

HOPPING GREEN SAMS & SMITH

PROFESSIONAL ASSOCIATION

ATTORNEYS AND COUNSELORS

123 SOUTH CALHOUN STREET

POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

(850) 222-7500

FAX (850) 224-8551

FAX (850) 425-3415

http://www.hgss.com

JAMES S. ALVES
BRIAN H. BIBEAU
RICHARD S. BRIGHTMAN
KEVIN B. COVINGTON
PETER C. CUNNINGHAM
RALPH A. DeMEO
WILLIAM H. GREEN
WADE L. HOPPING
GARY K. HUNTER, JR.
JONATHAN T. JOHNSON
LEIGH H. KELLETT
ROBERT A. MANNING
FRANK E. MATTHEWS
RICHARD D. MELSON
ANGELA R. MORRISON
SHANNON L. NOVEY
ERIC T. OLSEN

GARY V. PERKO
MICHAEL P. PETROVICH
DAVID L. POWELL
WILLIAM D. PRESTON
CAROLYN S. RAEPPEL
DOUGLAS S. ROBERTS
D. KENT SAFRIET
GARY P. SAMS
TIMOTHY G. SCHOENWALDER
ROBERT P. SMITH
DAN R. STENGLE
L. G. STUART
W. STEVE SYKES
OF COUNSEL
ELIZABETH C. BOWMAN

ORIGINAL

Writer's Direct Dial No.
(904) 425-2313

November 21, 2000

Blanca S. Bayó
Director, Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

RECEIVED-PPSC
NOV 21 PM 1:34
RECORDS AND REPORTING

Re: UNE Docket No. 990649-TP

Dear Ms. Bayó:

Enclosed for filing on behalf of Rhythms Links Inc., Covad Communications Company and BlueStar Networks, Inc. is their Joint Post-Hearing Brief. Broadslate Networks, Inc. Cleartel Communications, Inc. and Florida Digital Network, Inc. also join as signatories to this brief.

By copy of this letter, this document has been furnished to the parties on the attached service list.

RECEIVED & FILED

14
FPSC-BUREAU OF RECORDS

Very truly yours,

Richard D. Melson

Richard D. Melson

APP _____
CAF _____
CMP OC
COM 5
CTR _____
ECR _____
LEG 2
OPC _____
PAI _____
RGO _____
SEC I
SER _____
OTH _____

RDM/kcg

Enclosures

cc: Parties of Record

129471.5

DOCUMENT NUMBER-DATE

15078 NOV 21 00

RECORDS AND REPORTING

ORIGINAL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Investigation into pricing of unbundled network elements)))

Docket No. 990649-TP

Filed: November 21, 2000

JOINT POST-HEARING BRIEF OF RHYTHMS, COVAD AND BLUESTAR

Pursuant to Rule 28-106.215, Florida Administrative Code, Rhythms Links Inc. ("Rhythms"), DIECA Communications, Inc. d/b/a Covad Communications Company ("Covad") and BlueStar Networks, Inc. ("BlueStar") (collectively the "Data ALECs") hereby file their Joint Post-Hearing Brief¹ in the above-captioned docket.²

I. INTRODUCTION

The Florida Public Service Commission's (the "Commission's") determination of the appropriate rates that BellSouth Telecommunications, Inc. ("BellSouth") may assess alternative local exchange carriers ("ALECs") for access to unbundled network elements ("UNEs") is perhaps the single most important prerequisite to the establishment of local competition in the State of Florida. In particular, this docket presents the Commission with its first meaningful opportunity to establish rates for the UNEs that ALEC providers of advanced services require, namely digital subscriber line ("DSL" or "xDSL") loops.

¹ The parties collectively identified as "the Coalition" – Broadslate Networks, Inc., Cleartel Communications, Inc. and Florida Digital Network, Inc. – also join as signatories to this brief.

² In this Joint Post-Hearing Brief, the Data ALECs are only briefing the Issues that pertain the establishment of rates for xDSL capable loops. For other Issues, the Data ALECs adopt the positions taken by the FCCA in its concurrently filed post-hearing brief. See *infra* Issues 2, 4-5, 7(b-1 and n-v), 8(c and f), 10 and 12.

DOCUMENT NUMBER-DATE 15078 NOV 21 8 FPSC-RECORDS/REPORTING

While the Commission established recurring and nonrecurring rates for ADSL and HDSL loops in 1997, because there were no DSL providers in business in Florida at the time, the Commission determined these rates without data ALEC input. Florida Public Service Commission – Order No. PSC-98-0604-FOF-TP. Indeed, in establishing such rates, the Commission did not address the fundamental issue of what an xDSL loop is and how, if at all, such a definition should impact the rates that BellSouth is permitted to charge ALECs. Thus, the issues surrounding xDSL capable loops are matters of first impression for the Commission.

There can be no dispute that BellSouth has an obligation to provide data ALECs with xDSL capable loops in a manner intended to promote competition in the provision of advanced services to Florida consumers. See, e.g., FCC Order 99-238 (DN 96-98), Third Report and Order and ERRATA ¶¶ 166, 172-174, and 190-195 (“UNE Remand Order”). For example, the Federal Communications Commission (“FCC”) has repeatedly – and with increasing detail – required incumbent local exchange carriers (“ILECs” or “incumbents”), including BellSouth, to provide ALECs with access to xDSL capable loops, including situations in which an ALEC would require the incumbent to de-condition a loop in order for it to be capable of transmitting an xDSL signal. FCC Order 96-523 (DN 96-98), Interconnection Order ¶¶ 380-382 (“Local Competition Order”) UNE Remand Order ¶¶ 166, 172-174, and 190-195. Further, the FCC clarified that incumbents, including BellSouth, must provide ALECs with access to loop makeup information (*i.e.*, information delineating the physical characteristics of the specific loop plant that terminates at an ALEC specified end-user location). UNE Remand Order ¶¶ 425-437; 47 C.F.R. §§ 51.5 and 51.319(g).

In response to these directives, BellSouth has “developed” at least four different types of xDSL loops. Not surprisingly, however, not one of these loop types comports with the simple

xDSL capable loop that BellSouth is obligated to provide and that ALECs desire.³ In addition to improperly defining its xDSL loop types, BellSouth proposed extraordinarily high rates, particularly nonrecurring rates, for each of these xDSL loop types. BellSouth's proposed xDSL loop rates are completely out of line with those being offered by other ILECs in other parts of the country. *E.g.*, Public Utility Commission of Texas – Petition of Rhythms Links Inc. and Covad Communications for Arbitration to Establish an Interconnection Agreement with Southwestern Bell Telephone Company, Dockets No. 20226 et al., (Nov. 30, 1999) (setting the nonrecurring rate of an xDSL loop at \$15.03). Moreover, BellSouth's proposed rates are inconsistent with any rational application of the pricing standards required by the Telecommunications Act of 1996 (the "Telecom Act"), the pricing rules of the FCC (47 C.F.R. §§ 51.501 – 51.511, 51.515), and the previous pricing policies established by this Commission (Florida Public Service Commission – Order No. PSC-96-1579-FOF-TP; Florida Public Service Commission – Order No. PSC-98-0604-FOF-TP). (As will be shown below, these pricing rules remain in full force and effect.) Consistent with the Telecom Act, the FCC's pricing rules, and this Commission's prior pricing decisions, the Commission must set BellSouth's UNE rates based on forward-looking network design assumptions (regardless of the ultimate fate of FCC Rule 51.505(b)(1)).

Forward-looking pricing requires, at the very least, that rates be established based on the forward-looking network deployment practices of the incumbent at issue. Local Competition Order ¶¶ 683-685; 47 C.F.R. § 51.505(b). Furthermore, this Commission must insure that all work activities and task time assumptions are firmly supported by the evidence and reflective of efficient, forward-looking practices. *See* Local Competition Order ¶ 680; 47 C.F.R. § 51.505(e).

³ *See, infra*, Issue 3(a).

The Data ALECs base their adjustments to BellSouth's proposed rates on basic forward-looking, Total Element Long-Run Incremental Cost ("TELRIC") assumptions.

To the contrary however, the rates proposed by BellSouth are based on a misapplication of forward-looking costing principles. BellSouth demonstrates a fundamental lack of understanding of forward-looking pricing principles, causing BellSouth to misapply those principles. Caldwell, Tr. 1345. For example, BellSouth proposed three separate recurring charge loop models. Yet, by its own admission, only one of these three models approaches the network design assumptions that BellSouth indicated underlie its present and future network deployment plans. Thus, two of the three loop models presented by BellSouth are, by its own admission, not forward-looking. Even worse, BellSouth proposed a completely unrelated nonrecurring loop study for xDSL capable loops that assumes all-copper loops. An all-copper loop network topology is not forward-looking, and, indeed, has not been deployed by BellSouth for over 15 years. Greer, Tr. 1736-1738.

Federal pricing principles state that nonrecurring and recurring rates must be based on the same forward-looking network design. 47 C.F.R. § 51.507(e). By proposing multiple studies based on a myriad of different network topologies, BellSouth ignores this fundamental tenant of forward-looking pricing. Caldwell, Tr. 1345. Use of the same network design is also critical to determine whether BellSouth's models comply with the necessary outgrowth of this rule – that the sum of recurring and nonrecurring rates does not exceed the total cost of providing such loops.

An incumbent LEC must *prove* to the state commission that the rates for each element it offers do not exceed the forward-looking economic cost per unit of providing the element, using a cost study that complies with the methodology set forth in this section and § 51.511 of this part.

47 C.F.R. §51.505(e) (emphasis added); *see also* Local Competition Order ¶ 680. Indeed, it is fundamentally impossible to determine if BellSouth has met this obligation unless the recurring and nonrecurring charges are based on a single, consistent network design. Thus, the Commission should reject BellSouth's xDSL capable loop model for nonrecurring charges and two of BellSouth's three loop models for recurring charges.⁴

Further, use of the same forward-looking network to establish recurring and nonrecurring rates requires the conclusion that conditioning charges must be set at zero. As BellSouth admits, it does not deploy, nor plan to deploy, loops requiring load coils or excessive bridged taps. *E.g.*, Greer, Tr. 1829. Consequently, in a forward-looking network no load coils or bridged taps exist to condition, and thus there is nothing for which to assess a conditioning charge.

Task times and work group assumption must also be based on forward-looking, efficient practices. As Data ALEC witness Riolo testified, provisioning of an xDSL capable loop is a simple process, requiring no more than three steps. The ALEC order should flow through the BellSouth OSS systems to the central office where the connection work is done. The BellSouth technician will receive the ALEC order and a batch of other orders that are assigned for a particular day. After briefly reviewing the order, the technician runs the jumpers necessary to connect the loop to the ALEC collocation space. Finally, the technician closes the order by placing information in the OSS, which is then relayed to the ALEC. Mr. Riolo's testimony includes reasonable task times for these work steps, as well as for situations where there is reasonable fallout from the electronic ordering system. Specifically, he concludes that the entire process should take no more than 8 minutes per line on average, given a fully functional electronic OSS. Riolo, Tr. 2692. Thus, even if BellSouth were allowed to continue to require its

⁴ As will be shown in Issues 1 and 7(a), *infra*, the Copper and the BST2000 models should be rejected.

cumbersome “design” process, see *infra* p. 46-48, the provisioning of an xDSL loop should take substantially less time than BellSouth proposes. Riolo, Tr. 2692.

BellSouth task times and input assumptions reveal fatal flaws in the BellSouth cost study development process. First, BellSouth readily admits that, for this proceeding, it conducted no time and motion or task oriented costing studies, nor did it make task time assumptions based on actual historical data about how long or how often tasks are performed. Second, BellSouth filed four different cost studies in this docket, changing inputs, work groups, task times, and other assumptions while providing little, if any, support for these changes. Third, BellSouth’s task times and other assumptions reveal duplicative processes, excessive time spent on simple tasks, inexplicable tasks that do not aid the efficient provisioning of xDSL capable loops, and clear errors in analysis. All of these issues will be discussed in further detail in this brief.

Significantly, the conclusion that must be reached from the BellSouth cost studies is that they cannot and should not be relied upon for developing forward-looking pricing for UNEs.

In addition, BellSouth failed to meet its burden of proving to the Commission that its studies for xDSL capable loops are based on forward-looking costs because BellSouth failed to introduce any verifiable evidence to support many of its cost inputs. *See* 47 C.F.R. § 51.505(e). For example, none of the suppliers of the task time inputs testified for BellSouth, and thus were not subject to verification through cross-examination on those inputs. Instead, BellSouth inputs often were provided to product managers who then provided these inputs to the BellSouth cost team. The cost team, apparently without making any significant effort to verify the inputs it was provided, then used these inputs to arrive at BellSouth’s proposed rates. No time and motion or task oriented costing (“TOC”) studies were conducted for this proceeding. Caldwell, Tr. 1394-1398.

In fact, the only study of any kind offered by BellSouth to support its inputs was a TOC study performed in 1992, well before the Telecom Act was enacted, the FCC's pricing rules were promulgated, and BellSouth ever offered ALECs access to xDSL capable loops. Caldwell, Tr. 1394. Thus, BellSouth has provided no basis for the Commission to conclude that BellSouth met its burden of proof or that its rates are based on proper inputs for a forward-looking network.

The Data ALECs, through the testimonies of expert witnesses Murray and Riolo, have provided adjustments to the BellSouth studies and reasonable task times for the provisioning of xDSL capable loops. From those adjustments and proposed reasonable task times, the Data ALECs have also proposed final rates that properly reflect the forward-looking pricing principles that this Commission, Congress and the FCC have required. Murray, Tr. 2473-2611; Riolo, Tr. 2662-2774. These adjustments represent the changes necessary to the BellSouth models to bring them into compliance with forward-looking pricing rules. Accordingly, the Commission should order the rates proposed in Exhibits 141 - 142 in place of those proposed by BellSouth for xDSL loops and associated items.⁵

II. DISCUSSION

Issue A: **What is the current state of the law with regard to the use of a forward-looking cost methodology for computing rates for unbundled network elements?**

Data ALECs: * The current state of the law is that forward-looking cost methodologies must be used by state public service commissions to establish the rates under which

⁵ If, for any reason, the Commission is not satisfied with Data ALEC expert Riolo's estimates, it should not rely on BellSouth's unsupported figures, but should instead require BellSouth to perform the same type of detailed and statistically validated studies that the New York Public Service Commission required of Verizon. Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements, Opinion and Order Concerning DSL Charges, Case 98-C-1357 at 39 (Dec. 17, 1999). The Public Utilities Commission of Ohio recently noted that requiring an ILEC to conduct time and motion studies to justify work times is preferable to relying on the use of ILEC subject matter experts because such studies enable one to accurately quantify the specific tasks required to process and fill UNE orders. Cincinnati Bell Telephone Co. - Retail Pricing Plan, Case No. 96-899 TP-ALT at 7 (P.U.C.O. January 20, 2000).

incumbent local exchange carriers must make available unbundled network elements to competitors. *

The Federal pricing rules in place when this docket began in 1999 remain in full effect today. Although there has been litigation involving these pricing rules, this Commission should apply the federal pricing rules, in their entirety, to determine the rates and charges for BellSouth UNEs. The following discussion is provided to highlight for Commission the history of the legal challenges to the rules.

The rates for UNEs that the Commission will establish must be computed utilizing a forward-looking cost methodology. This methodology is required by the Telecom Act, the FCC's pricing rules, and this Commission's precedent.

The Telecom Act requires that BellSouth provide ALECs “. . . nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms and conditions that are just, reasonable, and nondiscriminatory in accordance with the terms and conditions of the agreement and the requirements of this section and section 252. . . .” 47 U.S.C. § 251(c)(3). *See also*, 47 U.S.C. §251(c)(2)(D). The Telecom Act further delineates how state commissions should determine such rates.

Determinations by a State commission of the just and reasonable rate for the interconnection of facilities and equipment for purposes of subsection (c)(2) of section 251, and the just and reasonable rate for network elements for purposes of subsection (c)(3) of such section—

(A) shall be—

(i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable), and

(ii) nondiscriminatory, and

(B) may include a reasonable profit.

47 U.S.C. § 252(d).

While Congress placed upon state commissions, including this Commission, the obligation to establish the appropriate UNE rates, Congress also permitted the FCC to establish pricing rules for state commissions to follow when determining UNE rates. *See AT&T Corp. v. Iowa Util. Bd.* 525 U.S. 366, 385 (1999) (“AT&T Corp.”). The FCC’s pricing rules require that rates be established using a forward-looking pricing methodology. Specifically, the FCC’s pricing rules direct that BellSouth’s rates for each UNE must comply with a “*forward-looking economic cost-based pricing methodology.*” 47 C.F.R. § 51.503(b) (emphasis added). The FCC adopted such a methodology because “a pricing methodology based on forward-looking, economic costs best replicates, to the extent possible, the conditions of a competitive market.” Local Competition Order ¶ 679. Further, a forward-looking pricing methodology specifically rejects cost recovery based on embedded cost incurred historically by the incumbents. 47 C.F.R. § 51.505(d)(1).

