unfeasible methods.<sup>23</sup>

SECCA and WorldCom claim that BellSouth's multiple scenarios do not properly account for the current level of demand. They say that FCC Rules 51.505(b) and 51.511 require that the elements' cost be based upon the levels of demand the ILEC is likely to provide.

We conclude to the contrary. The application of multiple scenarios does not violate FCC rules but rather ensures that BellSouth can meet its obligation to offer any network element.

<sup>&</sup>lt;sup>22</sup> Wood and Wilsky at 29–31.

<sup>&</sup>lt;sup>23</sup> I<u>d.</u> at 31–33.

In each of the scenarios presented by BellSouth, the fundamentals remain the same. Varied results are achieved by forcing the model to design a specific type of network. We find that BellSouth's five scenarios comply with 47 C.F.R. 51.307(c), which provides:

An incumbent LEC shall provide a requesting telecommunications carrier access to an unbundled network element, along with all of the unbundled network element's features, functions, and capabilities, in a manner that allows the requesting telecommunications carrier to provide any telecommunications service that can be offered by means of that network element.

Because BellSouth's BSTLM scenarios design a network based on forward-looking principles, certain elements that exist in BellSouth's network today will not be present in a forward-looking network. BellSouth is obligated by 47 C.F.R. 51.307(c) to offer those network elements to any requesting telecommunications carrier. It is for this reason that BellSouth uses multiple scenarios to price elements that exist in the present-day network, but will not exist in the forward-looking network.

Accordingly, having no other model to consider, the Commission finds that the BSTLM is the most appropriate means available to estimate the amount of outside plant required to provision services. The inherent design characteristics of the model and BellSouth's modeling approach using multiple scenarios and engineering assumptions pertaining to crossover points, loop length limits, range card limits, and other similar items should be accepted. To maintain operating efficiency and consistency within its region, BellSouth should continue to file with this Commission any and all information required by the Florida Commission pertaining to adjustments of the BSTLM. Unless a future Order of this Commission concludes otherwise, those changes should be applied in Kentucky, using Kentucky-specific data.

BellSouth's use of in-plant factors in deriving loop costs appears reasonable and should be accepted. Also, the fill factors proposed by BellSouth of 2 pairs per household and actual number of business lines appears reasonable and should be accepted. Finally, BellSouth's allocation of shared fiber and structure investment based on DS0 equivalents, instead of the number of copper pairs, appears reasonable and should be accepted. However, as mentioned above, BellSouth should file with us any and all information filed in the future with the Florida Commission, with Kentucky-specific data, regarding the explicit input of all engineering and installation costs in the BSTLM.

With regard to the remaining engineering-related issues including manholes, Fiber/Copper Cable material and placement costs, Drops, Network Interface Devices and DLC costs, terminal costs and switching costs, the Commission finds that BellSouth's proposed methodology to account for these costs should be accepted subject to the continued review by the Florida Commission and subsequent consideration by this Commission.

# xDSL LOOPS

The Commission finds that the appropriate treatment of xDSL loops has been ordered by the Florida Commission. Specifically, the CLECs should have the authority to determine the facilities used and the type of services provided. Furthermore, CLECs should not have to pay for non-essential added services such as DLR, test points, and order coordination unless specifically requested. Additionally, line splitting should be available to all CLECs on a non-discriminatory basis.

#### DEPRECIATION

Depreciation is one of the inputs in the BellSouth Cost Calculator model. Parties disagree about the specific lives to be used in this proceeding, but they agree that it is appropriate to use projection lives. By definition, these lives represent newly placed plant and, therefore, complies with the FCC's requirement of using forward-looking costs. According to BellSouth, the proposed lives are those resulting from its 2000 BellSouth Kentucky Depreciation Study.<sup>24</sup>

The 2000 BellSouth Kentucky Depreciation Study provides explanations of methodology, data, and analysis that support BellSouth's recommendations. As further support for the reasonableness of the recommended lives and salvage values, BellSouth asserts that these values are consistent with the depreciation lives and salvage values BellSouth uses for intrastate reporting purposes and for external reporting purposes. Lastly, BellSouth claims that its recommended lives are comparable to the lives last prescribed by the FCC for AT&T in 1994 as well as those of other competitors.

SECCA and WorldCom assert that the FCC's rules require that only forward-looking costs be used to set interconnection rates and that forward-looking costs use economic depreciation rates.<sup>26</sup> Their recommendations are generally consistent with the lives set forth in the FCC's 1995 prescription of BellSouth's depreciation rates.

<sup>&</sup>lt;sup>24</sup> Cunningham Direct at 3.

<sup>&</sup>lt;sup>25</sup> <u>Id</u>. at 5.

<sup>&</sup>lt;sup>26</sup> SECCA Brief at 17.

To the contrary, BellSouth asserts that the lives prescribed by the FCC for interstate depreciation purposes in Kentucky are inappropriate for use in UNE cost studies. BellSouth notes that the last FCC depreciation represcription for BellSouth was in 1995 and alleges that the lives are much too long, particularly for the technology-sensitive accounts. These FCC lives are based on the old regulatory paradigm in which plant lives were artificially lengthened beyond their true economic lives so that the investment would be recovered in smaller year-to-year increments over longer periods of time. BellSouth argues that today's competitive environment is not likely to allow BellSouth to recover investment based on lives that are inappropriately long.<sup>27</sup>

The purpose of this docket is not to direct BellSouth to use specific depreciation rates for pricing its retail business, but rather to establish the appropriate cost methodologies to be incorporated in the cost calculator for Kentucky-specific UNEs.

The Commission finds that SECCA's and WorldCom's proposed use of the FCC's 1995 presubscribed depreciation rates would not meet the forward-looking standard. The Commission finds that the rates put forth by BellSouth should be used, with these exceptions: Digital ESS; Circuit Analog; Analog Cable Metallic; Underground Cable Metallic; Buried Cable Metallic; and Submarine Cable Metallic.

Parties also disagree about the salvage values appropriate to determine UNE prices. The Commission finds it appropriate to adopt BellSouth's proposed salvage values for reasons similar to those discussed for projection lines. The approved lives and salvage values for use in UNE calculations in this proceeding are shown on the tables set forth in Appendix C, attached hereto and incorporated herein.