Although the Supreme Court has upheld the FCC’s jurisdiction to promulgate pricing rules, the substantive rules, and in particular the forward-looking requirement, were subsequently challenged. The United States Court of Appeals for the Eighth Circuit rejected this challenge and affirmed the forward-looking nature of the FCC’s pricing rules, holding that “the FCC’s use of a forward-looking cost methodology was reasonable.” *Iowa Util. Bd. v. FCC*, 219, F.3d 744, 752 (8th Cir., July 18, 2000) (“Iowa Utilities TELRIC”), motion for partial stay granted Sept. 22, 2000 (“Iowa Utilities Stay”). The Iowa Utilities TELRIC decision further affirmed the FCC’s rejection of cost recovery based on embedded or historical costs and said such recovery was clearly inappropriate under a forward-looking cost methodology.

At the same time the Eighth Circuit affirmed the FCC’s use of a forward-looking pricing methodology, the court vacated the FCC’s pricing rule requiring “the most efficient

telecommunications technology currently available and the lowest cost network configuration, given the existing location of the incumbent LEC's wire centers" (Rule 51.505(b)(1)). The court held that this rule was inconsistent with the plain meaning of the Telecom Act. Iowa Utilities TELRIC at 750. Therefore, after the mandate issued from the Eighth Circuit, all of the FCC's pricing rules – Rules 51.501 through 51.515 (except for the FCC's proxy pricing rule, 51.513) – remained in full force and effect with the exception of one specific subpart, 51.505(b)(1). In September 2000, the 8th Circuit stayed its vacation of Rule 51.505(b)(1). Consequently, all of the FCC's pricing rules for UNEs (except for the 51.513 proxy rate rule) remain in full force and effect at this time.

Thus, the pricing methodologies that the Commission must apply here are the same as those that existed when this proceeding began over one year ago. Indeed, the legal landscape with respect to this issue is clearer now than it has ever been – forward-looking cost methodologies must be utilized in determining the rates that BellSouth may charge ALECs for access to xDSL loops and other UNEs.

Issue B: **Based on the current state of the law set forth in Issue A, what is the Commission's authority to establish rates for unbundled network elements at this time?**

Data ALECs: * The Commission retains full statutory authority pursuant to 47 U.S.C. §§ 251(c)(2)(D), 251(c)(3), and 252(d) to establish rates for unbundled network elements at this time. *

The Commission has full authority, and indeed the responsibility, to establish rates for UNEs at this time. As shown in Issue A, Section 252(d)(1) of the Telecom Act, as well as Sections 251(c)(2)(D) and 251(c)(3), places the obligation to establish rates for UNEs upon state commissions. 47 U.S.C. §§ 252(d)(1), 251(c)(2)(D) and 251(c)(3). The FCC's pricing methodology rules remain in effect just as they were at the outset of this proceeding in 1999.

Further, the requirement that the cost methodology be forward-looking was reaffirmed by the Eighth Circuit in the Iowa Utilities TELRIC decision.

The Eighth Circuit's Iowa Utilities Stay decision minimizes potential uncertainty by ensuring that the status quo remains regarding the applicability of the FCC's pricing rules. Even in the unlikely event that the Supreme Court ultimately vacates the Eighth Circuit's stay and affirms the decision in Iowa Utilities TELRIC, thereby vacating 47 C.F.R. § 51.505(b)(1), such a decision is not likely to occur for approximately one to one and one-half years (the amount of time it took the Supreme Court in AT&T Corp. to rule on the prior Iowa Utilities Board decision, 120 F.3d 753 (8th Cir. 1997)). Moreover, if the Supreme Court were to reach such a decision, it is unlikely that this Commission would commence a new pricing proceeding, if at all, before at least a few months after any such decision were entered. Thus, it is unlikely that any changes in federal law would necessitate this Commission to revisit the results of this proceeding for at least two (2) years. And as Chairman Deason pointed out during the hearings, two years is a lifetime in this industry:

CHAIRMAN DEASON: Let me make one thing clear. If we're talking about establishing rates for two years in telecommunications, that's a lifetime, okay?

MR. MELSON: Yes, sir.

CHAIRMAN DEASON: I mean, if we do something here today that's going to last for two years, it will be time well spent.

Tr. 1065. Thus, whatever the ultimate legal status is of the FCC's pricing rules, today there is sufficient stability in these rules for this Commission to render its decision with confidence that this decision will remain valid for a relative lifetime.

Issue 1: What factors should the Commission consider in establishing rates and charges for UNEs (including deaveraged UNEs and UNE combinations)?

Data ALECs: * The Commission should adopt recurring and nonrecurring charges for all elements, including xDSL capable loops, that reflect the efficient provisioning of a single, consistent, forward-looking network architecture. *

The Commission should utilize forward-looking, economic costing principles as the overarching basis to establish rates and charges for UNEs, including xDSL loops. In particular, the Commission should ensure that the rates it determines are grounded on the efficient provisioning of a single, consistent, forward-looking network design.

A. The Commission Should Utilize a Single Cost Model to Establish Both Recurring and Nonrecurring Rates for xDSL Capable Loops

For recurring rates for xDSL capable loops, the Commission should utilize BellSouth's Combo model as adjusted according to the recommendations of other ALEC witnesses, *e.g.*, Donovan/Pitkin, Tr. 2117-2193, for Service Level 1 loops. This model most closely conforms to a forward-looking network deployed to provide efficient narrowband and broadband services. Murray, Tr. 2474.

Further, because BellSouth produced a cost model for nonrecurring rates and charges that is neither consistent with its recurring models nor reflects forward-looking efficient practices, the Data ALECs have proposed efficient, forward-looking times that should be used to establish nonrecurring charges for xDSL capable loops. Together, the use of the adjusted Combo model for recurring charges and the Data ALECs' proposals for nonrecurring charges approximate a single model based on a forward-looking network and practices.

B. BellSouth's Four Different Loop Models do Not Comply with the Stipulation Governing this Proceeding or with Federal Pricing Rules

In adopting both recurring and nonrecurring charges for UNEs, including for xDSL capable loops, the Commission should ensure that the network design being used as the basis for the rates represents, at the very least, the forward-looking network that BellSouth intends to

deploy during the appropriate long-run, forward-looking study period. There are four reasons why both the recurring and nonrecurring xDSL capable loop rates must be based on this network.

First, prior to BellSouth developing its cost study, the parties in this case, including BellSouth, stipulated that “[t]he recurring and nonrecurring studies should assume the same network design.” Florida Public Service Commission – Order No. PSC-99-2467-PCO-TP, Attachment A ¶ 3(d)(v).⁶ Agreement to this principle represented a central feature of the Commission-approved stipulation, without which the stipulation may never have been reached. The Commission should ensure that BellSouth lives up to its commitment to use a consistent network design for recurring and nonrecurring studies.

Second, under the FCC’s pricing rules, the sum of the recurring and the nonrecurring rates for an xDSL capable loop may not exceed the total forward-looking economic cost of this loop. Murray, Tr. 2512. Specifically, the FCC’s rules require that “[n]onrecurring charges . . . shall not permit an incumbent LEC to recover more than the total forward-looking economic cost of providing the applicable element.” 47 C.F.R. § 51.507(e). Unless the same network design is used to set recurring and nonrecurring rates, it will be impossible for the Commission to ensure, or even to determine, if the rates the Commission establishes comply with this rule. Murray, Tr. 2512. If different network designs are permitted, then essentially an ALEC would be paying for one type of xDSL capable loop with the recurring charge, and a different type of xDSL capable loop with the nonrecurring charge. *See* Murray, Tr. 2511-2520. Because the xDSL capable loops being bought with the recurring and nonrecurring charges would differ from an economic

⁶ This section of the stipulation also states that “[a]n ILEC may submit a cost study that does not meet this criterion provided that the supporting documentation clearly identifies how the assumptions can be adjusted by a model user to produce a cost study that meets this criterion.” Florida Public Service Commission – Order No. PSC-99-2467-PCO-TP, Attachment A ¶ 3(d)(v). BellSouth made no attempt to identify how the assumptions could be so adjusted.

perspective, it would not be possible to determine the total forward-looking economic cost of this loop.

Third, BellSouth will deploy only a single network configuration on a going forward basis. Murray, Tr. 2512. As explained in Issue A, the Commission is required to establish rates for UNEs, including xDSL capable loops, based on forward-looking economic cost. 47 C.F.R. §§ 51.503(b)(1) and 51.505. BellSouth's internal deployment guidelines show that today and through the life of its cost study it is deploying a loop plant that is comprised of integrated digital loop carrier ("IDLC") systems for the feeder portion of the loop. *See* Exh. 121, BellSouth's ADSL Planning Directives, RL: 00-01-021BT, Feb. 14, 2000 ("ADSL Planning Directives"); *see also*, Caldwell, Tr. 126. Moreover, BellSouth's plans show that, not only is it deploying IDLC, but that the type of IDLC it is deploying are Next Generation Digital Loop Carrier ("NGDLC") systems. *See* Exh. 121, ADSL Planning Directives; Milner, Tr. 247-253.⁷

As BellSouth witness Milner's testifies:

The network infrastructure design in the loop cost methodology starts with two basic assumptions. First, loops up to 12,000 feet from the central office are designed using copper. Second, loops longer than 12,000 feet are provided services using fiber feeder facilities and Next Generation Digital Loop Carrier (NGDLC).

...

The economics that limit copper cable deployment distances from central office to the customer location are the same as those that limit copper cable deployment from the NGDLC to the customer location. In addition to the economics of the design itself, the 12,000 foot maximum copper cable length makes copper loops compatible with many of the digital subscriber line (DSL) technologies used today in providing advanced services.

Milner, Tr. 247 and 249. In addition, while being deposed about the BellSouth network, BellSouth witness Greer stated definitively that BellSouth does not deploy copper feeder plant,

⁷ "NGDLC describes a version of digital loop carrier equipment that provides many enhanced services and cost-reducing features that are not available on the older DLC systems." Milner, Tr. 249.

and, moreover, that special permission is needed to terminate a copper cable on the main distribution frame in a central office. Exh. 110, Deposition of William H. B. Greer, Sept. 15, 2000 (“Greer Deposition”) at 14.⁸ Further, according to BellSouth, it has not terminated copper cables on the main distribution frame since the early to middle 1980s. Greer, Tr. 1797. Thus, as shown by BellSouth’s own deployment guidelines and witnesses, the loop plant that BellSouth is deploying on a forward-looking basis includes copper distribution plant and fiber NGDLC feeder plant. A more antiquated, all-copper loop plant design should not, therefore, serve as the basis for any loop rates ordered by the Commission.

Fourth, using different network assumptions for recurring and nonrecurring charges may enable BellSouth to double recover some of its costs. It is possible, and indeed likely, that, if BellSouth uses one network design for its recurring model and a separate network design for its nonrecurring model, certain costs will be recovered both through the recurring and nonrecurring charges. Murray, Tr. 2512. Such double recovery would lead to artificially high UNE rates, thereby creating entry barriers for ALECs. *Id.* In turn, this could reduce competition in Florida.

Data ALEC economic expert Murray illustrated the economic imperative that forward-looking recurring and nonrecurring rates be based on the same network design with this with a

⁸ Specifically, the exchange with deponent Greer went as follows:

A. . . . As a matter of fact, BellSouth now has a policy that in order to terminate cables on a CO, they must have special permission. So BellSouth is no longer building from a CO any large number of copper cables.

Q. Any large number. Does that mean in an exceptional circumstance you might do that?

A. Yes. In a very – it would take a special case, and they would ask for an officer permission in order to provide – terminate copper cables on the MDF, which is the mainframe in the central office.

Q. So that would require officer approval from an officer in BellSouth Telecommunications?

A. Yes.

Q. To terminate copper cable on the main distribution frame in a BellSouth central office?

A. Yes.

Greer Deposition at 14.

simple analogy to everyday life – the decision to buy a new car rather than to maintain an existing car.

. . . The decision to buy a new car typically involves a tradeoff between the higher monthly loan or lease payment associated with the new vehicle versus the higher maintenance cost associated with an older vehicle. At some point, the operating cost of the older car becomes so high that it is more economic to dispose of the old vehicle and buy a new one, even if the previously owned car is fully paid off and there are no monthly payments whatsoever. Now suppose, however, that the owner of the older vehicle is guaranteed recovery of the actual cost of all repairs needed to keep the car running. The owner would never have any incentive to incur the cost of buying a new car, and would continue operating the old vehicle long after doing so ceased to be economically rational (from a societal perspective). Similarly, if new entrants must reimburse the incumbents for both the recurring cost of building a brand-new, modern network (akin to the monthly payment on a new car) *and* the nonrecurring cost of maintaining and/or modifying their existing networks to provide both voice and advanced services, the incumbents will have less incentive to invest in new, forward-looking technology.

Prices that recover the total cost of building a new, fully modern network *and* selected additional costs associated with an older network design will always exceed total forward-looking economic cost. Such prices also will always exceed the price that would prevail if unbundled network elements were provided in a competitive environment.

Murray, Tr. 2513-2514. *See also* Exh. 88, Deposition of Terry L. Murray, Sept. 14, 2000 (“Murray Deposition”) at 52-56 and 68-71.

C. Other States Have Recognized that a Single Cost Model Must be Used for Recurring and Nonrecurring Rates

Several state commissions have rejected ILEC rate proposals because of their use of different network design assumptions to set recurring and nonrecurring rates and charges. For example, the Massachusetts Department of Telecommunications and Energy (“DTE”) recently rejected Verizon Massachusetts’ proposed line conditioning and loop qualification charges on the basis that Verizon-Massachusetts was using a copper network topology for some UNE rates and a fiber-fed network topology for other UNE rates. Specifically, the DTE found that:

[i]t would be inappropriate and inconsistent for the Department to allow Verizon to base its loop rates on the costs of a fiber feeder, which may be greater than the costs of copper feeder in that context, while it bases its line sharing rates on the costs of a copper feeder, which are greater than the costs of fiber in the context of line sharing. . . . Otherwise, Verizon would be able to tack back and forth between different network assumptions based solely on whether the network assumption produced higher rates for Verizon in each instance.

Massachusetts Department of Telecommunications and Energy – Order – In re: Investigation as the propriety of rates and charges set forth in M.D.T.E. No. 17, filed with the Department by Verizon New England, Inc., Order in Docket D.T.E. 98-57-Phase III at 87, September 28, 2000 (“MA Decision”); *see also* MA Decision at 85-86.

Similarly, the California Commission rejected Pacific Bell’s attempts to use different models for its recurring and nonrecurring rates, finding that “it makes little sense to model one type of network for unbundled elements and then assume a different network exists for ordering and provisioning the same unbundled elements.” California Public Utilities Commission – Order – In re: Rulemaking on Open Access to Bottleneck Services and In re: Investigation into Open Access and Network Architecture, Decision 98-12-097, Dockets R. 93-04-003/I.93-04-002, at 34, December 17, 1998.

Even more significant for xDSL capable loop rates, the Texas Commission determined that “the network design inconsistencies in the recurring and non-recurring cost studies [did] not result in correct xDSL costs and rates and consequently render[ed] the proposed charges invalid.” Public Utility Commission of Texas – Petition of Rhythms Links Inc. and Covad Communications for Arbitration to Establish an Interconnection Agreement with Southwestern Bell Telephone Company, Dockets No. 20226 et al., at 96 (Nov. 30, 1999).

Just as these commissions rejected studies that were not based on a consistent, single, forward-looking network design, this Commission should reject BellSouth’s mixed network

topology studies and order BellSouth to adopt the single topology adjustments recommended by the Data ALECs. *See* Murray, Tr. 2477-2479, 2499-2505, 2507-2533, 2545-2546, 2548-2576, 2580, 2584-2611; *see* Exhs. 140 and 142.; *see also, infra*, Sections 3(a), 3(b), 7(a), 7(m), 8(a), 8(b), 8(d) and 11.

Issue 2: (a) **What is the appropriate methodology to deaverage UNEs and what is the appropriate rate structure for deaveraged UNEs?**

(b) **For which of the following UNEs should the Commission set deaveraged rates?**

- (1) loops (all);
- (2) local switching;
- (3) interoffice transport (dedicated and shared);
- (4) other (including combinations).