<sup>&</sup>lt;sup>27</sup> Cunningham at 7.

# COST OF CAPITAL

# Cost of Equity

SECCA proposes two methods for estimating the cost of equity.<sup>28</sup> First, a three stage discounted cash flow model ("DCF") model is used to estimate BellSouth's cost of equity. SECCA used a list of comparable companies that included four RBOCs, including BellSouth, and two large independent telephone companies. The growth rate projections for the three stages were for years 1-5, 6-20, and 21 and beyond. Projected dividends were obtained from Value Line Inc. and company stock prices used in the calculations were those as of December 16, 2000. From this data, SECCA computed two DCF estimates of the cost of equity for BellSouth. For the comparable companies, including BellSouth, estimates of the cost of equity ranged from 7.83 percent (BellSouth) to 10.3 percent (Verizon). An adjustment is made to account for capital structure, which produces new DCF results ranging from 8.70 percent (Verizon) to 9.09 percent (SBC). BellSouth's adjusted cost of equity is 8.82 percent.<sup>29</sup>

Second, SECCA proposed the capital asset pricing model ("CAPM") model to calculate BellSouth's cost of equity. Beta values are obtained for each of the proxy companies and then adjusted for the respective companies' debt levels, which produces a leveraged beta. BellSouth's leveraged beta is .65. The market risk premium is calculated using both short-term T-bill rates and long-term Treasury bond rates. Using each of these rates, SECCA's estimate of the cost of equity for BellSouth was 8.05 percent and 8.31, respectively, with an average value of 8.18 percent. Averaging the

Wood and Wilsky Rebuttal Testimony at 85-93 and Exhibit CMW/DJW-7 filed June 22, 2001.

<sup>&</sup>lt;sup>29</sup> Wood and Wilsky Rebuttal at 85-93 and Exhibit CMW/DJW-7.

DCF and the CAPM results produced a recommended cost of equity for BellSouth of 8.50 percent.<sup>30</sup>

BellSouth utilizes two methods to calculate its cost of equity and to justify its contention that the rate inherent in the FCC's 11.25 percent cost of capital is reasonable. The first set of calculations employs a constant growth DCF model. A cluster analysis identifies a list of 20 proxy firms that are judged to be of comparable risk to BellSouth, only one of which is a telecommunications company. BellSouth states that the 20 proxy companies should be viewed as a portfolio that is comparable in risk to BellSouth.<sup>31</sup> A quarterly form of the DCF model is used and a flotation cost adjustment is made by reducing the market prices of the comparable firms by 5 percent. The DCF model estimates that BellSouth's cost of equity is in range of 15.37 percent to 15.61 percent.

The CAPM model is also used to estimate BellSouth's cost of equity and is applied to the same proxy risk firm portfolio. Prospective betas were obtained from BARRA. A long-term risk free rate of 6.16 percent is derived from Treasury bond futures contracts quoted during September 2000. A DCF analysis is used to estimate the expected return on the S&P 500 market index. The expected market return, calculated using both Institutional Brokers Estimation Service ("IBES") and Zacks growth rate forecasts, was 19.57 percent and 19.67 percent, respectively. Utilizing this data, BellSouth's cost of equity estimates range from 16.75 percent to 16.83 percent.

<sup>&</sup>lt;sup>30</sup> Wood and Wilsky Rebuttal at 85-93 and Exhibit CMW/DJW-7.

<sup>&</sup>lt;sup>31</sup> Billingsley Testimony at 17.

Secondly, BellSouth uses a risk premium analysis to determine an estimate of the expected return on the over all equity market. Using the Standard and Poor's Composite Index, or S&P 500, as a measure of the equity market, the analysis yields an expected return ranging from 14.91 percent - 15.41 percent. Based upon these estimates, BellSouth concludes that its estimated cost of equity, ranging from 15.17 percent - 16.83 percent, is reasonable.

On July 23, 2001, BellSouth updated its earlier cost of capital calculations, including the 20 companies it alleges have comparable risk to BellSouth.<sup>32</sup> New DCF calculations, using IBES and Zacks growth rates, resulted in new cost of equity estimates ranging from 14.95 percent - 15.02 percent.<sup>33</sup>

To update the CAPM estimates, BellSouth used May 2001 data. It calculated a new estimate of the risk free rate of return of 6.11 percent, and an average beta of 0.74 for the comparable proxy risk firm portfolio.<sup>34</sup> Updated IBES and Zacks growth rate were used to obtain updated expected rates of return on S&P 500 equity market of 17.67 percent and 16.94 percent, respectively. This data indicates that BellSouth's cost of equity is 14.66 percent, based on IBES growth rate forecasts, and 14.12 percent based on Zacks growth rate forecasts.<sup>35</sup>

Finally, BellSouth updated its risk premium analysis. The market risk premium of the S&P 500 over Aa-rated public utility bonds is calculated to be 7.51 percent. The

<sup>&</sup>lt;sup>32</sup> Billingsley Exhibit No. RSB-12.

<sup>&</sup>lt;sup>33</sup> Billingsley Surrebuttal at 16.

<sup>&</sup>lt;sup>34</sup> Billingsley Exhibit No. RSB-14 and RSB-12, respectively.

<sup>&</sup>lt;sup>35</sup> Billingsley Surrebuttal at 16.

average yield on Aa-rated public utility bonds from March – May 2001 was 7.67 percent, which implies that the expected cost of equity on the S&P 500 is 15.18 percent (7.51 percent + 7.67 percent). An alternative approach that adjusted the risk premium estimate to charges over time was also used. A new expected return on the S&P 500 equity market of 14.89 percent was the result of adding the adjusted risk premium of 9.11 percent to the current average level of 30 year Treasuries.<sup>36</sup> The updated risk premium analysis indicates that the current expected return on overall equity market is between 14.89 percent and 15.18 percent. BellSouth argues that this corroborates the reasonableness of the above DCF- and CAPM-based equity estimates.