Data ALECs: * Adopt FCCA position. *

Issue 3: (a) **What are xDSL capable loops?**

Data ALECs: * xDSL capable loops are loops that can be used to provide xDSL services. In a forward-looking network, such facilities include both "clean copper loops" and fiber-fed digital loop carrier (DLC) based loops. ALECs need to obtain loop make-up information, determine themselves if a loop is suitable for DSL service, and then reserve and order that loop. *

xDSL capable loops are any loops that ALECs qualify for themselves as being capable of supporting xDSL services. DSL providers in Florida want and need to be able to obtain accurate loop makeup information in advance of ordering a loop. Then, DSL providers use that information to determine themselves, based on their own equipment and technical requirements, whether the facility is indeed an xDSL capable loop. Once that determination is made, DSL providers will then decide to reserve and order particular loops. After reserving and ordering the loops they have qualified, ALECs then need those loops to be marked so that the loop selected and ordered will not be rolled to another facility, such as fiber. Thus, essentially an xDSL

capable loop is the same as a Service Level 1 (“SL1”) loop, except that the ALEC specifies the particular loop ordered after obtaining loop makeup information from BellSouth.

The simple xDSL loop offering and ordering procedure needed by data ALECs has been greatly and unnecessarily complicated by BellSouth. First, BellSouth has created an array of xDSL loop types that complicate the ordering process and limit ALEC access to the most economical loops available, SL1 voice grade loops that ALECs qualify for themselves. Second, BellSouth has designed loop makeup systems that preclude Data ALECs from qualifying a single loop and then ordering that loop as an SL1 voice grade loop. Finally, BellSouth refuses to mark loops qualified and ordered by Data ALECs to prevent those copper loops from being rolled to fiber.

A. The Simple xDSL Capable Loop

What ALECs need is very simple. First, ALECs need a voice grade copper loop, unencumbered by load coils, excessive bridged tap, and other interferors. Since xDSL services were created to work on existing voice grade copper loops, ALECs do not need and should not be required to pay for anything more than a voice grade loop. Riolo, Tr. 2673. ALECs need to be able to find and reserve, using BellSouth’s loop makeup data, loops that meet their individual technical specifications. ALECs then need the ability to order the loop they choose, without having to wade through the confusing array of BellSouth loop “products” that are nothing more than labels placed on loops for BellSouth’s purposes of radically changing the cost to an ALEC.

As the Data ALECs’ witness Murray explained, length limitations of xDSL capable loops are artificial. Murray, Tr. 2626. A single type of two-wire xDSL capable loop without any of these artificial limitations on loop length should be offered by BellSouth, just as Verizon and Sprint offer such loops in this state. Murray, Tr. 2626 and 2629. Furthermore, the Data ALEC’s

outside plant engineering expert, Mr. Riolo, testified that in a forward looking network, the facilities used to provide xDSL services are identical or nearly identical to those used to provide voice-grade services. Riolo, Tr. 2669-2673; *see also* Murray, Tr. 2669. BellSouth's witness Milner confirmed this fact when he testified, "[s]ignificantly, the same copper loops that are used to provide xDSL services are also utilized to provide voice service to BellSouth's customers, as well as to other ALECs' customers." Milner, Tr. 2669. The evidence demonstrates that irrespective of the labels BellSouth places on the loops, xDSL loops are simple voice grade loops.

B. BellSouth's Mystifying Array of Loops

Yet, BellSouth has proposed rates for five different 2-wire xDSL capable loops in this proceeding: the ADSL, HDSL, UCL- short, UCL-long, and IDSL/UDC (which is the ISDN loop for IDSL service) loops. Interestingly, although it offers this wide variety of loop "products" based on its own technical specifications, BellSouth does not guarantee that any of its xDSL capable loops "products" (ADSL, HDSL, UCL short or long and IDSL) will support any particular type of xDSL service. Latham, Tr. 1849. In fact, BellSouth specifically disclaims that the loop will support any particular service whatsoever. Latham, Tr. 1849. That is why the loops are called "capable."

With the exception of the IDSL loop that BellSouth will provision over fiber, all of BellSouth's other xDSL capable loops are defined by BellSouth as all-copper and are distinguished – unlike the same loop used for voice – according to loop length. Essentially, these loop "products" just label for how long the customer's existing copper loop is. The HDSL loop is limited to 12,000 feet. The ADSL loop is limited to 18,000 (including 2,500 feet of bridged tap), and the UCL-short can be 18,000 feet and can have an additional 6,000 feet of bridged tap.

Latham, Tr. 1848. BellSouth does not alter the length of loops to enable an ALEC to order one type of xDSL loop as compared with another. The loop going to a particular customer's premise is however long it is. If the customer happens to have a loop that is 10,000 feet long, BellSouth could label that loop SL1, HDSL, ADSL, or UCL without any impact on how well the loop would support of an ALEC's xDSL service. If that same customer is 15,000 feet from the central office, BellSouth will not sell, and ALECs cannot buy, an HDSL loop to that customer. See Milner, Tr. 228-231. Nonetheless, the 15,000 foot loop could be labeled SL1, ADSL, or UCL and could be provided for xDSL services. In essence, BellSouth inappropriately and uniquely seeks to limit what services an ALEC can provide over the customer's existing loop through its xDSL loop definitions. It also seeks to recover from the ALEC, and thus ultimately from the end user, a much higher price *for the existing loop*.

Simply put, BellSouth is the only party who is concerned with whether the loop is labeled as an SL1, UCL, ADSL or HDSL loop. When BellSouth labels the loop an xDSL capable loop, its nonrecurring charge skyrockets. When that identical loop is labeled an SL1, the substantially lower voice grade loop rate applies. For example, if the ALEC used BellSouth's loop makeup data to determine that a loop 10,000 feet long could be reserved to service a given customer, depending upon whether the ALEC ordered (or was required to order) the loop as an SL1, UCL, ADSL, or HDSL loop, the nonrecurring charge imposed by BellSouth would vary from \$83.20 (SL1), \$ 389.84 (UCL-short), \$331.86 (UCL-long), \$391.71 (ADSL), or \$409.03 (HDSL). BellSouth's product manager for loops admitted that all of the xDSL capable loops are merely subsets of the larger class of SL1 loops. Latham, Tr. 1891-1892. The Commission should not permit BellSouth to establish arbitrary loop types for the sole purposes of limiting consumer options and charging ALECs higher rates.

C. **BellSouth Refuses To Allow Data ALECs To Qualify, Reserve and Order an xDSL Capable Loop as an SL-1 Loop**

Numerous BellSouth witnesses testified that ALECs were free to order an SL1 loop and place any type of service they wanted on that loop. Greer, Tr. 1709; Latham, Tr. 1894. In reality, however, BellSouth has designed systems that severely limit an ALEC's ability to do so. As previously discussed, Data ALECs wishing to provide xDSL service need to be able to look at the loop makeup information on a particular loop. Once they determine that the loop is suitable for their purposes, they need to be able to order that exact loop. It is at this point that BellSouth's artificial loop labels and rate distinctions between voice grade loops and the various xDSL capable loops are the most absurd.

BellSouth's OSS witness Pate admitted that the loop information database, Loop Facilities Assignment Control System ("LFACS"), does not distinguish, identify or label loops as ADSL, HDSL, UCL, or SL1. Pate, Tr. 1665. LFACS simply inventories segments of loops and the physical characteristics of those segments (length, fiber or copper, etc.). Once an ALEC accesses LFACS and identifies the loop it wants to obtain, the ALEC then needs to reserve that loop for its use. BellSouth might label that loop as a UCL or an ADSL, but the ALEC would want to order it as a simple voice grade SL1 loop. *See* Pate, Tr. 1666. BellSouth's ordering system will not allow ALECs to do that. When Commissioner Jaber asked if that restriction resulted from a technical limitation, Mr. Pate responded "[I]t's just a decision from a design standpoint." Pate, Tr. 1668. Through this design restriction, BellSouth essentially precludes ALECs from using the electronic loop makeup and ordering process to identify, select, reserve, and order a SL1 voice grade loop that the ALEC understands will serve its needs. Instead, BellSouth has chosen to lock ALECs into BellSouth's byzantine designed loop structure, which unnecessarily inflates the costs of a simple voice grade loop.

D. BellSouth Should Identify xDSL Capable Loops So Those Loops Will Not Be Rolled Onto Fiber

If Data ALECs were permitted to use loop makeup information to select and order a loop of their choosing, the only thing needed to distinguish between a voice loop and an xDSL loop would be some sort of identifier in the BellSouth records that indicates that the loop is supporting an xDSL service. Riolo, Tr. 2666. That way, xDSL providers and their customers will not be inadvertently rolled from a loop that supports xDSL (all copper) to a loop that does not support xDSL (copper and fiber). BellSouth already employs this type of identification of loops used for xDSL services, since the IDSL/UDC loop is nothing more than an ISDN loop specifically identified as being used to provide xDSL services. Caldwell, Tr. 1139. There is no additional cost whatsoever for identifying an ISDN as a IDSL/UDC loop. Caldwell, Tr. 1383. Just as the identification of a loop as supporting IDSL insures that the loop will be properly provisioned for IDSL services, the identification of a loop as supporting xDSL will prevent that loop from being rolled to fiber. BellSouth has offered no evidence showing that this cannot or should not be done. In fact, to the contrary, BellSouth is already making this type of identification of the IDSL loop. Caldwell, Tr. 1139. Thus, just as BellSouth identifies IDSL loops as distinct from ISDN loops without a cost difference, so should BellSouth identify xDSL capable loops as distinct from SL1 loops without a cost difference.

(b) Should a cost study for xDSL-capable loops make distinctions based on loop length and/or the particular DSL technology to be deployed?

Data ALECs: * No. The Commission should adopt costs for all loops, including xDSL capable loops, that reflect the efficient provisioning of such loops in a forward-looking network architecture. In a forward-looking network, a cost study for xDSL-capable loops should not make distinctions based on loop length or on the particular xDSL technology to be deployed. *

The Commission established rate for xDSL capable loops should not be driven by the length or by the particular xDSL technology that the ALEC will deploy over that loop. Rather, contrary to BellSouth's proposed multiple xDSL loop types, the Commission should establish rates for the single, non-distance sensitive, non-technology sensitive, xDSL-capable loop described in Issue 3(a).

The technology that an ALEC may choose to provide over a given loop is irrelevant to how loops should be priced. BellSouth claims that it permits ALECs to provide any given technology over any given loop. For example, BellSouth's product manager for unbundled loops testified that ALECs may use *any loop*, not just xDSL capable loops, to provide xDSL services. Latham, Tr. 1853. *See also* Latham, Tr. 1883. If an ALEC, at its choice, may provide xDSL services over any loop, then there is no reason to use a different loop model to determine the rates for xDSL capable loops than is used to determine rates for other unbundled loops. Thus, if BellSouth is not attempting to dictate the services that ALECs may place over a loop, the distinctions that BellSouth seeks to impose through its arbitrary xDSL loops types are not necessary. *See* Issue 3(a).

Moreover, the ALEC, not BellSouth, will determine the type of technology that can and will be deployed over the loop. When ordering a loop, ALECs will access the loop's makeup information to determine the particular characteristics of that loop. This information will allow an ALEC to determine which technology that ALEC wants to deploy over that loop. *See* Pate, Tr. 1617-1621 and 1629-1631; *see also* Riolo, Tr. 2721. So long as BellSouth does not subsequently alter the physical loop ordered pursuant to the loop makeup information inquiry, the ALEC will know exactly what technology it may provide over the loop it ordered. Any act by BellSouth to switch the loop ordered for a loop with different characteristics at a later point in

time would completely undermine the purpose of the ALEC obtaining the loop makeup information and then reserving a specific loop.

In addition, by deciding which loop to order to provide its xDSL service, the ALEC is risks that it might have made the wrong choice in the technology that it can provide over a given loop. This risk, however, is the ALEC's to take. BellSouth has offered no evidence that ALECs want BellSouth to qualify loops as xDSL capable according to a BellSouth pre-determined set of characteristics. To the contrary, BellSouth's loop makeup witness Pate testified that the ALEC will make its own decision about the service that the ALEC will provide over a given loop. Pate, Tr. 1619. This statement is consistent with the ALECs' desire to make their own business decisions regarding how to utilize the UNEs they obtain from BellSouth. *See* Murray, Tr. 2494.⁹

The Massachusetts DTE recently concluded that ALECs are best suited to determine the service to provide over a given loop to their customer, finding that "CLECs are capable of advising their potential xDSL customers about what transmission speed a particular loop is capable of supporting based upon that loop's characteristics (*e.g.*, length) and the type of equipment selected by the CLEC." MA Decision at 11. Thus, if the ALEC assumes the risk that

⁹ Indeed, Commissioner Jaber raised this very point during the cross-examination of BellSouth witness Latham.

COMMISSIONER JABER: In a competitive arena, if the ALEC chose an SL-1 loop and that provided a lower quality frequency and was less efficient, isn't that the ALEC's problem? And then, in fact doesn't that work to BellSouth's favor, because if the customer isn't happy they will turn to BellSouth instead of the ALEC?

THE WITNESS: Well, I was with you on the first part of that. I believe where you said – I do agree that it is the CLEC's prerogative to choose the SL-1 loop even if they recognize it to be a lower quality loop, that is correct that is their choice. And the second part was?

COMMISSIONER JABER: That is their choice. If they have any problems and they come to BellSouth and ask for a better quality loop, then there is an added cost.

THE WITNESS: Correct.

COMMISSIONER JABER: So I come back to the original question. Isn't that a risk a CLEC takes and, therefore, its is their problem which quality loop they ask for?

THE WITNESS: Yes, in most cases it is. . . .

Latham, Tr. 1879-1880.

its technology will not work over the specific loop it ordered, there is no reason to differentiate loop types for costing purposes based on the technology that the ALEC intends to deploy.

Just as the xDSL technology deployed by the ALEC should have no bearing on the cost of the loop, neither should the length of a loop impact the rates for xDSL capable loops. While loop length does factor into the cost of a loop, it does so for all loop types, not just xDSL capable loops. Murray, Tr. 2495. Yet, BellSouth did not propose distance sensitive pricing for any loop types other than xDSL capable loops. BellSouth's insistence that xDSL capable loops alone be priced according to whether such loops are over or under 18,000 feet long – *see, e.g.*, UCL-long v. UCL-short – is discriminatory and will lead to BellSouth over-recovering its costs. Murray, Tr. 2495-2496. By proposing a recurring rate for long xDSL capable loops (*i.e.*, over 18,000 feet) that is approximately three times the recurring rate for short xDSL capable loops (*i.e.*, under 18,000 feet) – \$52.66 v. \$18.13 – BellSouth effectively ensures that ALECs will only purchase short loops. Murray, Tr. 2495. BellSouth does not attempt to require ALECs to purchase only short loops for any other loop types. Accordingly, just as the Massachusetts DTE “direct[ed] Verizon to remove loop lengths from . . . the tariff,” the Commission should find loop length an inappropriate consideration in BellSouth's cost study for an xDSL capable loop. MA Decision at 12.

Establishing rates and charges for xDSL capable loops without regard to loop length or the xDSL technology the ALEC intends to deploy is consistent with the Data ALECs' proposed definition of an xDSL capable loop in Issue 3(a), not with BellSouth's proposed definitions. ALECs, including the Data ALECs, are the only parties that proposed rates consistent with a definition of an xDSL capable loop that does not differentiate based on loop length or technology. *See* Issue 3(a). BellSouth made no attempt to propose rates for xDSL capable loops

based on this definition of an xDSL capable loop. Moreover, despite being on notice since January 2000 that the definition of an xDSL capable loop was an open issue in this proceeding, BellSouth simply assumed that its distance- and technology-sensitive definition was appropriate and made no attempt to generate rates based on an ALEC proposed definition. In fact, the BellSouth UNE product manager intentionally did not inform the BellSouth cost team of the definition of xDSL capable loops that ALECs desired.¹⁰ Latham, Tr. 1866-1867.¹¹ Because the product team decided BellSouth would not make an xDSL capable loop as defined by ALECs available, the cost team did not price that offering. Caldwell, Tr. 1337-1340.

Thus, because BellSouth only proposed rates based on an improper definition of an xDSL capable loop, including improperly considering loop length and the xDSL technology to be deployed, the Commission should reject BellSouth's proposed rates for xDSL capable loops. Instead, the Commission should adopt the rates for xDSL capable loops proposed by the Data

¹⁰ Without knowing how ALECs proposed defining an xDSL-capable loop, the BellSouth cost team could not propose alternative rates based on the ALEC proposed definition. Rather, the BellSouth cost team only proposed rates for UNEs that the BellSouth product managers informed the cost team that BellSouth offered according to the definitions provided by these product managers. Caldwell, Tr. 1336-1340. If the product team decided it would not make available a particular offering, the cost team did not price that offering. Caldwell, Tr. 1337-1340. Because the product team decided not to make an xDSL capable loop as defined by ALECs available, BellSouth made no attempt to develop rates for the xDSL capable loop sought by ALECs.