BellSouth also critiques the methodologies and results from SECCA, arguing that the cost of equity estimates obtained from the DCF model are flawed. The three-stage DCF model is highly subjective, according to BellSouth, and does not represent investors' perspectives. In addition, it argues that the growth rate forecasts do not reflect the investment community's consensus; that it includes no flotation cost adjustment; and that the model is not adjusted for quarterly dividend payments. Finally, SECCA did not qualify its group of comparable companies as being appropriate proxies for BellSouth. As to the CAPM model, BellSouth argues that SECCA utilized an inappropriately low market risk premium and that it relied upon historical, rather than prospective, beta values.<sup>37</sup>

The Commission agrees that there are serious flaws in SECCA's application of the DCF methodology and in some of the model input values. SECCA did not, it

<sup>&</sup>lt;sup>36</sup> Billingsley Surrebuttal at 17 and RDB-15.

<sup>&</sup>lt;sup>37</sup> Billingsley Surrebuttal at 3.

appears, adequately qualify its proxy firms. However, the firms included in the list are telecommunications firms and would, therefore, face many of the same industry risks and business opportunities as BellSouth. The Commission is not convinced that BellSouth's portfolio of proxy companies is either sufficiently representative of the risks faced by BellSouth or sufficiently similar to BellSouth to merit its use in determining BellSouth's cost of equity. Thus, there is doubt about the DCF results of both SECCA and BellSouth. While the Commission believes that determining a reasonable cost of equity could best be accomplished by combining the parties' models, the flaws found in both DCF presentations make this difficult. Therefore, the clearest route to determining an appropriate cost of equity is to use the CAPM model.

The CAPM equity of SECCA's estimated cost of equity using the CAPM Model ranges from 8.98 percent to 8.02 percent.<sup>38</sup> Similarly, BellSouth's cost of equity capital ranges from 14.12 percent to 14.66 percent.<sup>39</sup> BellSouth's updated growth rates are 17.67 percent and 16.94 percent for IBES and Zacks, respectively. The updated, risk-free rate of return is 6.11 percent. Using these inputs in the CAPM model and SECCA's beta of .65 for BellSouth produces a cost of equity between 13.14 percent and 13.62 percent. Consequently, the Commission finds that the appropriate cost of equity in this proceeding is 13.25.

#### Capital Structure

In determining the forward-looking cost of capital, BellSouth uses the average market value-based capital structure of 20 firms that have comparable risk to that of

<sup>&</sup>lt;sup>38</sup> Exhibit CMW/DJW-7 page 8 of 10.

<sup>&</sup>lt;sup>39</sup> Billingsley Surrebuttal at 4.

BellSouth.<sup>40</sup> These capital structures were based upon the closing common stock prices and financial statements of the companies as of June 30, 2000 and produce an average capital structure of 13.42 percent debt (short-term and long-term) and 86.58 percent equity. Based upon the average capital structure from the comparable firm group, BellSouth's capital structure is estimated to be 14.36 percent debt (long-term and short-term) and 85.64 percent equity.<sup>41</sup> These values were derived from the closing common stock prices and financial statements of the companies as of December 31, 2000.

SECCA determined the average market value based capital structure based upon the capital structures of six telephone holding companies using the companies' Securities and Exchange Commission's Form 10-Q for the third quarter of the year 2000. SECCA also determined that the book value capital structures of the sample companies were 49.40 percent total debt, .60 percent preferred stock, and 50 percent equity, and that the market value capital structure was .20 percent total debt, 20 percent preferred stock and 79.80 percent equity.

BellSouth criticizes SECCA's recommended capital structure because it relies on book values to determine the low end of the recommended cost of capital ranges. Also, book value capital structures do not capture and do not reflect a new event or announcement that could enhance or detract share values.

<sup>&</sup>lt;sup>40</sup> Billingsley Testimony at 3 and Exhibit RSB-10.

<sup>&</sup>lt;sup>41</sup> Billingsley Surrebuttal Testimony at 4 and Exhibit No. RSB-17.

<sup>&</sup>lt;sup>42</sup> Wilsky and Wood at 28.

Although BellSouth believes market values are superior to accounting values in determining a forward-looking capital structure, it uses accounting values in selecting the comparable companies. In selecting recent capital structures for a surrogate, BellSouth projects that at some point BellSouth's capital structure will mirror the average capital structure of those companies, many of which are in markets that are totally competitive and highly risky. BellSouth uses a capital structure of 60 percent equity and 40 percent debt for planning purposes.<sup>43</sup>

The Commission believes that it is more reasonable to use a capital structure used by BellSouth for future planning purposes than a capital structure significantly higher in risk. The latter structure was developed using totally competitive companies in entirely different markets. Certainly BellSouth has the expertise to develop a capital structure that will reflect its forward-looking risk in planning for its future. Therefore, the Commission accepts the use of a capital structure consisting of 60 percent equity and 40 percent debt.

## Cost of Debt

To determine the forward-looking cost of debt, BellSouth added the recent average yield to maturity on 30-year U.S. Treasury bonds to the average difference between the yields on such U.S. Treasury bonds and Aa-rated public utility bonds. The result was a forward-looking cost of debt of 8.05 percent. BellSouth computed a cost of debt of 7.86 percent.<sup>44</sup>

<sup>&</sup>lt;sup>43</sup> Data Response to Commission Staff's Fourth Data Request.

<sup>&</sup>lt;sup>44</sup> Billingsley Surrebuttal Testimony at 19.

SECCA computed its forward-looking cost of debt by weighting the yields for BellSouth's outstanding debt as reflected in Moody's Bond Guide dated January 1, 2001. The process yielded a cost of debt for BellSouth of 7.2 percent.<sup>45</sup>

BellSouth discounts the debt cost derived by SECCA because it included in the calculations debt that was issued by an affiliated company that was not used to finance telephone network assets.