¹¹ Specifically, the exchange with BellSouth witness went as follows:

Q. How long have you been aware that there may have been some distinction between ALECs and BellSouth as to what constitutes an xDSL loop?

A. Well, there has been some debate on different types of xDSL loops, I would say, for the past year, year and a half.

Q. And when you provided the assumption to Ms. Caldwell so that she could develop the costs for your various loops products, did you inform her that some ALECs had a different view of what an xDSL loop was, and did you inform her what the ALEC assumptions might have been?

A. No, there would have been no reason for me to inform her of that.

Q. So there would have been no reason for her to attempt to develop the cost for the loop that the ALECs believe should exist?

A. Not from my perspective as product manager. . . . So, no, I could not see the need for me to in the responsibilities of my job to volunteer that oh, well, here is the product as we want you to cost it out, but just be aware that there are some debates as to whether the CLECs agree with these or not. I would not have done that.

Latham, Tr. 1866-1867.

ALECs, as these rates are based on the proper definition of an xDSL capable loop. Exhs. 141 - 142, Murray Direct and Rebuttal Testimony, Exh. TLM-2.

- Issue 4:**
- (a) **Which subloop elements, if any, should be unbundled in this proceeding, and how should prices be set?**
 - (b) **How should access to such subloop elements be provided, and how should prices be set?**

Data ALECs: * Adopt FCCA position. *

Issue 5: **For which signaling networks and call-related databases should rates be set.**

Data ALECs: * Adopt FCCA position. *

Issue 6: **Under what circumstances, if any, is it appropriate to recover non-recurring costs through recurring rates?**

Data ALECs: * BellSouth's nonrecurring charges do not reflect efficient, forward-looking economic costs of provisioning unbundled network elements and should be rejected. If the nonrecurring charges adopted are so high as to create barriers to competition in Florida, then it is appropriate to consider recovering some of the non-recurring costs through recurring rates. *

Nonrecurring charges are the entrance fees to competition. The higher the nonrecurring charge, the more difficult it will be for new entrants to offer competitive local exchange services. Murray, Tr. 727. Unlike recurring charges for UNEs or recurring costs for a new entrant's own facilities, nonrecurring charges are sunk costs. A new entrant cannot obtain a refund or repayment for any or all of the nonrecurring charges it pays the incumbent. Thus, even if the new entrant loses the retail customer on whose behalf it incurred the nonrecurring charges or goes out of business entirely, it cannot pass on the nonrecurring charge already incurred to the customer or to another competitor taking over the business. Murray, Tr. 728. In contrast, if a new entrant loses a retail customer that it had been serving using an unbundled loop, or exits the

local exchange business entirely, the new entrant is no longer obligated to pay monthly recurring charges for the loop it no longer needs. *Id.* The only way that a new entrant can be sure of recovering the full cost of the nonrecurring charges it incurs on behalf of a retail customer is to impose an up-front nonrecurring charge on the retail customer that equals or exceeds the nonrecurring charge the new entrant had to pay the incumbent to order the unbundled network element or elements needed to serve that customer. Of course, such an imposition of costs negatively effects a new entrants ability to win that customer from the ILEC in the first place. Murray, Tr. 729.

Some of the basic ordering and provisioning charges that BellSouth proposed for xDSL-capable loops – charges that would apply to each and every loop that competitors order – are high enough to pose entry barriers to ALECs. For example, BellSouth's proposed nonrecurring charges for provisioning an xDSL loop range from \$199.01 (\$331.86 with loop makeup) for an Unbundled Copper Loop-long to \$258.86 (\$391.71 with loop makeup) for an ADSL compatible loop to \$276.19 (\$409.03 with loop makeup) for an HDSL loop (\$108.29 of which is the disconnect charge). Varner Tr., 1098; Exh. 92, Revised Exhibit AJV-1. In all cases except the long copper loop, BellSouth has included a \$57.99 “conditioning” additive charge that it seeks to impose on all xDSL-capable loops under 18,000 feet. These totals do not include any charges for manual service order processing, order coordination, manual loop qualification, or specific loop “conditioning,” each of which would add to the total. Worse still are the nonrecurring charges if loop conditioning is required. The nonrecurring charge for an xDSL-capable loop longer than 18,000 feet (UCL-long) that requires removal of load coils would total \$967.71

(\$1099.57 with loop makeup), substantially more than the entire investment for an average loop. *See Murray, Tr. 732 - 733.*¹²

Loop rates that pose a barrier to entry are statutorily precluded under the Telecom Act. “No State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.” 47 U.S.C. § 253(a). Thus, the Commission must not permit the exorbitant nonrecurring charges proposed by BellSouth to take effect.

While the BellSouth proposed nonrecurring charges should be rejected outright, *see infra* Issue 8, if this Commission adopts total, cumulative nonrecurring charges that create a barrier to competitive entry in Florida, the Commission should consider converting some or all of the nonrecurring charges to recurring charges. Section 51.507(e) of the FCC’s pricing rules for unbundled network elements explicitly permits such a step: “[s]tate commissions may, where reasonable, require incumbent LECs to recover nonrecurring costs through recurring charges over a reasonable period of time.” 47 C.F.R. § 51.507(e). The Data ALECs have provided this Commission with ample evidence that the nonrecurring charges proposed by BellSouth are unjustified. *See infra* Issue 8. To the extent that this Commission decides to accept the nonrecurring charges proposed by BellSouth, the Data ALECs encourage the Commission to consider requiring BellSouth to recover these over time as recurring charges.

Issue 7: What are the appropriate assumptions and inputs for the following items to be used in the forward-looking recurring UNE cost studies?

(a) network design (including customer location assumptions);

¹² These numbers are based on BellSouth’s revised cost study filings and, therefore, differ from those in Ms. Murray’s testimony. Even using the revised BellSouth numbers, however, the point remains that BellSouth’s proposed nonrecurring charges for xDSL capable loops pose significant entry barriers.

Data ALECs: * The network design assumptions for the recurring UNE cost studies should be based on a single forward-looking network designed to support all UNEs. BellSouth's use of a separate all-copper network design for cost studies for xDSL capable loops should be rejected as neither forward-looking nor representative of a network that BellSouth will actually build. *

In the recurring UNE cost studies, the network design assumptions should be based on a consistent, single, forward-looking network design. *See, supra*, Issues A and 1. This network design must be based, at the very least, on the forward-looking network design that BellSouth will deploy in the long-run. *See* 47 C.F.R. §§ 51.503(b)(1) and 51.505; *see also, supra*, Issue 1. BellSouth will only be deploying a single network design on a going forward basis. Murray, Tr. 2512.

The evidence presented in this proceeding, both by BellSouth and by ALECs, demonstrates that BellSouth will be deploying a network containing a loop plant comprised of copper distribution plant and NGDLC fiber feeder plant. *E.g.*, Exh. 121.

The network infrastructure design in the loop cost methodology starts with two basic assumptions. First loops up to 12,000 feet from the central office are designed using copper. Second, loops longer than 12,000 feet are provided services using fiber feeder facilities and Next Generation Digital Loop Carrier (NGDLC).

Milner, Tr. 247. This network topology is an efficient economic design for the single, multi-functional, loop plant being deployed. Riolo, Tr. 2722.

[I]n actual network design, voice grade services are mixed with demand for other types of service such as DS-1 and higher bandwidth services. In selecting the infrastructure design for a network to meet all of these demands, new copper cable is rarely the facility of choice for the feeder network. Instead, fiber cable with fiber optic multiplexers and NGDLC are used to meet the combined demand on the cable route.

Milner, Tr. 248. Thus, it does not matter what service the ALEC or BellSouth is providing over the loop, BellSouth is designing its loop plant to serve a mixed demand. The forward-looking

network design used to determine recurring rates and charges for all loops, including xDSL capable loops, therefore, should consist of copper distribution plant and fiber NGDLC feeder plant. *See* Milner, Tr. 247.

Despite this single, fiber/copper forward-looking network design, BellSouth proposed three different cost studies for recurring rates for unbundled loops. BellSouth proposed the Combo model for loops as part of UNE combinations, the BST2000 model for stand alone loops, and the Copper model for stand alone xDSL capable loops. Caldwell, Tr. 91 - 92. The Combo-study models loops assuming the use of an NGDLC form of IDLC. Caldwell, Tr. 92 and 125 – 126; Milner, Tr. 247 - 253.. The BST2000-study models loops assuming older, universal DLC. *Id.* Finally, the Copper model, used only for xDSL capable loops, assumes an all-copper loop network, which no carrier has had for decades. *Id.* In proposing three different models for recurring loop rates, BellSouth violates the requirement – which it agreed to in the December 1999 Stipulation¹³ – that it use a single network design in its cost models.

Moreover, at least two of these models – the BST2000 model and the Copper models – are not forward-looking. The BST2000 assumes the use of older, universal DLC equipment, rather than the use of NGDLC, the forward-looking technology. Caldwell, Tr. 125 - 126. BellSouth claims that it must model stand-alone loops using universal DLC because it is not technically feasible to provide individual stand-alone loops using newer NGDLC/IDLC. Milner, Tr. 1966. Yet, this is contradicted by BellSouth’s own testimony.

In providing non-switched services, NGDLC has the capability, on a line by line basis, to provision remote NGDLC lines through the universal capacity of the NGDLC central office terminal. This allows non-switched services to be routed around the central office switch to connect with the other customer locations of

¹³ *See, supra*, p. 12 and *infra* p.35-36.

the non-switched services or to interconnect with another telecommunications carrier's facilities.

Milner, Tr. 250 - 251. Perhaps this is why the FCC concluded as early as 1996 that "it is technically feasible to unbundle [NGDLC/]IDLC-delivered loops." Local Competition Order ¶ 384.

Even less forward-looking than the BST2000 model proposed by BellSouth is the Copper only model BellSouth proposes for xDSL capable loops. This model makes no pretext at being forward-looking. BellSouth claims that all xDSL capable loops sought by ALECs will be comprised solely of copper so the rates for xDSL capable loops should be modeled by looking only at all-copper loops. Caldwell, Tr. 92; *see also* Latham, Tr. 1853.

This claim squarely contradicts the record in this case. BellSouth witnesses Caldwell and Milner stated that BellSouth deploys IDLC in its network today and that BellSouth will be providing xDSL services over loops that traverse NGDLC in 2001. Caldwell, Tr. 1278 and Milner, Tr. 1993 - 1995. Similarly, BellSouth's deployment directives show that BellSouth will deploy xDSL-capable DLC systems. Exh. 121. Further, Data ALEC expert Riolo explained that forward-looking NGDLC equipment permits the provision of xDSL-based services over NGDLC based loops. Riolo Tr. 2668 and 2715. Thus, in a forward-looking network, the loop facilities used to provision xDSL services are essentially the same as those used to provide voice-grade and other services. Riolo, Tr. 2669.

Moreover, not only is a copper-only network not forward-looking for xDSL-capable or any other loop types, but this network is not going to be deployed by BellSouth. Greer, Tr.1797; Caldwell, Tr. 1329-1330;¹⁴ *see also* Exh. 61, BellSouth's Response to Rhythms' Interrogatory

¹⁴ Specifically, BellSouth witness Caldwell testified as follows:
Q. . . . You would agree with me that a 100 percent copper network is not a forward-looking network?

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Investigation into pricing
of unbundled network elements
_____)

) Docket No. 990649-TP

)
)
) Filed: November 21, 2000

**JOINT POST-HEARING BRIEF
OF RHYTHMS, COVAD AND BLUESTAR**

CATHERINE F. BOONE
10 Glenlake Parkway
Suite 350
Atlanta, GA 30328
(678) 579-8388

Attorney for
Covad Communications Company
and
BlueStar Networks, Inc.

KIMBERLY A. SCARDINO
Rhythms Links Inc.
Suite 300
1625 Massachusetts Ave, N.W.
Washington, DC 20036
(202) 387-4077

Attorney for
Rhythms Links Inc.

MICHAEL C. SLOAN
Swidler Berlin Shereff Friedman
3000 K Street, N.W.
Washington, DC 20007
(202) 295-8548

Attorney for Broadslate Networks, Inc.,
Cleartel Communications, Inc. and
Florida Digital Networks, Inc.

ELISE P.W. KIELY
JEREMY D. MARCUS
Blumenfeld & Cohen
– Technology Law Group
1625 Massachusetts Avenue, N.W.
Suite 300
Washington, DC 20036
(202) 955-6300

and

RICHARD D. MELSON
Hopping Green Sams & Smith
P.O. Box 6526
Tallahassee, FL 32314
(850) 425-2313

Attorneys for
Rhythms Links Inc.

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	DISCUSSION	7
	<u>ISSUE A:</u> WHAT IS THE CURRENT STATE OF THE LAW WITH REGARD TO THE USE OF A FORWARD-LOOKING COST METHODOLOGY FOR COMPUTING RATES FOR UNBUNDLED NETWORK ELEMENTS?	7
	<u>ISSUE B:</u> BASED ON THE CURRENT STATE OF THE LAW SET FORTH IN ISSUE A, WHAT IS THE COMMISSION'S AUTHORITY TO ESTABLISH RATES FOR UNBUNDLED NETWORK ELEMENTS AT THIS TIME?	10
	<u>ISSUE 1:</u> WHAT FACTORS SHOULD THE COMMISSION CONSIDER IN ESTABLISHING RATES AND CHARGES FOR UNES (INCLUDING DEAVERAGED UNES AND UNE COMBINATIONS)?	11
	<u>ISSUE 2:</u> (A) WHAT IS THE APPROPRIATE METHODOLOGY TO DEAVERAGE UNES AND WHAT IS THE APPROPRIATE RATE STRUCTURE FOR DEAVERAGED UNES?	18
	(B) FOR WHICH OF THE FOLLOWING UNES SHOULD THE COMMISSION SET DEAVERAGED RATES?	18
	(1) LOOPS (ALL);.....	18
	(2) LOCAL SWITCHING;	18
	(3) INTEROFFICE TRANSPORT (DEDICATED AND SHARED);	18
	(4) OTHER (INCLUDING COMBINATIONS).	18
	<u>ISSUE 3:</u> (A) WHAT ARE XDSL CAPABLE LOOPS?	18
	(B) SHOULD A COST STUDY FOR XDSL-CAPABLE LOOPS MAKE DISTINCTIONS BASED ON LOOP LENGTH AND/OR THE PARTICULAR DSL TECHNOLOGY TO BE DEPLOYED?	23
	<u>ISSUE 4:</u> (A) WHICH SUBLOOP ELEMENTS, IF ANY, SHOULD BE UNBUNDLED IN THIS PROCEEDING, AND HOW SHOULD PRICES BE SET?	28
	(B) HOW SHOULD ACCESS TO SUCH SUBLOOP ELEMENTS BE PROVIDED, AND HOW SHOULD PRICES BE SET? ..	28
	<u>ISSUE 5:</u> FOR WHICH SIGNALING NETWORKS AND CALL-RELATED DATABASES SHOULD RATES BE SET.	28
	<u>ISSUE 6:</u> UNDER WHAT CIRCUMSTANCES, IF ANY, IS IT APPROPRIATE TO RECOVER NON-RECURRING COSTS THROUGH RECURRING RATES?	28
	<u>ISSUE 7:</u> WHAT ARE THE APPROPRIATE ASSUMPTIONS AND INPUTS FOR THE FOLLOWING ITEMS TO BE USED IN THE FORWARD-LOOKING RECURRING UNE COST STUDIES?	30
	(A) NETWORK DESIGN (INCLUDING CUSTOMER LOCATION ASSUMPTIONS);	30
	(B) DEPRECIATION;	35
	(C) COST OF CAPITAL;	35
	(D) TAX RATES.	35
	(E) STRUCTURE SHARING;	35
	(F) STRUCTURE COSTS;	35
	(G) FILL FACTORS;.....	35
	(H) MANHOLES;.....	35
	(I) FIBER CABLE (MATERIAL AND PLACEMENT COSTS);	35
	(J) COPPER CABLE (MATERIAL AND PLACEMENT COSTS);	35
	(K) DROPS;	35
	(L) NETWORK INTERFACE DEVICES;	35
	(M) DIGITAL LOOP CARRIER COSTS;	35
	(N) TERMINAL COSTS;	37
	(O) SWITCHING COSTS AND ASSOCIATED VARIABLES;	37
	(P) TRAFFIC DATA;.....	37
	(Q) SIGNALING SYSTEM COSTS;	37
	(R) TRANSPORT SYSTEM COSTS AND ASSOCIATED VARIABLES;	37
	(S) LOADINGS;.....	37
	(T) EXPENSES;.....	37
	(U) COMMON COSTS;	37
	(V) OTHER.	37
	<u>ISSUE 8:</u> WHAT ARE THE APPROPRIATE ASSUMPTIONS AND INPUTS FOR THE FOLLOWING ITEMS TO BE USED IN THE FORWARD-LOOKING NON-RECURRING UNE COST STUDIES?	37
	(A) NETWORK DESIGN;	37

(B)	OSS DESIGN;	41
(C)	LABOR RATES;	45
(D)	REQUIRED ACTIVITIES;	45
(E)	MIX OF MANUAL VERSUS ELECTRONIC ACTIVITIES;	57
(F)	OTHER	57
<u>ISSUE 9: (A) WHAT ARE THE APPROPRIATE RECURRING RATES (AVERAGED OR DEAVERAGED AS THE CASE MAY BE) AND NON-RECURRING CHARGES FOR EACH OF THE FOLLOWING UNES?</u>		58
(1)	2-WIRE VOICE GRADE LOOP;	58
(2)	4-WIRE ANALOG LOOP;	58
(3)	2-WIRE ISDN/IDSL LOOP;	58
(4)	2-WIRE XDSL-CAPABLE LOOP;	58
(5)	4-WIRE XDSL-CAPABLE LOOP;	58
(6)	4-WIRE 56 KBPS LOOP;	58
(7)	4-WIRE 64 KBPS LOOP;	58
(8)	DS-1 LOOP;	58
(9)	HIGH CAPACITY LOOPS (DS3 AND ABOVE);	58
(10)	DARK FIBER LOOP;	58
(11)	SUBLOOP ELEMENTS (TO THE EXTENT REQUIRED BY THE COMMISSION IN ISSUE 4);	58
(12)	NETWORK INTERFACE DEVICES;	58
(13)	CIRCUIT SWITCHING (WHERE REQUIRED);	58
(14)	PACKET SWITCHING (WHERE REQUIRED);	58
(15)	SHARED INTEROFFICE TRANSMISSION;	58
(16)	DEDICATED INTEROFFICE TRANSMISSION;	58
(17)	DARK FIBER INTEROFFICE FACILITIES;	58
(18)	SIGNALING NETWORKS AND CALL-RELATED DATABASES;	58
(19)	OS/DA (WHERE REQUIRED).	58
(B)	SUBJECT TO THE STANDARDS OF THE FCC'S THIRD REPORT AND ORDER, SHOULD THE COMMISSION REQUIRE ILECS TO UNBUNDLE ANY OTHER ELEMENTS OR COMBINATIONS OF ELEMENTS? IF SO, WHAT ARE THEY AND HOW SHOULD THEY BE PRICED?	59
<u>ISSUE 10: WHAT IS THE APPROPRIATE RATE, IF ANY, FOR CUSTOMIZED ROUTING?</u>		59
<u>ISSUE 11: WHAT IS THE APPROPRIATE RATE IF ANY, FOR LINE CONDITIONING, AND IN WHAT SITUATIONS SHOULD THE RATE APPLY?</u>		59
<u>ISSUE 12: WITHOUT DECIDING THE SITUATIONS IN WHICH SUCH COMBINATIONS ARE REQUIRED, WHAT ARE THE APPROPRIATE RECURRING AND NON-RECURRING RATES FOR THE FOLLOWING UNE COMBINATIONS:</u>		65
(A)	"UNE PLATFORM" CONSISTING OF: LOOP (ALL), LOCAL (INCLUDING PACKET, WHERE REQUIRED) SWITCHING (WITH SIGNALING), AND DEDICATED AND SHARED TRANSPORT (THROUGH AND INCLUDING LOCAL TERMINATION);	65
(B)	"EXTENDED LINKS," CONSISTING OF:	65
(1)	LOOP, DSO/1 MULTIPLEXING, DS1 INTEROFFICE TRANSPORT;	65
(2)	DS1 LOOP, DS1 INTEROFFICE TRANSPORT;	65
(3)	DS1 LOOP, DS1/3 MULTIPLEXING, DS3 INTEROFFICE TRANSPORT.	65
<u>ISSUE 13: WHEN SHOULD THE RECURRING AND NON-RECURRING RATES AND CHARGES TAKE EFFECT?</u>		66
III.	<u>CONCLUSION</u>	66

No. 62. Indeed, as indicated by the testimonies of BellSouth's xDSL specific witnesses, BellSouth ceased deploying a copper-only network in the early to middle 1980s.

A. No. Today, BellSouth has been moving for many years to digital loop carrier. This is what was seen in the early '80s as a way to begin to evolve your outside plant to the new technologies that were coming.

So, since the early '80s when DLC, digital loop carrier, first came out, BellSouth started then restricting the amount of feeder plant that was copper, that's the pairs that were terminated on the MDF. So, since that time, a decreasing amount of copper has been placed in the F1 portion from the central office.

Q. A decreasing amount? Do you recall during your deposition stating that you had to obtain officer approval from BellSouth to terminate a copper cable on the MDF today?

A. Yes, I do.

Q. Okay. So, it would be a very rare circumstance when that would happen?

A. Today, not only to the western states of BellSouth, but also the eastern states of BellSouth have to have officer approval to terminate any cable on the MDF.

Greer, Tr. 1737-1738.

Because the Copper only network used by BellSouth to model rates for xDSL capable loops neither will be nor has been deployed by BellSouth for over 15 years, the Copper only model does not represent a forward-looking network. Therefore, the Commission should reject it as the basis for determining xDSL capable loop recurring rates. Instead, the Commission should use the BellSouth Combo model, which assumes IDLC feeder plant as the basis for determining xDSL capable loop rates (and, indeed, all UNE rates). *See* Donovan/Pitkin, Tr. 2129-2132.

A. It would not be something that we would deploy going forward. It was just a convention to get a copper loop that did not have an artificial limitation of 12,000 feet on it.

Q. And, in fact, BellSouth has got no plans to deploy a 100 percent copper network, is that correct?

A. That's correct.

Caldwell, Tr. 1329 – 1330

- (b) depreciation;
- (c) cost of capital;
- (d) tax rates.
- (e) structure sharing;
- (f) structure costs;
- (g) fill factors;
- (h) manholes;
- (i) fiber cable (material and placement costs);
- (j) copper cable (material and placement costs);
- (k) drops;
- (l) network interface devices;

Data ALECs: * Adopt FCCA position on items (e) to (l). *

- (m) digital loop carrier costs;

Data ALECs: * DLC costs assigned to digital/ISDN loops should not be disproportionate as compared to the amount of DLC assigned to voice grade loops. Rather, forward-looking DLC systems and associated electronics are designed so that any reasonable increment of ISDN/IDSL services will not cause any incremental cost. *

Digital loop carrier costs affect DSL providers in a significant way. DSL providers may use BellSouth's ISDN-capable loops to provide IDSL service to customers at great distances from a central office that are served through a digital loop carrier system. As Data ALEC expert Riolo explained, the facilities used to provide ISDN-capable loops do not differ from the facilities to provide voice-grade loops. Riolo, Tr. 2669. Witness Riolo further explained that the only cost difference between a fiber-fed digital loop capable of carrying ISDN or IDSL services and a fiber-fed analog loop should be the cost of the line card or channel unit. That is, ISDN-capable loops that traverse fiber DLC systems require only an additional line card investment. Therefore, recurring charges for ISDN-capable loops should be set at the recurring charge for basic loops, plus an increment to account for the higher cost of an ISDN card as compared to a POTS card. The increment should reflect the cost of the card, weighted by the percentage of

loops that would be provisioned over fiber feeder in the forward-looking network. Murray, Tr. 2504.

BellSouth's proposed recurring charges for ISDN-capable loops include inappropriate assumptions regarding DLC costs. For example, BellSouth incorrectly assumed that the higher bandwidth of digital loops automatically causes it to incur greater central office and remote terminal costs for digital loops. As a result, BellSouth has assigned a disproportionate share of its DLC investment to ISDN-capable loops as opposed to voice-grade loops. Murray, Tr. 2504-2505. Yet, the DLC systems and associated electronics that the incumbents will deploy on a forward-looking basis are designed so that any reasonable increment of ISDN or IDSL services will not cause any incremental cost. Murray, Tr. 2505.

The fallacy of BellSouth's position is illustrated by the following example. The BSTLM© calculates the DLC common equipment investment associated with a service based on its "DS0 equivalents." Murray, Tr. 2508; Exh. 61, BellSouth's Response to AT&T's Interrogatory 147. Further, BellSouth assumed that one ISDN-capable loop is required the equivalent of three DS0s. Murray, Tr. 2508; BSTLM© inputs. The BSTLM also appears to triple the fiber investment associated with an ISDN-capable loop. Murray, Tr. 2508, Exh. 61, BellSouth's Response to AT&T's Interrogatory 147. Yet, transmitting a higher rate of light pulses along a fiber does not require a larger fiber. Murray, Tr. 2508; Riolo Tr. 2712. Rather, the capacity of fiber is so vast that any reasonably foreseeable demand for digital services will not cause BellSouth to invest in additional fiber feeder cable beyond that already reflected in its recurring cost study. Murray, Tr. 2508. BellSouth therefore should have modeled the DLC costs of ISDN-capable loops in the same manner as it modeled DLC costs for analog loops. Murray, Tr. 2508; Riolo, Tr. 2712-2713.

- (n) terminal costs;
- (o) switching costs and associated variables;
- (p) traffic data;
- (q) signaling system costs;
- (r) transport system costs and associated variables;
- (s) loadings;
- (t) expenses;
- (u) common costs;
- (v) other.

Data ALECs: * Adopt FCCA position on items (n) to (v). *

Issue 8: **What are the appropriate assumptions and inputs for the following items to be used in the forward-looking non-recurring UNE cost studies?**

- (a) network design;

Data ALECs: * The forward-looking network design used in the non-recurring UNE cost studies should be the same as the forward-looking design used in the recurring cost studies. *

The Commission should utilize the same forward-looking network design as the basis for BellSouth’s nonrecurring UNE cost studies as it uses for the recurring UNE cost studies. *See, supra*, Issues 1 and 7(a). Specifically, this Commission should adopt, with changes suggested by the ALECs, the BellSouth Combo model for recurring rates for all loops. This model most closely approximates a forward-looking network. Use of the Combo model is required both by agreement of the parties and by the FCC’s pricing rules. Specifically, BellSouth, the Data ALECs and numerous other ALECs all agreed in a stipulation approved by the Commission that “[t]he recurring and nonrecurring studies should assume the same network design.” Florida Public Service Commission – Order No. PSC-99-2467-PCO-TP, Attachment A ¶ 3(d)(v). In addition, as demonstrated in Issue 1, *supra*, the Commission must use the same network design when establishing nonrecurring charges that it uses when establishing recurring charges in order to comply with FCC Rule 51.507(e). Since BellSouth did not propose nonrecurring charges

based on the Combo model network assumptions, the Data ALECs have supplied the appropriate assumptions necessary to derive nonrecurring charges for xDSL loops. The Commission should adopt the Data ALECs proposals with respect to nonrecurring charges, since they represent the proper assumptions about the forward-looking underlying network design. Unless the same network design is used for both nonrecurring and recurring rates, it will be impossible for the Commission to ensure that the sum of the nonrecurring and recurring rates does not exceed the total forward-looking economic cost of providing the element.

BellSouth's proposed nonrecurring rates are not based on the same network design as its proposed recurring rates. In fact, BellSouth's nonrecurring rates are not based on any of the three network design models BellSouth proposed for its recurring rates. *See* Issue 7(a). Instead, BellSouth uses a completely different basis (and assumptions about network design) for its nonrecurring rates. Specifically, BellSouth witness Caldwell testified that “[m]ost of the nonrecurring costs are in spreadsheets where [BellSouth] look[s] at the time to perform each activity and multiply that times the labor rate of the individual doing that activity.” Caldwell, Tr. 1346.

The entire process by which the nonrecurring charge inputs were generated raises doubts about the accuracy of the inputs. BellSouth's cost analysts obtained task activities and task time estimates from “BellSouth personnel familiar with the provisioning process” of the particular UNE. Caldwell, Tr. 99. None of the task activities or times were known directly by the BellSouth cost analysts, nor were the personnel responsible for the estimates made available for cross-examination. The resulting estimates are thus no more than unverified supposition or conjecture that have no record support for their accuracy or appropriateness.

Indeed, the Commission has little record evidence that can justify reliance on BellSouth's "estimates." For example, BellSouth failed to provide any detail as to the instructions that were provided to the "BellSouth personnel familiar with the provisioning process." Moreover, for many of the nonrecurring rates for xDSL capable loops proposed by BellSouth, the BellSouth product manager was interposed between the cost group and the personnel that provided the task times, increasing the probability that the times were revised without reference to the actual forward-looking task activities. For instance, BellSouth witness Ms. Caldwell stated that she obtained many of the tasks and task time inputs for the xDSL capable loop nonrecurring charges from other BellSouth witnesses. Caldwell, Tr. 1322-1323, 1365 and 1393. These witnesses did not provide any task times themselves; instead, they relied on input supplied by others. Greer, Tr. At 1758; *see* Latham, Tr. 1861. Thus, the nonrecurring rates are often based on inputs that are, in effect, hearsay upon hearsay.

Adding to the purely speculative nature of BellSouth's estimates is BellSouth's failure to perform any time and motion studies or TOC studies to support its inputs. Caldwell, Tr. 1393 - 1398. The only study even referenced as a basis for any of the nonrecurring inputs was a TOC study that was conducted in 1992 or earlier. Caldwell, Tr. 1393 - 1394. It strains credibility in the extreme to assume that a TOC study performed several years *before* the enactment of the Telecom Act assumed the proper forward-looking network design assumptions required by the FCC's pricing rules.

Moreover, the installation and maintenance subject matter expert relying on the task times from this TOC study in providing task times to the cost group is no longer considered by BellSouth to be a subject matter expert for installation and maintenance. Latham, Tr. 1888 - 1890. Consequently, it is impossible for the Commission to verify any of the inputs used in

developing BellSouth's nonrecurring rates or to verify whether the inputs were based on proper forward-looking network design assumptions.

Accordingly, since BellSouth's nonrecurring loop model for xDSL loops fails to rely on the same forward-looking network as the recurring loop model and is not based on any verifiable forward-looking network assumptions, the Commission should reject BellSouth's nonrecurring xDSL capable loop model.

Instead, the Commission should order the nonrecurring rates proposed by the Data ALECs at Exhibit TLM-2 of economist Murray's direct and rebuttal testimony. Exhs. 141-142. These rates comply with the FCC's pricing rules by assuming a consistent, forward-looking network design for both the nonrecurring and the recurring rates. Murray, Tr. 2485-2488 and 2511-2520; Riolo, Tr. 2669-2711. In so doing, they ensure that BellSouth neither over-recovers nor under-recovers its costs. Murray, Tr. 2412-2414. In addition, the Data ALECs' proposed rates are based on efficient work times and efficient operations support systems ("OSS") assumptions. Riolo, Tr. 2675-2711; Exh. 144; Murray, Tr. 2499-2503 and 2523-2533; *see, infra*, Sections 8(b), 8(d) and 8(e). These work times, unlike those proposed by BellSouth, are directly supported by the personal experiences of the Data ALECs' engineering witness. Riolo, Tr. 2786-2788; Exh. 145. Thus, the work times are facially more credible than those set forth by BellSouth. Consequently, the rates proposed by the Data ALECs are more reasonable than those proposed by BellSouth and should be adopted by the Commission.

(b) OSS design;

Data ALECs: * The NRC cost study should assume electronic OSS for all preordering and ordering functions, including access to loop make-up data. The study should assume that ILECs have reasonably maintained complete, quality databases and that competitors will have nondiscriminatory access to the data therein and to the electronic processing capability of the incumbent's OSS. *

This Commission should base its assumptions regarding operations support systems (“OSS”) design on the forward-looking OSS system that should be and is expressly contemplated by BellSouth. First and foremost, a forward looking OSS includes electronic preordering and ordering functions that enable an ALEC to access to the data needed to qualify its own loops and to submit an xDSL capable loop order electronically. Riolo, Tr. 2679. The electronic OSS should allow orders to flow through without manual handling. A fully functional, electronic OSS rejects orders with errors or incorrect inputs almost instantaneously, allowing the ALEC to immediately correct the error or seek further clarification. King, Tr. 2417. Once the order is submitted, work tasks should be assigned electronically, again without manual intervention, for the work to be performed in the central office or in the field, if necessary.