The Commission notes that neither BellSouth nor SECCA considers short-term debt in its analysis of the appropriate cost of debt. However, BellSouth stated that an appropriate cost rate for short-term debt would be the average P-1 commercial paper yield of 6.52 percent for September 2000. 46 To determine the percentage of short-term debt in the overall 40 percent debt previously adopted, the Commission will use the percentage found on Exhibit CMW/DJW-7. This will produce a short-term capital structure component of 18 percent and a long-term component of 22 percent. Since short-term debt financing is eventually refinanced with long-term debt, the percent of each in a capital structure is constantly changing. The Commission considers the percentages determined above a reasonable breakdown of short- and long-term debt. With respect to the appropriate cost rate for long-term debt, the Commission believes that the embedded analysis presented by SECCA is the more appropriate as it includes debt issues that extend into the future and therefore reflects the forward-looking costs of BellSouth's debt service. However, the Commission will adjust the analysis to exclude

<sup>&</sup>lt;sup>45</sup> Wilsky and Wood at 93.

<sup>&</sup>lt;sup>46</sup> Exhibit CMW/DJW 7 at 9.

the debt issued by BellSouth Capital Funding. The resulting forward-looking cost of long-term debt for BellSouth is 7.06 percent.

In summary, given a capital structure of 60 percent equity, 18 percent short-term debt and 22 percent long-term debt, and cost rates of 13.25 percent for equity, 6.52 percent for short-term debt and 7.06 percent for long-term debt, the Commission finds that the appropriate forward-looking cost of capital is 10.67 percent.

## **TAX RATES**

BellSouth's combined state and federal income tax rate is 38.71 percent, based on an average of its taxes paid region-wide. In Kentucky, BellSouth's combined tax rate is 40.36 percent based on a 35 percent federal tax and an 8.25 percent state tax. The ad valorem and other tax factor of .9265 percent is an effective tax factor furnished by the BellSouth Tax Department, calculated by dividing property-related tax expenses by telephone plant-in-service region-wide.

The rates established in these proceedings will be for UNEs offered in Kentucky; therefore, we find it appropriate that Kentucky-specific tax rates be applied. Accordingly, we approve a combined state and federal income tax rate of 40.36 percent, an ad valorem and other tax rate of .6402 percent, and a Regulatory Assessment Fee ("RAF") rate of .1898 percent.

## **EXPENSES AND COMMON COSTS**

The inclusion of a reasonable amount of forward-looking shared and common costs in the rates established for UNEs is consistent with the past orders of the FCC and the Commission. BellSouth's approach for determining these costs consists of a study that develops appropriate shared and common cost factors for application to

forward-looking investments or costs in UNE rate calculations. BellSouth has modified its methodology from the one used in previous arbitration cases before the Commission. This modification in the treatment of shared and common costs consists of dissociating shared and common costs from labor rates.<sup>47</sup>

To shared and common costs, BellSouth splits the total forward looking cost of business between the wholesale and retail functions and specifically identifies three major categories of wholesale costs: (1) wholesale direct costs; (2) the portion of shared costs attributed to wholesale; and (3) a reasonable portion of common costs applicable to wholesale operations. BellSouth further splits direct costs between those wholesale costs that are related to recurring investment pertaining to transactions (i.e., UNE related) and those that are related to "other wholesale" transactions, such as non-recurring or special purposed transactions. BellSouth uses its CAM as a model to break down the costs into the separate categories. The relationship between the wholesale common costs and the total wholesale direct and wholesale shared costs yields the common cost factor that is equal to 6.24 percent.

BellSouth also develops a second set of factors by determining the relationship, by investment type, between wholesale shared costs related to investment accounts and the associated network investment.

<sup>&</sup>lt;sup>47</sup> Reid Direct at 4.

<sup>&</sup>lt;sup>48</sup> Reid Direct at 5-6.

<sup>&</sup>lt;sup>49</sup> Reid Direct at 6.

<sup>&</sup>lt;sup>50</sup> Reid Direct at 6.

<sup>&</sup>lt;sup>51</sup> Reid Direct at 7.

SECCA and WorldCom contend that BellSouth's expense and common cost factors do not reflect forward-looking cost because BellSouth uses historical levels of expense that are not adjusted to eliminate expenses associated with inefficient process prior to the forecasting process. They also claim that BellSouth fails adequately to adjust its historical expenses for future productivity improvements. They further allege that BellSouth has improperly applied inflation to personal computer expense and inappropriately forecasts expenses for analog switching.<sup>52</sup>

SECCA and WorldCom prepared an adjustment to BellSouth's common cost by looking at FCC ARMIS data for common support expense for all ILECs from 1997 to 1999. They then determined the common support per line for each ILEC. The intervenors assumed that the 90<sup>th</sup> percentile ILEC is the best approximation of the least cost, most-efficient ILEC in terms of its embedded costs. They calculate that BellSouth's common cost per line is 22.12 percent higher than the least cost, most-efficient ILEC; they then conclude that BellSouth's 1998 common support expense data should be reduced by the same amount.

SECCA and WorldCom note that BellSouth used a productivity factor of 3.1 percent to project its expenses. They argue that this factor is based on a study the United States Telephone Association filed with the FCC that has never been adopted. They recommend the use of a 6.5 percent factor, which they argue is the most recent factor approved by the FCC for BellSouth. They contend that, "[g]iven the FCC's currently effective 6.5 percent productivity factor has been subject to in depth analysis

<sup>&</sup>lt;sup>52</sup> Darnell Rebuttal at 61–62.

and debate from both BellSouth and CLECs, there is no reason for this Commission to undertake an effort to set a Kentucky state-specific productivity factor." <sup>53</sup>

BellSouth argues that the intervenors have "not performed any studies or provided any reasonable evidence that would indicate that the 3.1% productivity factor used by BellSouth for projecting certain expenses in its study is understated." BellSouth asserts that SECCA and WorldCom have simply recommended that the Commission require BellSouth to use the factor previously used by the FCC in its interstate price cap formula, though they offer no explanation why that is appropriate.

BellSouth notes that the use of the 6.5 percent factor for interstate price cap purposes was rejected by the United States Court of Appeals for the District of Columbia Circuit<sup>55</sup> and remanded to the FCC for further proceedings. BellSouth also notes that the FCC subsequently established a new interstate price plan in the CALLS proceeding, which rendered the use of the productivity factor moot.<sup>56</sup>

The Commission finds that the recommended use of a 6.5 percent productivity factor proposed by the intervenors should not be used in this proceeding. A review of the reasons for the FCC's adoption of this particular factor and the subsequent reversal and remand by the United States Court of Appeals for the District of Columbia Circuit lead this Commission to accept the productivity factor used by BellSouth for purposes of this study.