A. Assumptions About OSS Should Be Based On Forward-Looking Functionality

As the Data ALECs’ witness Riolo testified, fallout from a forward-looking, electronic OSS will be designed to be minimal. Riolo, Tr. 2676. For example, no more than a 10% fallout rate was acceptable for service inquiry OSS functions. Riolo, Tr. 2682. Likewise, 3% fallout from the engineering OSS tasks is reasonable and achievable. Riolo, Tr. 2692; *see also* Stacy, Tr. 3038-3041. This evidence stands in sharp contrast to assumptions made in the BellSouth cost studies.

Furthermore, not a single BellSouth witness testified that the process it used or will use in the future to deliver xDSL loops is the most efficient process available; not a single BellSouth

witness explained why its own existing electronic systems suffered high failure rates; and not a single BellSouth witness justified its development of an electronic ordering system that would result in fallout 60% percent of the time. Riolo, Tr. 2683. In fact, the record is bare of any reference to BellSouth's belief that its process is anything more than an error filled, manually dependant process resulting from years of BellSouth's failure to invest in system upgrades necessary to deliver efficient service in Florida.

B. BellSouth's OSS Assumptions Are Based On Backward Looking, Error Riddled, or Manual Systems

BellSouth's OSS processes are riddled with inefficiencies, duplicative processes, and enormous built in failure rates. For example, BellSouth appears to have built an OSS process in which mechanical functions must be checked 100% of the time by manual means. While BellSouth has mechanized the order assignment functions within a central office and the dispatch functions for field work, it still requires manual oversight 100% of the time. Riolo, Tr. 2676. Furthermore, BellSouth's OSS process places two separate work groups (the CRSG and LCSC) in the path of an xDSL capable loop order, performing duplicative manual functions. Both groups apparently "validate information" on service order forms and check for errors made by ALECs. Greer, Tr. 1699.

As a preliminary matter, these functions should be performed by a fully functional, electronic OSS system that rejects orders when basic service information is incorrect. *See* Riolo, Tr. 2676-2677. Nonetheless, even if a manual process were necessary occasionally, there is no reason that two different sets of BellSouth employees must review a single order for ALEC errors. *See* Riolo, Tr. 2677-2678. At a minimum, efficiency demands that a single work group review a complete Service Inquiry and Local Service Request for errors. *See id.* Thus, BellSouth has built duplicate processes that greatly increase costs to competitors.

Furthermore, for the cluster of tasks associated with engineering an xDSL loop, a process which the Data ALECs believe is completely unnecessary, BellSouth's OSS apparently builds in enormous failure rates. BellSouth's cost study lists essentially two groups involved with the engineering of an xDSL loop: the CPG (Circuit Provisioning Group) and the AFIG (Address and Facility Inventory Group). Riolo, Tr. 2682-2683. Although BellSouth admits that the work functions of both groups are mechanized, the CPG tasks include two distinct time estimates for correcting OSS fallout, which take 15 and 18 minutes respectively. Riolo, Tr. 2683. Further, BellSouth estimates that each type of fallout will occur 15% of the time. *Id.* Likewise, although the AFIG tasks of loop facility assignments are mechanized, BellSouth assumes that this mechanized process will fail a staggering 30% of the time. *Id.*

These assumed OSS failure rates are problematic for two reasons. First, BellSouth offers no support whatsoever for the assumptions. No evidence exists in the record that these assumptions are based on historical data, BellSouth review of fallout rates, or any other verifiable process. Rather, the fallout rate assumptions apparently sprang from some closed session in which BellSouth employees hypothesized about the proper fallout rates and crafted the assumptions suggested in the cost study. Despite the numerous discovery requests issued by the Data ALECs, not a single document produced by BellSouth explains how these assumptions were made, the basis for them, or even identifies exactly who made the assumptions. BellSouth apparently feels no compulsion to justify these enormous fallout rates or to offer support for them. Yet, each assumption about fallout from OSS triggers a startling cost increase driven by the inflated times and unnecessary tasks BellSouth includes in its xDSL cost studies. *See infra* Issues 8(d). Accordingly, BellSouth's assumptions must be rejected.

Second, BellSouth's fallout rates do not account for improvements to the systems that would decrease the manual (and expensive) intervention. BellSouth's proposal, if it is not pure conjecture, locks BellSouth into recovering costs that result from its embedded, malfunctioning OSS existing today. BellSouth makes no attempt to look forward toward improvements that are clearly warranted by its own assumptions about the level of electronic OSS failure. This Commission should set UNE rates based on a forward-looking, electronic OSS in which all conceivable opportunities are taken to reduce fallout to manual processing. Murray, Tr. 2529-2530. The ability to deliver high volumes of products at lower costs requires electronic systems that function as designed more than 40% of the time. See Riolo, Tr. 2683. Any competitive business experiencing the level of fallout that BellSouth assumes in its cost study would clearly be incented to drive those fallout rates down to more acceptable levels. Looking forward, this Commission must base prices on the efficient use of a fully functional, electronic OSS for xDSL preordering and ordering, such that fallout rates are kept to a bare minimum. Data ALEC witness Riolo outlines what those fallout rates, if any, should be. Riolo, Tr. 2679-2693; *see also* Stacy, Tr. 3038-3041.

C. BellSouth has proposed Recovery of OSS Development charges that were specifically excluded from this Docket by the Stipulation of the Parties

All parties to this docket agreed at the outset that the rates for access to BellSouth's OSS would *not* be established in this proceeding. Specifically, the parties stipulated as follows: "Costing and pricing for access to operations support systems will be dealt with in a separate proceeding. This does not preclude consideration in the cost studies filed in this proceeding of costs such as service order processing and service inquiry costs." Florida Public Service Commission-Order No. PSC-99-2467-PCO-TP, Attachment A ¶ 3(b). Pursuant to this Stipulation, BellSouth witness Caldwell admitted that BellSouth did not include in its filings the

cost of the OSS, or operation support services, interfaces that have been developed to allow competitors to access BellSouth's provisioning systems. Caldwell, Tr. 1347. Nonetheless, BellSouth has include a charge of .69 cents per transaction for obtaining an electronic loop makeup inquiry. Electronic loop makeup utilizes the BellSouth LFACS. To enable ALECs to access LFACS electronically, BellSouth is "developing electronic access to [LFACS] as part of pre-ordering for a loop makeup data query. This access will be via the pre-ordering functionality of the Telecommunications Access Gateway ("TAG") and Local Exchange Navigation System ("LENS") electronic interfaces." Pate, Tr. 1619. This development process consisted of developing a new gateway system through which ALECs could gain entrance to the information in LFACS.

To recover the cost of developing this new electronic gateway, BellSouth has chosen to impose a .69 cent fee per transaction. Clearly, this is an attempt to recover OSS development costs, despite the Stipulation governing the issues in this case. Thus, BellSouth cannot be permitted to assess this charge, since this issue is not properly before the Commission in the ongoing docket.

(c) labor rates;

Data ALECs: * Adopt FCCA position. *

(d) required activities;

Data ALECs: * The nonrecurring cost study should assume only the efficient performance of those activities which would be required in a forward-looking network. For xDSL loops, those activities include processing an ALEC service order, performing the necessary central office work, and closing the order. BellSouth's nonrecurring cost study unnecessarily bloats both the work activities and the work times for provisioning xDSL loops. *

A. Required Activities And Task Times For xDSL Loops

The only activities required to process an order for an individual xDSL capable loop are the following: (1) processing and reviewing the ALEC service order; (2) placing the required jumper to connect the loop appearance in the central office to the pre-wired collocation cross connection; and (3) reporting back to the Operation Support System that the work is completed. Riolo, Tr. 2693. These are the same steps required for a basic unbundled loop. *Id.* There is no reason whatsoever that the nonrecurring work times or costs for xDSL capable loops should be different than for a basic, non-designed loop. *Id.* Thus, the times associated with the provisioning of a non-designed basic loop, as adjusted according to the recommendations made by other ALECs in this proceeding, *see* Pitkin/Donovan, Tr. 2117-2182, should be used when establishing rates for xDSL capable loops.

In his direct testimony, Data ALEC witness Riolo provides a thorough discussion of how long it takes to process an ALEC order and to place the necessary jumpers to provision the loops. Given his thirty years of experience in the telephone industry, his testimony provides reliable guidance about how this work is really done day to day. For example, while BellSouth seeks to stretch each task into a discrete activity, witness Riolo explains that central office work is generally done in batches. Riolo, Tr. 2694. With an automated system, all work orders for the day are produced for a technician. Even in a worst case manual environment, the technician would pull multiple orders at one time, organize them, and locate where the work needs to be performed. *Id.* This work takes no more than 2.5 minutes per order to pull and analyze the order to connect the xDSL capable loop. *Id.*

The next necessary provisioning step is to place the jumper connection that completes the xDSL loop itself. Placing a jumper to connect the loop appearance to the appearance of a cross

connection to collocation space should take no more than a few minutes, even allowing for walking time. Riolo, Tr. 2695. A technician will know the frame well and the process of attaching a jumper to the frame is so routine as to be almost automatic. *Id.* In fact, BellSouth witness Greer admitted in his deposition that BellSouth technicians use one of two routine devices to further speed the placement of jumpers. Exh. 110, Greer Deposition at 127. There is no evidence in the record to contradict Mr. Riolo's express conclusion that it should take no more than a few minutes. BellSouth's witness Greer stated that he had no personal experience with running jumpers, had never asked any technicians how long it took to run a jumper, and could not estimate the appropriate amount of time for running a jumper. Exh. 110, Greer Deposition at 127-129. Thus, the only affirmative evidence this Commission has to consider is the expert opinion of Mr. Riolo. Accordingly, BellSouth's proposed times for these tasks must be rejected.

The final step necessary to provision an xDSL loop is to close the order in the OSS, so that the ALEC knows its order has been completed. Since no analysis is required, closing an order should take less time than opening an order. Riolo, Tr. 2695. An efficient technician will do this work in batch, several orders at a time. Riolo, Tr. 2695-2696. This saves unnecessary time and effort that seems to be built into every BellSouth assumption. On average, it should take about 1.5 minutes to report work complete for each line on an order. Riolo, Tr. 2696.

Finally, for the very small percentage of times that an order cannot flow through the system without manual intervention (a percentage which should be no more than 2% in a forward looking OSS, Riolo, Tr. 2684), it should take an average of 15 minutes to correct errors in facility assignment or work assignments. This assumption on the correction of errors in the ordering process would legitimately take an additional 0.3 minutes on a per-line basis. These

tasks and task times are more fully detailed in the testimony of witness Riolo. Riolo, Tr. 2697 - 2698.

B. Required Activities And Task Times For An ISDN Loop

The required activities and task times for provisioning ISDN/IDSL capable loops are essentially the same as for POTS loops. Riolo, Tr. 2698-2701. For an all-copper ISDN loop, BellSouth should provision the loop exactly as it would any other copper loop. BellSouth must simply place a jumper from the cable appearance on the central office main distribution frame to the hardwired cable appearance running to the ALECs collocation space. Riolo, Tr. 2699. The work is only slightly different for fiber-fed DLC systems because the ISDN loop must be connected to an appropriate line card in the DLC. *Id.* Essentially, for the first line at a remote terminal, an ISDN line card must be placed at the remote terminal to establish the feeder portion of the circuit and subsequently, and a cross-connect jumper must be placed at the adjacent feeder distribution interface from the appearance of this feeder pair to the distribution copper cable pair that serves the end user. *Id.* Because an ISDN line card can accommodate 4 ISDN lines, the subsequent 3 lines of ISDN service would only require the placement of a cross-connect jumper at the feeder distribution interface for subsequent orders. *Id.*

The outside plant work to perform these tasks and thereby to provision an ISDN loop would take no more than 8 minutes for a copper ISDN loop and 32.75 minutes for a fiber-fed ISDN loop. Riolo, Tr. 2700-2701. Thus, these are the proper inputs that should be used by the Commission.

C. BellSouth Design Process Is Unnecessary And Increases Costs To ALECs

Since all DSL providers need is the ability to qualify, reserve and electronically order a simple voice grade loop, BellSouth's byzantine design process is completely unnecessary.

BellSouth witness Greer explained that the “design process” provides competitive carriers with essentially three “attributes” not available on nondesigned loops: a Design Layout Record, Order Coordination, and a test point. Greer, Tr. 1707. Ironically, these “attributes” are not required to provide xDSL services and are not desired competitive carriers. The Design Layout Record is nothing more than a confirmation of information originally provided to competitive carriers in the manual loop makeup report. According to BellSouth witness Latham, the DLR is a “by-product” of the design process and “the DLR information is, again, I guess affirming that what they [ALECs] asked for is actually what they got.” Latham, Tr. 1874-1875. Essentially, ALECs are required to pay for loop makeup information and then are required by BellSouth to pay again to make sure ALECs got what they ordered. If BellSouth needs to produce a DLR to insure that BellSouth actually provisions the specific loop ordered by the ALEC, BellSouth is free to do so. Nonetheless, an ALEC should not be required to pay for the loop it ordered and then pay more to make sure that BellSouth actually delivers the loop ordered by the ALEC.

BellSouth witness Latham also admitted that he could not recall any ALEC requesting that BellSouth place a test point on an xDSL capable loop. Latham, Tr. 1872. In fact, as Data ALECs witness Riolo testified, xDSL loops do not require any special testing and do not require a test point. Riolo, Tr. 2723. Finally, BellSouth failed to produce any evidence showing that order coordination is necessary or desired by ALECs. BellSouth should not be allowed to force upon ALECs “design process” for xDSL loops that provides test points and order coordination unless and until ALECs request test points and order coordination.

Again, not a single BellSouth witness justified BellSouth’s use of the “design process” for xDSL capable loops, except to suggest that this is how BellSouth has chosen to provide loops to ALECs. Latham, Tr. 1870. BellSouth’s arbitrary choices do not justify its imposition upon

ALECs of a “design process” that adds no value to ALECs, but nevertheless dramatically increases costs.

In fact, BellSouth may be the only ILEC that proposes pricing distinctions between voice grade loops and xDSL capable loops, particularly distinctions based on BellSouth categorizing xDSL capable loops as “designed” loops. In contrast to BellSouth, ILECs generally, including Verizon and Sprint in the State of Florida, have the same rate for voice grade loops and for xDSL capable loops, because there is no distinction between a voice grade and an xDSL capable loop.

- Q. Isn't it fair to say that practically every incumbent, if not every incumbent has a different rate for ADSL capable loop and an DSL capable loop as opposed to a simple voice grade loop?
- A. No.
- Q. Which incumbents are you aware of do not have that specific distinction?
- A. As to the rate, Southwestern Bell, for example, in Texas has the exact same rate for a generic xDSL capable loop as it has for an analog voice grade loop. Pacific Bell has the identical rate for an xDSL capable loop as for a voice grade loop. The former Bell Atlantic companies, now Verizon, have identical rates for xDSL capable loops generally as for voice grade loops. Let me see if I can think of an exception to that rule, I'm having trouble. GTE, now part of Verizon, offers xDSL capable loops at the same price as voice grade loops. I am having trouble thinking of an exception to that rule; that is, an incumbent that has a different rate.
- Q. So your testimony is that, for example, Bell Atlantic -- would this be in New York, has the same rate for a voice grade loop as it does for an ADSL or HDSL capable loop?
- A. The same rate. There is a different name for the element which allows Bell Atlantic, now Verizon, to track the fact that it is a DSL capable loop and avoid -- and be able to have the kind of reservation, avoid a rollover problem. But the price is based on exactly the same cost. Now, let me carefully distinguish. There is something called a four-wire

HDSL loop. I am talking about two-wire loops so we have an apples-to-apples comparison.

Murray, Tr. 2624-25. Thus, virtually all states and ILECs treat xDSL capable and voice grade loops the same way from a pricing standpoint. BellSouth's required "design process" for all xDSL capable loops contrasts sharply with the way in which other incumbent carriers meet their legal obligations to provide xDSL UNEs.

Accordingly, because BellSouth's design process (1) is not desired by ALECs, (2) is not necessary to provide xDSL capable loops, and (3) has not been adopted by other ILECs or state commissions, it should be rejected by this Commission along with all of the cost inputs associated with the design requirements.

D. Tasks That Are Unnecessary, Greatly Over Stated, Or Redundant

BellSouth's nonrecurring cost studies do not comply with the foundational requirement of a forward-looking cost analysis because they were not developed based on work flows, task times or probability factors considering a forward-looking network design. Instead, BellSouth derived its nonrecurring cost study inputs based on its existing network architectures, which are wholly different network designs from those on which BellSouth based its filed recurring cost analysis. *See supra* Issues 7(a) and 8(a). Moreover, BellSouth's nonrecurring cost studies rely on data pertaining to its existing, embedded processes and its existing, embedded network architectures. BellSouth considers minor modifications to its embedded or "current state" by considering process modifications that are planned only in the immediate future, not the long-run. Murray, Tr. 2521. Thus, the BellSouth cost studies fail to meet federal pricing guidelines.

Even if this Commission forces ALECs to endure BellSouth's cumbersome, expensive "design process" to obtain a simple loop, BellSouth should only be permitted to recover costs based on efficient task times appropriate in a forward-looking network. The Data ALECs have

provided specific expert testimony, presenting realistic task times and activities for which DSL providers should be charged. Riolo, Tr. 2692. Furthermore, the validity of Data ALEC expert Riolo's opinions were endorsed by BellSouth Witness Greer when he said that Mr. Riolo "has done a very good job here [with respect to loop conditioning] on enumerating the steps and giving some times." Greer, Tr. 1751. The same first-hand experiences that Mr. Riolo used to propose conditioning task times also underlie all of the other task times he proposed. Riolo, Tr. 2690-2692; 2697-2703.

The evidence shows that BellSouth greatly inflated the task times for multiple aspects of provisioning, including, among others, the following:

- First among BellSouth's erroneous assumptions about provisioning xDSL loops are the task times associated with Outside Plant Engineering work ("OSPE"). The BellSouth study assumes that it will take a skilled Outside Plant Engineer 150 minutes (2 and one half hours) to conduct a manual loop makeup inquiry. Yet, BellSouth admitted that LFACS contains some information about every loop in the BellSouth system. Pate, Tr. 1638. In fact, BellSouth has admitted that the following information will be available in LFACS for *every* loop: (1) presence of digital loop carrier systems; (2) type of digital loop carrier system; (3) service category and loading information, including type of loading and number of load points; (4) length and gauge of cable; and (5) total length of bridged tap. Pate, Tr. 1642. Additional detailed information will be available electronically in LFACS on 75% to 85% of the loops in metropolitan areas such Miami. Pate, Tr. 1638.

When an Outside Plant Engineer needs more information than what is in LFACS, the engineer can obtain more detailed information electronically by accessing Map

Viewer for all loops in Florida. Pate, Tr. 1643. Map Viewer is an electronic version of the plat that houses all BellSouth's information on any given loop. Pate, Tr. 1643. Thus, loop makeup inquiries in Florida will always be successfully conducted through an electronic interface at much greater speed, although BellSouth's assumptions fail to recognize this fact. Nevertheless, BellSouth's cost study assumes that its loop make up information database will fail to have the requisite information an astounding 52% of the time, triggering the inflated and expensive 2.5 hour manual look up process.

The BellSouth subject matter expert on Outside Plant Engineering admitted that generating loop make up information from LFACS took less than 5 minutes. Exh. 99, Zitzmann Dep., p.101. Moreover, he refused to quantify how much time it took to perform a search of either the plats or of Map Viewer (which mechanically contains the plats) or to research jobs. Exh. 99, Zitzmann Dep., p. 100. Thus, BellSouth's own subject matter expert provided no support for BellSouth's assumption that these tasks take 2.5 hours. Nonetheless, at 2.5 hours per loop BellSouth has assumed that a BellSouth engineer, working with plant records for a central office with which he is familiar, would only be able to perform 3 loop makeup inquiries per day. A more reasonable time for this task is a few minutes for a loop for which information is available electronically (which is every loop in Florida), and no more than an hour when the engineer must consult paper records, a highly unlikely occurrence given the availability of electronic records in Florida. On average, no more than 30 minutes for this entire group's work should be assumed. Riolo, Tr. 2682.

- BellSouth assumes 20 minutes of work for wiring a circuit at a collocation site by its CO I&M personnel. As Mr. Riolo explains, this is work that should take no more than 11

minutes. Riolo, Tr. 2687. After all, the main task involved is the quite simple: running jumpers. Every central office technician has surely mastered an efficient manner of provisioning jumpers. Likewise, that technician will be familiar with where the termination points are located so that he can group several orders together, and perform the work in less time. Riolo, Tr. 2694.

- BellSouth assumes 115.2 minutes of outside plant or field work plus 20 minutes of travel time for every ADSL loop order. This work, however, should not be included in a forward-looking analysis of nonrecurring costs because it is already captured in recurring cost analysis. Murray, Tr. 2525-2527. Furthermore, xDSL loops will not require dispatch of outside plant technicians any more often than is required for a basic voice grade loop, which BellSouth assumes will be required for only 20% of the loops. *See* Riolo, Tr. 2692. Moreover, all of the tasks can be performed by a qualified, efficient technician in 50 minutes total. Riolo, Tr. 2692; McPeak, Tr. 2951-2954.
- BellSouth's revised filing on August 18, 2000 also dramatically and inexplicably increased the dispatch rate assumption for SL1 loops from 20% to 38%. BellSouth filed no evidence or supporting material to sustain this increase. Instead, the record evidence indicates that ILECs design their plant to eliminate, to the fullest extent possible, the expense of dispatching a technician to provision an order. Riolo Tr. 2762. Thus, BellSouth's increased dispatch rate on SL1 loops must be rejected in favor of the more reasonable, but probably still overstated, 20% BellSouth originally proposed. Riolo, Tr. 2763.
- BellSouth assumes 85.2 minutes for essentially coordinating and testing loops, work that ALECs do not need. Riolo, Tr. 2684. No time is required for this activity in a forward-

looking network because these functions will not be performed manually (if at all).

BellSouth assumes that it will take its UNEC work group (Unbundled Network Element Center) 54 minutes to simply test continuity on xDSL loops. This assumption is absurdly high. Continuity testing simply requires a technician to place a set of test equipment on a line to insure that BellSouth has in fact provisioned a loop that is properly cross connected all the way from the central office to the customer premise. Riolo, Tr. 2677; Exh. 97, Ennis Dep. p. 18. This task requires no more than five minutes.

In addition to the inflated task times assumed in the BellSouth studies, there are also numerous duplicative processes in BellSouth's design process that an efficient provider would eliminate. Examples of these duplicative processes abound; the following are a few examples of unnecessary and costly duplicative BellSouth processes:

- BellSouth claims that the CRSG spends 61.8 minutes on all orders with a service inquiry to do the following: "receive[s] firm order SI from ALEC and screens documents; CRSG prepares/sends transmittals to OSPE for verification of facility availability. Upon completion of the job, CRSG informs ALEC facilities are available." *See* Riolo, Tr. 2679. Essentially, this group receives an order and translates that order into a different format for OSPE and, at the end of the process, sends notice back to the ALEC that the service inquiry is complete. Riolo, Tr. 2678. These are functions that a mechanized OSS does automatically. Thus, a forward-looking cost study should allow no time for manually performing those tasks.
- BellSouth claims that its LCSC group takes 45 minutes to screen and process orders, tasks that would be done automatically by an electronic OSS systems. Included in this time are tasks like "checking ALEC agreements to insure that the ALEC has contractual

rights to order certain products.” Greer, Tr. 1699-1700. BellSouth offers no explanation why ALECs should pay for BellSouth to review BellSouth’s own legal obligations under contracts with ALECs. Moreover, BellSouth fails to explain why this task would ever be done more than once per loop type order. These feeble work group task descriptions cannot support BellSouth’s claim that 45 minutes of work is performed by the LCSC.

- BellSouth claims that part of the time spent by the UNEC in the provisioning process is spent “ensuring dispatch,” meaning that a BellSouth employee is manually checking to make sure that a dispatch has been properly scheduled by the BellSouth mechanized system. Riolo, Tr. 2685. The dispatch should simply be scheduled properly. If BellSouth needs to take extra steps to ensure that this occurs, ALECs should not be required to pay for such steps.

These are only a few examples of the unnecessary, duplicative or inflated work activities and work times included in BellSouth's cost studies. These examples demonstrate, however, that BellSouth’s studies cannot withstand close scrutiny. Moreover, they illustrate that BellSouth has assumed the worst kind of backward-looking and inefficient processes and procedures to provision xDSL loops. BellSouth has made no attempt to model streamlined work activities to more efficiently provision their products. In fact, many work groups seem to be present in the process only to double check mechanized system work or work supposedly done by other work groups at BellSouth. The proper assumptions for work activities and task times are provided in Mr. Riolo’s testimony and that testimony compromises the only evidence before this Commission supporting TELRIC based forward looking costs for providing xDSL loops in Florida. Consequently, the Commission should use the task times proposed in witness Riolo’s testimony and should reject the analogous times proposed by BellSouth. Riolo, Tr. 2677-2703.

(e) mix of manual versus electronic activities;

Data ALECs: * A forward looking network includes fully automated operation support systems. Where BellSouth now penalizes competitors by forcing them to use expensive, manual processes, those processes should be automatic and costs should be set on a forward-looking basis to reflect that automation. *

One fundamental underpinning of a forward-looking network is the recognition that tasks that can be automated will be automated. BellSouth's assumptions fail to recognize the need to, and in fact BellSouth's stated plans to, automate its systems, eliminate duplicative work groups and streamline its provisioning processes. *See Riolo, 2679-2682.* A forward-looking process does not require "designed" xDSL capable loops, which have mechanized service inquiry functions and would not require manual engineering work. *Id.* This Commission is empowered to require BellSouth to provide service in the most efficient manner possible, including incenting BellSouth to properly automate its OSS by establishing rates that assume forward-looking electronic OSS. BellSouth should be allowed to recover for manual tasks only where BellSouth has proven that those tasks cannot be automated. Where manual task work is triggered by inflated BellSouth fallout rates, those assumptions must be reduced to acceptable, competitive levels as described in Issue 8(b).

(f) other.

Data ALECs: * Adopt FCCA position. *

Issue 9:

(a) What are the appropriate recurring rates (averaged or deaveraged as the case may be) and non-recurring charges for each of the following UNEs?

- (1) 2-wire voice grade loop;**
- (2) 4-wire analog loop;**
- (3) 2-wire ISDN/IDSL loop;**
- (4) 2-wire xDSL-capable loop;**
- (5) 4-wire xDSL-capable loop;**
- (6) 4-wire 56 kbps loop;**
- (7) 4-wire 64 kbps loop;**
- (8) DS-1 loop;**
- (9) high capacity loops (DS3 and above);**
- (10) dark fiber loop;**
- (11) subloop elements (to the extent required by the Commission in Issue 4);**
- (12) network interface devices;**
- (13) circuit switching (where required);**
- (14) packet switching (where required);**
- (15) shared interoffice transmission;**
- (16) dedicated interoffice transmission;**
- (17) dark fiber interoffice facilities;**
- (18) signaling networks and call-related databases;**
- (19) OS/DA (where required).**

Data ALECs: * The proper forward-looking recurring and nonrecurring rates for xDSL capable loops are set forth in the testimony of Terry Murray, Exhibit TLM-2 (Exhs. 141-142), as well as the two-wire voice grade service level 1 recurring loop rates proposed in Exh. 135, JAK-1, revised. *

The recurring rate for 2-wire and 4-wire xDSL capable loops should be the same as the rate for 2-wire and 4-wire voice grade loops, which should be \$6.76. Exh. 135, JAK-1, revised.

The rate for a 2-wire ISDN/IDSL loop should be the same as the rate for a 2-wire voice grade loop, plus the ISDN adder shown on the Proprietary Version of Ms. Murray's Exhibit TLM-2. Exhs. 141-142. The rate for an xDSL capable loop should apply to all xDSL capable loops, regardless of technology or loop length. *See supra* Issue 3(b). Therefore, no separate rate should be established for ASDL compatible, HDSL compatible, or "unbundled copper loops." Murray, Tr. 2497.

Nonrecurring charges should be based on efficient practices. The nonrecurring charges should reflect only the work that is necessary for provisioning xDSL loops and those work times must be based on efficient practices, as outlined in Ms. Murray and Mr. Riolo's testimony. A nonrecurring charge of \$5.33 should apply for provisioning a two-wire voice grade or xDSL capable loop; a nonrecurring charge of \$4.67 should apply for disconnecting a two-wire voice grade or xDSL capable loop. A nonrecurring charge of \$12.83 should apply for provisioning a two-wire ISDN loop; a nonrecurring charges of \$4.75 should apply for disconnecting a two-wire ISDN loop. These rates are based on an illustrative labor rate of \$40 per hour, and reflect efficient work practices. All of these rates are found in Exhibit TLM-2 to the Direct Testimony of Ms. Murray. Murray, Tr. 2611, TLM-2. Exhs. 141-142.

(b) Subject to the standards of the FCC's Third Report and Order, should the Commission require ILECs to unbundle any other elements or combinations of elements? If so, what are they and how should they be priced?

Data ALECs: * Adopt FCCA position. *

Issue 10: What is the appropriate rate, if any, for customized routing?

Data ALECs: * Adopt FCCA position. *

Issue 11: What is the appropriate rate if any, for line conditioning, and in what situations should the rate apply?

Data ALECs: * In a forward-looking network line conditioning is unnecessary; hence a zero rate should apply. If the Commission, inappropriately, establishes line conditioning rates, it should adopt a rate of \$8.32/loop for load coil removal and of \$0.89/loop for bridged tap removal, reflecting the efficiencies of conditioning multiple loops at a time. *

All the parties agree to one concept: a forward-looking network does not have load coils on loops less than 18,000 feet. E.g., Caldwell, Tr. 1204; Riolo 2727-2734. Thus, loop

conditioning¹⁵ rates should be set at zero. This is the only answer that can be provided to Chairman Deason's question asking how conditioning charges could possibly be consistent with the obligation to establish rates using a single forward looking network.

CHAIRMAN DEASON: . . . The question that I have is that if the whole purpose of this exercise that we've been doing for yesterday, today, and for the next two days is to determine the cost of a going-forward network and a going-forward network does not have load coils, why are we even concerned with the cost of taking a load coil out of the network?

Tr. 1829 - 1830. Indeed, the BellSouth witness asked this question by Chairman Deason was unable to provide an answer. Greer, Tr. 1830.

As shown in Issues A, 1, 3(b), 7(a) and 8(a), *supra*, the Commission must use a consistent single forward-looking network design in establishing both recurring and nonrecurring rates for all UNEs, including xDSL capable loops. Further, as shown in Issues A, 1, 3(b), 7(a) and 8(a), *supra*, the proper forward-looking network design consists of a loop plant comprised of NGDLC feeder plant. These loops do not contain load coils or bridged taps. *E.g.*, Greer, Tr. 1829; Murray, Tr. 2550-2551. In fact, BellSouth's lead economic witness explicitly confirmed this, testifying that she "agree[d] with the postulate that a forward-looking network being designed today would not include load coils." Caldwell, Tr. 1204-1205. Therefore, in a forward-looking network, there are no load coils or bridged taps to remove. *See* Greer, Tr. 1827. Accordingly, in a forward-looking network, load conditioning would never need to occur. *See*

¹⁵ Loop conditioning refers to modifications to embedded loop plant facilities to remove equipment or plant arrangements that would impede the transmission of xDSL-based services. Murray, Tr. 2548; Riolo, Tr. 2726-2728. Thus, BellSouth must condition copper loops in its embedded plant by removing now obsolete and unnecessary equipment that may have been required in 20- to 30-year-old plant designs to support analog/voice services – such as load coils and bridged taps – to make the loops in its embedded plant xDSL-capable.

A "load coil" is a device placed on copper POTS lines longer than 18,000 feet to counteract the effect of capacitance that builds up as the length of the loop increases. Riolo, Tr. 2727.

A "bridged tap" is a three-way splice of a cable pair such that dial tone can appear in two or more different cable pair locations. Riolo, Tr. 2727-2728.

Greer, Tr. 1828.¹⁶ Hence, the rates for conditioning should be zero. In zeroing out the rates for loop conditioning, the Commission must be sure to zero out the \$57.99 conditioning additive, as well as the load coil and bridged tap removal charges. *See* Exh. 92.

BellSouth argues that, because it incurs costs in removing load coils and bridged tap from its embedded network, it is entitled to recover those costs. Nonetheless, load coils and bridged tap on loops are features of a network installed more than 20 years ago and their presence in the BellSouth plant today results from BellSouth's failure to bring its outside plant up to modern specifications. Riolo, Tr. 2730.

Furthermore, while BellSouth claims its position is supported by the FCC, *see* Caldwell, Tr. 137, BellSouth ignored the FCC's explicit "defer[al] to the states to ensure that the costs incumbents impose on competitors for line conditioning *are in compliance with our pricing rules for nonrecurring costs.*" UNE Remand Order ¶ 194 (emphasis added). When the FCC's pricing rules for nonrecurring costs are applied to the proper forward-looking network, as shown above, there are no conditioning charges for BellSouth to recover.

The Massachusetts DTE reached this precise conclusion when confronted with arguments from Verizon that were almost identical to the arguments BellSouth is making here.