<sup>&</sup>lt;sup>53</sup> Darnell Rebuttal at 64.

<sup>&</sup>lt;sup>54</sup> Reid Surrebuttal at 9-10.

<sup>&</sup>lt;sup>55</sup> BellSouth Brief at 23.

<sup>&</sup>lt;sup>56</sup> Id

## LAND, BUILDING, AND POWER EXPENSES

SECCA and WorldCom argue that BellSouth has failed to account for future collocation rent in its expense forecasts. They contend that because collocation rent offsets land, building and power expenses, BellSouth's failure to account for future rents will lead to double-recovery of land, building, and power expense. They explain that BellSouth receives revenues for services it provides, such as collocation rate elements. They assert that the costs associated with providing these services should be offset against associated expenses before apportioning the remaining amounts to the UNE rate elements.

BellSouth argues that there is no double recovery, explaining that it does not include central office land, central office building, and central office power expenses in its projection of shared and common costs.<sup>58</sup>

SECCA and WorldCom have proposed no specific adjustments to land, building, and power expense. They simply believe that BellSouth should offset revenues received from leases against these expenses. BellSouth rebuts this notion, explaining that the costs the intervenors propose to adjust are not included in the cost study. Therefore, we shall require no adjustments to these costs.

#### FORWARD-LOOKING NON-RECURRING UNE COST STUDIES

Non-recurring costs are one-time costs resulting from an order by a customer for the provision of a service. Generally, they consist of labor cost and direct expense. BellSouth used the BellSouth Cost Calculator to determine non-recurring costs,

<sup>&</sup>lt;sup>57</sup> Darnell at 66-67.

<sup>&</sup>lt;sup>58</sup> Reid at 12.

inputting estimates of (1) work times for activities required to provision each element and (2) the probability of each activity occurring.

WorldCom suggests that all non-recurring charges could be recovered through recurring rates.<sup>59</sup> FCC rules allow state commissions to require recovery of non-recurring costs over time:

State commissions may, where reasonable, require incumbent LECs to recover nonrecurring costs through recurring charges over a reasonable period of time. Nonrecurring charges shall be allocated efficiently among requesting telecommunications carriers, and shall not permit an incumbent LEC to recover more than the total forward-looking economic cost of providing the applicable element.<sup>60</sup>

BellSouth asserts that there are difficult policy and administrative issues that must be resolved if the Commission requires non-recurring costs to be recovered through recurring charges. BellSouth explains that the ILEC will be financially exposed if a CLEC who purchases service discontinues its use before non-recurring costs are fully recovered. BellSouth also points out that recurring rates could be set too high with the inclusion of non-recurring costs in recurring rates. BellSouth therefore believes that non-recurring charges should be recovered through non-recurring rates.

The Commission agrees with BellSouth that non-recurring charges generally should be recovered through non-recurring rates. Furthermore, the Commission notes that WorldCom did not propose any specific recurring rate that included recovery of non-recurring charges.

<sup>&</sup>lt;sup>59</sup> Darnell Rebuttal at 59.

<sup>&</sup>lt;sup>60</sup> 47 C.F.R. 51.507(e).

WorldCom and SECCA propose that the Commission reduce BellSouth's proposed non-recurring costs by at least 50 percent and that certain charges be eliminated entirely. The Commission declines to reduce BellSouth's non-recurring charges by 50 percent as suggested by WorldCom and SECCA due to lack of supporting testimony or evidence. The intervenors have offered no methodology to support the calculation.

WolrldCom and SECCA have proposed elimination of the non-recurring OSS charge. They allege that the costs for OSS are included in BellSouth's common costs and included in BellSouth's recurring rates. BellSouth defends its OSS charge by explaining that the charge is designed to recover the development, implementation, and maintenance of its electronic interfaces to OSS used by CLECs. BellSouth maintains that the OSS costs included in shared and common costs relate to legacy systems only. 62

The Commission agrees with BellSouth and will allow a separate charge for OSS. The Commission has previously recognized and adopted this rate element.

WorldCom and SECCA also assert the service order charge (N.1.1) and installation charge (P.1) are, for no apparent reason, higher than the one proposed in Georgia. BellSouth's ordering and provisioning systems are identical in all BellSouth states. They further contend that there should be a single charge instead of two and that BellSouth is recovering its costs twice. They do not give any support for these allegations.

<sup>&</sup>lt;sup>61</sup> Darnell at 74.

<sup>&</sup>lt;sup>62</sup> Caldwell Direct at 55.

Accordingly, input changes as ordered by the Florida Commission will be required. These include changes to network design, OSS design, labor rates, appropriate mix of manual versus electronic activities and other activities related to non-recurring charges. Changes to those inputs ordered herein have the effect of significantly reducing these non-recurring rates.

#### DEAVERAGED UNES

47 C.F.R. 51.507(f) governs the method in which rates must be deaveraged. It states:

State commissions shall establish different rates for elements in at least three defined geographic areas within the state to reflect geographic cost differences. (1) To establish geographically-deaveraged rates, state commissions may use existing density-related zone pricing plans described in Sec. 69.123 of this chapter, or other such cost-related zone plans established pursuant to state law. (2) In states not using such existing plans, state commissions must create a minimum of three cost-related rate zones.

BellSouth contends that the Commission should deaverage UNEs into three zones by utilizing existing rate groups. BellSouth believes that this will provide for consistency between the structure of the existing retail rates, resale rates, and prices for UNEs, thus reducing the opportunity for arbitrage.

BellSouth's proposal geographically deaverages rates by assigning wirecenters to existing retail rate groups. BellSouth admits that the existing retail rate groups are not based on cost, but rather on a public policy to ensure affordable local service for all customers. Furthermore, BellSouth's proposal does not take into account the actual costs of individual wirecenters. As an example, if the Commission adopted BellSouth's proposal, the range of individual wirecenter costs for Zone 1 would be approximately

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<sup>&</sup>lt;sup>63</sup> Ruscilli Direct at 12.