Loop qualification and loop conditioning would not be necessary in a network with all fiber feeder should not be necessary [sic]. The presence or absence of load coils or bridged taps . . . [is] immaterial in a network with 100 percent fiber feeder. Verizon does not dispute this conclusion, but instead argues that "the relevant costs should take into account the network that is being used," and that it is "irrational to develop these costs on a network design . . . that was assumed for the pricing of different types of loops, such as 2-wire analog loops as a surrogate for xDSL loops . . . In so arguing, Verizon ignores our findings in the

¹⁶ Specifically, BellSouth witness Greer testified that loop conditioning will not be required for loop plant that BellSouth is deploying today.

Q. Okay. So the different digital subscriber line technologies will run over the plant we're putting in the ground today and tomorrow without having to remove any load coils?

A. Yes.

Greer, Tr. 1828.

Phase 4 Order and the *Phase 4-L Order* where we stated that the goal of the TELRIC methodology is “to model a forward-looking telecommunications network” (*Phase 4-L Order* at 19), not the network in place today.

...

Concerning Verizon’s argument that the FCC has explicitly allowed it to recover its costs for line qualification and conditioning, we find that this is not a correct interpretation of the FCC’s Order. We believe that the FCC’s directives related to recovery of loop qualification and conditioning costs are only relevant to states that have assumed copper feeder for purposes of calculating TELRIC. The FCC has not directed states to assume copper feeder in calculating TELRIC, and, without such a directive, it would be illogical for the FCC to mandate the recovery of costs that are relevant only to a network assumption that may not have been approved in a particular state.

MA Decision at 86-87. For exactly these same reasons, this Commission should order that loop conditioning charges (load coil removal, bridged tap removal, and the conditioning additive (for loops and for distribution subloops)) be set at zero.

If the Commission, nevertheless, permits BellSouth to charge for loop conditioning, it should scrutinize BellSouth’s proposed charges to ensure that they reflect efficient methods and procedures. The costs that BellSouth proposed are based on highly inefficient work times and manual procedures as well as on BellSouth’s own failures in modernizing its loop plant consistent with current network design standards. The Data ALEC engineering witness identified specific redundancies and inefficiencies in these activities and provided alternative forward-looking times. Riolo, Tr. 2742-2754.

The Data ALECs’ engineering witness, along with witnesses presented by other ALECs, were the only witnesses with any outside plant experience whatsoever. BellSouth witness Greer never conditioned or de-conditioned a loop and he never supervised others who did. Greer Tr. 1805. Similarly, BellSouth witness Latham offered testimony on conditioning, even though he has never performed any of those tasks nor supervised others who had. Latham Tr. 1861. In sharp contrast, Mr. Riolo had extensive experience installing and maintaining loop plant (and

supervising those who do the same), including removing load coils and bridged taps. Riolo, Tr. 2775-2776; *see also* Greer, Tr. 1758. Accordingly, he is the most credible witness in this case to provide appropriate task times for conditioning work. In fact, not only does witness Riolo have direct experience performing conditioning functions, but witness Riolo also audited BellSouth during the period of time when BellSouth would have been installing the load coils or bridged taps that now require removal. Riolo, Tr. 2786-2788.

BellSouth cannot meet its burden of proof to support its proposed conditioning charges since BellSouth has failed to proffer any witness with direct experience performing or supervising those who perform loop conditioning. *See, infra*, Issue 8(a). BellSouth appears to have attempted to cure this defect by introducing a videotape showing BellSouth technicians removing load coils from 25-pair of loops in a manhole. Exh. 117. Yet, BellSouth went out of its way to repeatedly state that the videotape did not depict a typical load coil removal situation. *E.g.*, Greer, Tr. 1820 - 1821. Even BellSouth's own attorney admitted that the videotape represented "an extreme situation." McPeak, Tr. 3001-3002.

In stark contrast to the atypical nature of the videotape, the very BellSouth witness who sponsored the videotape testified that both the tasks and task times proposed by the Data ALECs' engineering witness were appropriate. Specifically, BellSouth witness Greer concluded that Data ALEC witness Riolo "has done a very good job of enumerating the steps and giving some times" and that "he did an excellent job of listing out the [conditioning] tasks, and his assumptions on times were reasonable." Greer, Tr. 1751 and 1767. Thus, while BellSouth failed to substantiate its own conditioning task times, BellSouth's own witness verified the task times proposed by the Data ALECs. Consequently, should the Commission adopt loop conditioning

rates and charges – which it should not – these rates and charges should be computed based on the task times presented by the Data ALECs.

In addition, BellSouth proposes that it should be permitted to recover for load coil removal not just on loops over 18,000 feet for which load coils are necessary to provide voice services, but for loops under 18,000 feet as well. Caldwell, Tr. 136-137; Varner, Tr. 62. Such recovery is inconsistent with any design guidelines in place and used by all ILECs over the last 30 years. Riolo, Tr. 2727-2741. Accordingly, in the Bell Atlantic territories, Verizon does not even attempt to charge for load coil removal on loops under 18,000 feet in length. Riolo, Tr. 2735-2736. Similarly, here the Commission should not permit BellSouth to charge for removing load coils on loops under 18,000 feet.

Further, BellSouth has calculated costs for removal of load coils based on deloading ten pairs at a time and assessing the ALEC requesting the de-loading a conditioning charge and all ALECs requesting an xDSL-capable loop (including the ALEC requesting the deloading) a \$57.99 conditioning additive. Exh. 92. First, this additive must be rejected because it will lead to over-recovery on the part of BellSouth. Murray, Tr. 2561-2566. Second, the assumption that on average 10 pairs should be deloaded at a time fails to reflect efficient engineering practices that call for deloading 25 pairs or 50 pairs at a time. Riolo, Tr. 2742-2749. By deloading 25, 50 or more pairs at a time, BellSouth would be deloading entire binder groups. Deloading as many pairs as possible in each entry into a splice case helps preserve binder group integrity and, thereby, represents good plant maintenance policy. Riolo, Tr. 2743-2744.

BellSouth's claim that it cannot remove (on average) more than 10 load coils at a time because BellSouth had previously installed load coils on certain special services circuits, such as analog PBX trunks and Centrex lines, is simply a red herring designed to confuse the

Commission. *See* Greer, Tr. 1689. None of BellSouth's witnesses offered any evidence regarding the number of analog PBX trunk or Centrex line circuits that remain in service in Florida, and, of this number, how many have load coils (particularly if they are less than 18,000 feet long). *See* Greer, Tr. 1795 - 1796. Moreover, even for these services, loops under 18,000 feet should never have included load coils. Riolo, Tr. 2727, 2734-2736 and 2812-2813. If the Commission permits BellSouth to limit the number of load coils that are removed at a time due to the improper existence of load coils on special circuits, the Commission would effectively be enabling BellSouth to charge ALECs for bringing its plant into conformance with engineering specifications. Riolo, Tr. 2730-2737; Exh. 145, Exh. JPR-3. Thus, the Commission should not be distracted by BellSouth's claim to deload 10 loops at a time.

In sum, the Commission should reject BellSouth's proposals to impose additional non-recurring charges on competitors for loop conditioning activities based upon cost studies that apply assumptions inconsistent with the TELRIC principles reflected in forward-looking recurring loop costs. Instead, the Commission should adopt the Data ALECs' proposed \$0.00 charge for loop conditioning activity.

Issue 12: **Without deciding the situations in which such combinations are required, what are the appropriate recurring and non-recurring rates for the following UNE combinations:**

- (a) **"UNE platform" consisting of: loop (all), local (including packet, where required) switching (with signaling), and dedicated and shared transport (through and including local termination);**
- (b) **"extended links," consisting of:**
 - (1) **loop, DSO/1 multiplexing, DS1 interoffice transport;**
 - (2) **DS1 loop, DS1 interoffice transport;**
 - (3) **DS1 loop, DS1/3 multiplexing, DS3 interoffice transport.**

Data ALECs: * Adopt FCCA position. *

Issue 13: **When should the recurring and non-recurring rates and charges take effect?**

Data ALECs: * The recurring and nonrecurring rates and charges established by the Commission in this proceeding should take effect immediately upon the Commission's issuance of its order. ALECs should not be required to amend their interconnection agreements with BellSouth in order to avail themselves of these rates and charges. *

The rates and charges established by the Commission should take effect immediately upon the Commission issuance of its order establishing UNE rates in this docket. Such new or changed rates should automatically govern the purchase by ALECs of services and network elements from BellSouth, so that ALECs and BellSouth will not be required to amend their interconnection agreements to immediately apply these new rates. To the extent that BellSouth and ALECs amend interconnection agreements to reflect the results of this proceeding, such amendments should be deemed to apply as of the date of the Commission's order in this proceeding. Otherwise, BellSouth may seek to delay the process of amending existing interconnection agreements in order to prevent, or at least delay, ALECs from purchasing services and network elements under the new rates, thereby frustrating the development of local telecommunications competition in Florida.

III. CONCLUSION

The rates and charges that the Commission will adopt in this proceeding will in large measure determine if competition, particularly competition in the advanced services market, is to develop in the State of Florida. As the Data ALECs demonstrate, BellSouth's proposed rates and charges for xDSL loops, for loop conditioning, and for access to loop makeup information fail to comport with forward-looking pricing rules and with forward-looking, efficient practices.

Specifically, BellSouth failed to comply with either the Stipulation in this docket or with the FCC's pricing rules, both of which required BellSouth to propose rates and charges, both recurring and nonrecurring, based on a single forward-looking network design. Moreover, the four models proffered by BellSouth failed to utilize efficient, forward-looking engineering practices and design assumptions. Consequently, the Commission should reject BellSouth's proposed rates and charges for xDSL loops, for loop conditioning and for access to loop makeup information.

Instead, the Commission should adopt the rates and charges for these items that were proposed by the Data ALECs. Exhs. 141-142. Because the BellSouth Combo model is the only model in evidence that can be adjusted to reflect a more forward-looking network design, the Data ALECs' proposed rates and charges used BellSouth's Combo model as a baseline for their proposed rates and charges. In addition, Data ALEC witness Riolo provided the Commission with appropriate efficient tasks and task times that were based on a forward-looking network design (substantially similar to that proposed in the Combo model). Accordingly, the recurring and nonrecurring rates proposed by the Data ALECs comply with the FCC's pricing rules and should be adopted in place of those rates proposed by BellSouth.

RESPECTFULLY SUBMITTED this 21st day of November, 2000.

Catherine F. Boone /RON

CATHERINE F. BOONE
10 Glenlake Parkway
Suite 350
Atlanta, GA 30328
(678) 579-8388

Attorney for
Covad Communications Company
and
BlueStar Networks, Inc.

KIMBERLY A. SCARDINO
Rhythms Links Inc.
Suite 300
1625 Massachusetts Ave, N.W.
Washington, DC 20036
(202) 387-4077

Attorney for
Rhythms Links Inc.

Richard D. Kiely

ELISE P.W. KIELY
JEREMY D. MARCUS
Blumenfeld & Cohen
– Technology Law Group
1625 Massachusetts Avenue, N.W.
Suite 300
Washington, DC 20036
(202) 955-6300

and

RICHARD D. MELSON
Hopping Green Sams & Smith
P.O. Box 6526
Tallahassee, FL 32314
(850) 425-2313

Attorneys for
Rhythms Links Inc.

Michael C. Sloan /RON

MICHAEL C. SLOAN
Swidler Berlin Shereff Friedman
3000 K Street, N.W.
Washington, DC 20007
(202) 295-8548

Attorney for Broadslate Networks, Inc.,
Cleartel Communications, Inc. and
Florida Digital Networks, Inc.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing was furnished to the following parties by U.S. Mail, hand delivery (*) this 21st day of November, 2000.

*Beth Keating
Staff Counsel
Florida Public Service Commission
Division of Legal Services
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

*BellSouth Telecommunications, Inc.
Nancy B. White
c/o Nancy H. Sims
150 S. Monroe Street,
Suite 400
Tallahassee, FL 32301-1556

Joseph A. McGlothlin
Vicki Gordon Kaufman
McWhirter, Reeves, McGlothlin, Davidson,
Decker, Kaufman, Arnold, & Steen, P.A.
117 South Gadsden Street
Tallahassee, FL 32301

Floyd Self/Norman Horton, Jr.
Messer, Caparello & Self
P.O. Drawer 1876
215 S. Monroe Street Suite 701
Tallahassee, FL 32302-1876

Marsha Rule
AT&T Communications
101 N. Monroe Street
Suite 700
Tallahassee, FL 32301

Susan Hither
Rick Heater
M.C. Communications, Inc.
3301 Worth Buffalo Drive
Las Vegas, Nevada 89129

James C. Falvey, Esq.
e.spire Communications, Inc.
133 National Business Parkway
Suite 200
Annapolis Junction, MA 20701

Jeremy Marcus
Kristen Smith
Blumenfeld & Cohen
1625 Massachusetts Ave. NW
Suite 300
Washington, D.C. 20036

Terry Monroe
Vice President, State Affairs
Competitive Telecomm. Assoc.
1900 M. Street, N.W.
Suite 800
Washington, DC 20036

Kimberly Caswell
Verizon Select Services, Inc.
One Tampa City Center
201 North Franklin Street
Tampa, FL 33601-0110

Carolyn Marek
Vice President of Regulatory Affairs
Southeast Region
Time Warner Communications
233 Bramerton Court
Franklin, TN 37069

Donna Canzano McNulty, Esq.
MCI WorldCom
325 John Knox Road Suite 105
Tallahassee, Fl 32303

Michael A. Gross
VP Reg. Affairs & Reg. Counsel
Florida Cable Telecomm. Assoc.
246 East 6th Avenue
Tallahassee, FL 32303

TCG South Florida
c/o Rutledge Law Firm
Kenneth Hoffman
P.O. Box 551
Tallahassee, FL 32302-0551

Karen M. Camechis
Pennington, Moore, Wilkinson & Dunbar
P.O. Box 10095
Tallahassee, FL 32302

Scott A. Sapperstein
Sr. Policy Counsel
Intermedia Communications
3625 Queen Palm Dr.
Tampa, FL 33619

Cathy Boone
Covad Communications, Co.
10 Glen Lake Parkway
Suite 650
Atlanta, GA 30328

Charles J. Rehwinkel
Sprint
P.O. Box 2214
Tallahassee, FL 32316

Bettye Willis
ALLTEL Communications Services, Inc.
One Allied Drive
Little Rock, AR 72203-2177

J. Jeffrey Wahlen
Ausley & McMullen
P.O. Box 391
Tallahassee, FL 32302

Florida Digital Network, Inc.
390 N. Orange Ave., Suite 2000
Orlando, FL 32801

KMC Telecom, Inc.
John McLaughlin
Suite 170
3025 Breckinridge Blvd.
Duluth, Ga 30096

MCI WorldCom, Inc.
Mr. Brian Sulmonetti
Concourse Corporate Center Six
Six Concourse Parkway
Suite 3200
Atlanta, GA 30328

Office of Public Counsel
Stephen C. Reilly
c/o The Florida Legislature
111 W. Madison Street, Rm. 812
Tallahassee, FL 32399-1400
Holland Law Firm

Bruce May
P.O. Drawer 810
Tallahassee, FL 32302

John Fons
Ausley & McMullen
P.O. Box 391
Tallahassee, FL 32302

George S. Ford
Chief Economist Z-Tel Communications,
Inc.
601 South Harbor Island Blvd.
Tampa, FL 33602

Genevieve Morelli
Eric D. Jenkins
Kelley Dry & Warren, LLP
1200 19th Street, NW,
Fifth Floor
Washington, DC 20036

Rodney L. Joyce
Shook, Hardy & Bacon, L.L.P.
600 14th Street, N.W.
Suite 800
Washington, D.C. 20005-2004

Hope G. Colantonio
Cleartel Communications, Inc.
1255 22nd Street N.W.
6th Floor
Washington, DC 20037

John Spilman
Broadslate Networks of Florida, Inc.
675 Peter Jefferson Parkway
Suite 310
Charlottesville, VA 22911

Network Access Solutions Corporation
100 Carpenter Drive, Suite 206
Sterling, VA 20164

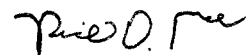
Sprint Communications Company
Limited Partnership
3100 Cumberland Circle
Mailstop GAATLN0802
Atlanta, GA 30339

Patrick K. Wiggins, Esq.
Charles J. Pellegrini
Katz Kutter Law Firm
12 Floor
106 East College Avenue
Tallahassee, FL 32301

Brent E. McMahan
Vice President-Regulatory and Government
Affairs
Network Telephone Corporation
815 South Palafox Street
Pensacola, FL 32501

Jim Lamoureux, Esq.
AT&T Communications of the Southern
States, Inc.
1200 Peachtree Street.
Suite 8068
Atlanta, GA 30309

Michael C. Sloan
Swidler Berlin Shereff Friedman
3000 K Street N.W.
Washington, DC 20007



Attorney