\$8.00 to \$73.00. The other two zones are equally disparate. The Commission finds this disparity unreasonable and rejects BellSouth's proposal.

WorldCom and SECCA assert that the Commission should determine UNE costs on a wirecenter basis by grouping wirecenters into zones based on cost and developing an average rate for each group of wirecenters. WorldCom also believes that BellSouth's proposal to base deaveraging on rate groups would not be based on cost as required by the FCC rules. WorldCom proposes a methodology put forth by Sprint in other jurisdictions. It deaverages rates based on an approximate 20 percent deviation of the actual cost from the averaged price. This methodology produces eight different rate bands based on its proposal.

Though this proposal comports with the FCC's deaveraging rule and is cost-based, the Commission finds that it creates too many zones. This proposal would be administratively burdensome and is not necessary to reflect the level of variation in BellSouth's costs. The Commission finds that there should be three geographic zones established based upon the ascending ranking of individual wirecenter costs. Although no specific criteria was used to split the costs, many factors and variations have been considered. The methodology selected extends the Zone 1 rates to other state localities and the Commission finds this is necessary to expand local competition to all areas of the state.

The Commission also finds that all varieties of loops, sub-loops, and combinations containing loops, shall be deaveraged in this proceeding. BellSouth proposes to deaverage all loops below DS3. Other parties merely contend that "loops" be deaveraged. Since the rate structure for loops and local channels whose bandwidth

is DS3 and above resembles that of interoffice transport in that it is priced on a mileagesensitive basis, we find that it is sufficient to deaverage only loops below DS3.

Attached hereto and incorporated herein are Appendix B, which shows the wirecenters contained in each of our three approved zones, and Appendix A, which contains the final deaveraged rates using the methodology ordered herein.

# ADJUSTMENTS TO LOOPS AND COMBINATIONS BASED ON FCC METHODOLOGY

On December 7, 2001, BellSouth filed a revised cost model run. This revision accounts for adjustments to loops and combinations based on BellSouth's understanding of an FCC methodology.<sup>64</sup> On December 12, 2001, BellSouth provided an explanation for the revised cost model run including a description of the calculation used to create the adjustment. The overall effect is to reduce BellSouth's UNE rates by approximately 17.7 percent. The Commission accepts this adjustment and the rates contained in Appendix B reflect this reduction. This late filing should significantly benefit competition in Kentucky and ultimately Kentucky ratepayers. But, it also demonstrates the flexible nature of UNE pricing and casts doubt on the cost model's function of producing exact costs. The Commission finds that the prices contained in Appendix B, attached hereto, are the reasonable, forward-looking, TELRIC-based prices appropriate for BellSouth at this time. However, UNE rates must frequently be monitored to ensure that they are up to date and that they account for all changes to BellSouth's costs. The Commission adopts these rates to be used at this time but also advises that it will continually monitor the appropriateness of these rates.

See the Order approving the Application of SBC for InterLATA Authority in Missouri and Arkansas, FCC 01-338 at 29, Fn 160, Order Dated November 16, 2001.

# "CURRENTLY COMBINED" ELEMENTS AND OTHER ISSUES FROM PREVIOUS ARBITRATION DECISIONS

This Commission has long required BellSouth and other ILECs to combine elements in its network for requesting carriers, so long as the combinations currently exist in the ILECs' networks. This Commission continues to hold that "currently combines" as set forth in 47 C.F.R. § 51.315(b), should be given the same meaning as "ordinarily combines" and BellSouth should combine for any CLEC requested UNEs if those UNEs are ordinarily combined in BellSouth's network. <sup>65</sup> Thus, CLECs must be permitted to order from BellSouth UNE combinations even if the UNEs to serve a particular customer are not already combined, if such UNEs are the sort that BellSouth currently or typically combines in its network. The Commission also herein reiterates that a "glue charge" or combining fee based on costs associated with the combination is an appropriate compensation for BellSouth.

The Commission also makes clear in this Order that ordinarily combined UNEs must also be made available where line-splitting occurs. Line-splitting must be made available to all CLECs on a nondiscriminatory basis. Moreover, BellSouth may not discontinue the provision of line-splitting when a CLEC provides voice service through UNE-P, regardless of which xDSL provider is used.<sup>66</sup>

The Commission next reaffirms its decision to require BellSouth to make the enhanced extended link ("EEL") available as a UNE combination. The provisioning of

See generally, Case No. 2000-465, Petition by AT&T Communications of the South Central States, Inc. and TCG Ohio for Arbitration of Certain Terms and Conditions of a Proposed Agreement with BellSouth Telecommunications, Inc. Pursuant to 47 U.S.C. Section 252, Order Dated June 22, 2001, at 1-4.

<sup>66</sup> See generally, WorldCom brief at 37-46.

EELs as UNEs will extend the range of CLECs ability to serve customers. Thus, the benefits of competition will be brought to a broader base of customers. The EEL must be made available at a TELRIC-based price. The total price charged by BellSouth for the EEL should be the sum of the established TELRIC rates for: (1) an unbundled loop; (2) a cross-connect of appropriate capacity; and (3) unbundled interoffice dedicated transport.<sup>67</sup>

Furthermore, the Commission reaffirms that co-carrier cross connects should be provided by BellSouth when requested between two or more CLECs' collocation arrangements. Collocated CLECs may use these facilities to connect directly to each other within BellSouth's central office. Though this arrangement may bypass BellSouth's facilities, BellSouth will be adequately compensated for the use of its facilities and performance of any necessary collocation functions for cross connects to be implemented.<sup>68</sup>

Finally, the Commission reaffirms its decision requiring ILECs to provide to CLECs all of the features, functions, and capabilities of each requested network element. This includes all of the features, functions, and capabilities of the local switch when the unbundled local switching has been purchased by a CLEC. Thus, when a

<sup>&</sup>lt;sup>67</sup> Case No. 99-218, A 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, Order Dated March 2, 2000 at 4-6.

<sup>&</sup>lt;sup>68</sup> Case No. 2000-480, Petition of Sprint Communications Company for Arbitration with BellSouth Telecommunications, Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996, Order Dated June 13, 2001 at 1-2.

CLEC purchases an unbundled port, all of the vertical services residing in the switch must be provided for no additional charge.<sup>69</sup>

In establishing the UNE rates contained in this Order, the Commission does not alter any decision previously made in an arbitration proceeding. Instead, we reaffirm those decisions and incorporate them in the rates established herein.

The Commission, having considered the evidence of record and being otherwise sufficiently advised, HEREBY ORDERS that:

- 1. BellSouth shall charge the UNE rates contained in Appendix A, attached hereto and incorporated herein.
- 2. The decisions reached by the Florida Commission, as described herein, and absent further Order, shall be implemented in Kentucky.
- 3. BellSouth shall file with this Commission copies of all documents and information it supplies to the Florida Commission in its UNE docket within 10 days of filing in Florida.
- 4. Within 20 days of the date of this Order, BellSouth shall file a tariff containing the UNE rates established herein as Appendix A.
- 5. Within 90 days of the date of this Order, Verizon, or its successor, and Cincinnati Bell shall submit proposed UNE rates with supporting documentation in a format similar to that in Appendix A.

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<sup>&</sup>lt;sup>69</sup> Case No. 96-482, The Interconnection Agreement Negotiations Between AT&T Communications of the South Central States, Inc. and BellSouth Telecommunications, Inc. Pursuant to 47 U.S.C., Order Dated July 14, 1997 at 5-6.

Done at Frankfort, Kentucky, this 18<sup>th</sup> day of December, 2001.

By the Commission

ATTEST:

Executive Director

For Appendix A see document "0000382\_121801appx.pdf"

#### APPENDIX B

## APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN ADMINISTRATIVE CASE NO. 382 DATED DECEMBER 18, 2001

#### Zone 1

CLLI	Location

DAVLKYMA **DANVILLE** LSVLKY26 LOUISVILLE - 26th Street LOUISVILLE - Anchorage LSVLKYAN **LSVLKYAP** LOUISVILLE - Armory Place LSVLKYBE LOUISVILLE - Beechmont **LSVLKYBR** LOUISVILLE - Bardstown Road LOUISVILLE - Shively LSVLKYSH LSVLKYSL LOUISVILLE - Six Mile Lane LSVLKYSM LOUISVILLE - St. Matthews LSVLKYTS LOUISVILLE – Third Street **LSVLKYWE** LOUISVILLE - Westport Road MYVLKYMA **MAYSVILLE** OWBOKYMA **OWENSBORO** 

PADUCAH - Main

### Zone 2

**PDCHKYMA** 

## <u>CLLI</u> <u>Location</u>

BRTWKYES BARDSTOWN

BWLGKYMA BOWLING GREEN – Main

CNCYKYMA CENTRAL CITY

CRBNKYMA CORBIN

ERTNKYMA EARLINGTON

FRFTKYES FRANKFORT – East FRFTKYMA FRANKFORT - Main GRTWKYMA GEORGETOWN HNSNKYMA HENDERSON HPVLKYMA HOPKINSVILLE

LOUSKYES LOUISA

LSVLKYCW LOUISVILLE – Crestwood LSVLKYFC LOUISVILLE – Fern Creek

LSVLKYHA LOUISVILLE – Harrods Creek LSVLKYJT LOUISVILLE – Jeffersontown

LSVLKYOA LOUISVILLE – Okolona

LSVLKYVS LOUISVILLE – Valley Station

MDBOKYMA MIDDLESBORO MDVIKYMA MADISONVILLE

MRRYKYMA MURRAY
MYFDKYMA MAYFIELD
OKGVKYES OAK GROVE

PDCHKYIP PADUCAH – Information Park

PDCHKYLO PADUCAH – Lone Oak

PDCHKYRL PADUCAH

PKVLKYMA PIKEVILLE – Main
PNVLKYMA PAINTSVILLE
RCMDKYMA RICHMOND
PSTRKYES POSE TERRACE

RSTRKYES ROSE TERRACE SHVLKYMA SHELBYVILLE

WNCHKYMA WINCHESTER - Main

## Zone 3

#### CLLI Location

ALLNKYMA ALLEN
AURRKYMA AURORA
BDFRKYMA BEDFORD
BGDDKYMA BAGDAD

BLFDKYMA BLOOMFIELD
BLSPKYMA BLUFF SPRINGS
BNLYKYMA BENHAM-LYNCH

BNTNKYMA BENTON BRGNKYMA BURGIN BRMNKYMA BREMEN

BVDMKYMA BEAVER DAM BWLGKYRV BOWLING GREEN

BYVLKYMA BEATTYVILLE

CADZKYMA CADIZ
CHPLKYMA CHAPLIN
CLAYKYMA CLAY
CLHNKYMA CALHOUN

CLPTKYMA CLOVERPORT

CLTNKYES CLINTON

CMBGKYMA CAMPBELLSBURG

CNTNKYMA CANTON

CNTWKYMA CENTERTOWN

COTNKYMA CROFTON

CRBOKYMA CRAB ORCHARD

CRLSKYMA CARLISLE
CRTNKYMA CARROLLTON
CYDNKYMA CORYDON
CYNTKYMA CYNTHIANA

DIXNKYMA DIXON

DRBOKYES DRAKESBORO

DWSPKYES DAWSON SPRINGS

EDVLKYMA EDDYVILLE EKTNKYMA ELKTON

ELCYKYES ELKHORN CITY

EMNNKYES EMINENCE EMNNKYPL EMINENCE ENSRKYMA ENSOR

FDCKKYES FEDSCREEK
FDVLKYMA FORDSVILLE
FEBRKYMA FREEBURN
FKLNKYMA FRANKLIN
FLTNKYMA FULTON
FNVLKYMA FINCHVILLE

FORDKYMA FORD

FRDNKYMA FREDONIA

GBVLKYMA GILBERTSVILLE

GHNTKYMA GHENT

GNVLKYMA GREENVILLE
GRACKYMA GRACEY
GTHRKYMA GUTHRIE
HABTKYMA HABIT
HANSKYMA HANSON

HBVLKYMA HEBBARDSVILLE

HCMNKYMA HICKMAN

HDBGKYMA HARRODSBURG HRBGKYES HARDINSBURG HRFRKYMA HARTFORD HRLNKYMA HARLAN

HWVLKYMA HAWESVILLE

INEZKYMA INEZ ISLDKYMA ISLAND JCSNKYMA JACKSON

JNCYKYMA JUNCTION CITY KKVLKYMA KIRKSVILLE

LBJTKYMA LEBANON JUNCTION

LFYTKYMA LAFAYETTE LGRNKYES LAGRANGE

LRBGKYMA LAWRENCEBURG

LVMRKYMA LIVERMORE
MACEKYMA MACEO
MARNKYMA MARION
MARTKYMA MARTIN

MCDNKYMA MCDANIELS
MCWLKYMA MCDOWELL
MGFDKYMA MORGANFIELD
MGTWKYMA MORGANTOWN
MLBGKYMA MILLERSBURG

MLTNKYMA MILTON

MRGPKYMA MORTONS GAP

MTEDKYMA MT. EDEN

MTSTKYMA MT. STERLING

NEBOKYMA NEBO NEONKYES NEON

NRVLKYMA NORTONVILLE NWHNKYMA NEW HAVEN OWTNKYMA OWENTON

PARSKYMA PARIS

PIVLKYMA PINEVILLE PKVLKYMT PIKEVILLE

PLRGKYMA PLEASANT RIDGE

PMBRKYMA PEMBROKE PNTHKYMA PANTHER

PRBGKYES PRESTONSBURG

**PRTNKYES PRINCETON PRVDKYMA** PROVIDENCE PRVLKYMA **PERRYVILLE PTRYKYMA** PORT ROYAL **RBRDKYMA ROBARDS** RLVLKYMA RUSSELLVILLE SCRMKYMA SACRAMENTO **SDVLKYMA** SADIEVILLE

SEBRKYMA SEBREE

SHGVKYMA SHARON GROVE SLGHKYMA SLAUGHTERS

SLPHKYMA SULPHUR
SLVSKYMA SALVISA
SNTNKYMA STANTON
SPFDKYMA SPRINGFIELD
SRGHKYMA SORGHO

SSVLKYMA SIMPSONVILLE STCHKYMA ST. CHARLES STFRKYMA STANFORD

STGRKYMA STAMPING GROUND

STNLKYMA STANLEY STONKYMA STONE STRGKYMA STURGIS

SWSNKYMA S. WILLIAMSON

TRENKYMA TRENTON

TYVLKYMA TAYLORSVILLE

UTICKYMA UTICA
VIRGKYMA VIRGIE
WACOKYMA WACO
WDDYKYMA WADDY

WHBGKYMA WHITESBURG
WHVLKYMA WHITESVILLE
WLBGKYMA WILLIAMSBURG
WLCKKYES WALLINS CREEK
WLVLKYMA WEST LOUISVILLE

WNCHKYPV WINCHESTER
WRFDKYMA WARFIELD
WSBGKYMA WILLISBURG
WSPNKYMA WEST POINT
WYLDKYES WAYLAND

#### APPENDIX C

# APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN ADMINISTRATIVE CASE NO. 382 DATED DECEMBER 18, 2001

### Comparison of Lives

Account	BellSouth	SECCA & WorldCom	Commission Approved
	(Yrs.)	(Yrs.)	(Yrs.)
Motor Vehicles	8	8	8
Special Purpose Vehicles	7	7	7
Garage Work Equipment	12	21	12
Other Work Equipment	15	21	15
Buildings	45	45	45
Furniture	15	15	15
Office Support Equipment	11.5	12	11.5
Office Communication Equipment	7	7	7
Computers	4.5	6.5	4.5
Digital ESS	10	17.5	13
Operator Systems	10	13	10
Radio	9	12.5	9
Circuit DDS	8	8	8
Circuit Digital	9	11	9
Circuit Analog	7.5	11	6.8
Station Apparatus	6	6	NA
LPBX	6	6	NA
Other Terminal Equipment	6	6	NA
Poles	36	36	36
Aerial Cable Metallic	15	20	18
Aerial Cable Fiber	20	30	20
Underground Cable Metallic	14	25	23
Underground Cable Fiber	20	30	20
Buried Cable Metallic	15	22	18
Buried Cable Fiber	20	30	20
Submarine Cable Metallic	15	25	18
Submarine Cable Fiber	20	25	20

Account	BellSouth	SECCA & WorldCom	Commission Approved
Intrabldg. Cable Copper & Fiber	20	20	20
Conduit	55	65	55

Comparison of Salvage Values

Account	BellSouth	SECCA & WorldCom	Commission Approved
	(%)	(%)	(%)
Motor Vehicles	16	15	16
Special Purpose Vehicles	0	0	0
Garage Work Equipment	0	0	0
Other Work Equipment	0	0	0
Buildings	0	0	0
Furniture	10	5	10
Office Support Equipment	5	5	5
Office Communication Equipment	10	10	10
Computers	2	1	2
Digital ESS	0	0	0
Operator Systems	0	0	0
Radio	(5)	(5)	(5)
Circuit DDS	2	2	2
Circuit Digital	0	0	0
Circuit Analog	0	0	0
Station Apparatus	0	0	NA
LPBX	5	(4)	NA
Other Terminal Equipment	5	(4)	NA
Poles	(55)	(55)	(55)
Aerial Cable Metallic	(14)	(14)	(14)
Aerial Cable Fiber	(14)	(14)	(14)
Underground Cable Metallic	(8)	(24)	(8)
Underground Cable Fiber	(8)	(8)	(8)
Buried Cable Metallic	(7)	(10)	(7)
Buried Cable Fiber	(7)	(7)	(7)
Submarine Cable Metallic	(5)	(5)	(5)

Account	BellSouth	SECCA & WorldCom	Commission Approved
Submarine Cable Fiber	(5)	(5)	(5)
Intrabldg. Cable Copper & Fiber	(10)	(10)	(10)
Conduit	(10)	(10)	(10)