ATTACHMENT C

BellSouth Telecommunications, Inc.
FPSC Docket No. 990649-TP
Request for Confidential Classification
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8/30/00

REQUEST FOR CONFIDENTIAL CLASSIFICATION OF BELLSOUTH INFORMATION INCLUDED IN THE BLUESTAR/COVAD/RHYTHMS LINKS DIRECT AND REBUTTAL TESTIMONY OF WITNESSES' TERRY L. MURRAY AND JOSEPH P. RIOLO FILED JULY 31, 2000 IN FLORIDA DOCKET NO. 990649-TP

One Highlighted Copy

This confidentiality request was filed by or for a "telco" for DN 10943-00. No ruling is required unless the material is subject to a request per 119.07, FS, or is admitted in the record per Rule 25-22.006(8)(b), FAC.

appeal

in some cases, lead to substantial overstatement of the costs that BST would actually incur to install plant.

Q. How can the use of "in-plant" loading factors lead to substantial overstatement of the costs that BST would actually incur to install plant?

A. Two examples from BST's recurring cost studies illustrate this point. First, consider the cost to install a line card or channel unit in a remote terminal. Although the electronics on the line cards for various types of service (*e.g.*, ISDN vs. POTS) differ, the labor time required to "plug-in" the different types of cards should be essentially the same. That is not the result that BST obtains using its "in-plant" factor approach. Instead, the "in-plant" factor methodology implicitly assumes that it costs BST *** **BST PROPRIETARY** three times **END PROPRIETARY** *** as much to install an ISDN line card as it costs to install a POTS line card, simply because BST assumes the same relationship between the investment cost of the two card types.

Second, consider the costs to install various sizes of copper cable. Cable installation costs exhibit what economists call "economies of scale" because the cost to install larger cables does not differ substantially from the cost of installing smaller cables. In other words, on a per-pair basis, installing a 3,000-pair copper cable is much less expensive than installing a 25-pair cable. Again, that is not the result that BST obtains using its "in-plant" factor approach. Instead, BST assumes that the cost to install cables will increase in direct proportion to the increased investment in those cables. The installation cost for a 3,000-pair copper cable in BST's model therefore is more than ***

BST PROPRIETARY 40 **END PROPRIETARY** *** times the cost to install a 25-pair cable because that is the ratio of BST's assumed investment costs for these two cable sizes. This modeling error fundamentally misstates one of the basic economic facts of local exchange telecommunications networks.

Q. Do you have any recommendations as to how the Commission could remedy these errors in BST's cost modeling?

A. The solution to the first problem that I identified is straightforward: the Commission should require BST to use the "combo" case assumptions to model the costs for all unbundled loops. The solution to the second problem requires the identification of appropriate alternative estimates for the installation costs associated with each material type. I have not attempted such an exercise, but instead recommend that the Commission give serious consideration to the proposed solutions of other parties that have focused their analysis more intensively on BST's basic voice-grade loop costs.

Q. Please summarize the actions you recommend that the Commission take with respect to the incumbents' recurring cost studies for voice-grade loops.

A. I recommend that the Commission require BST to rely on its "combo" scenario to compute all unbundled loop costs. I also recommend that the Commission require BST to correct its flawed "in-plant factors." Finally, I recommend that the Commission require all three incumbents to correct

Q. Is Sprint's proposed ISDN adder reasonable?

A. No. Sprint's proposed monthly recurring charge additive of $14.60 is excessive. This is especially apparent when compared to Sprint's proposed two-wire analog prices: Sprint's proposed ISDN adder represents an increase of almost 58% over the statewide average of Sprint's proposed monthly analog loop prices. Because the adder is not deaveraged, it represents an even higher percentage of loop prices in high-density areas. For example, for loops within "Band 1," Sprint's proposed price for ISDN-capable loops is more than double its proposed price for analog loops.

As I have explained, Sprint has incorrectly inflated central office and remote terminal costs for digital loops; this appears to account for about *** **SPRINT PROPRIETARY** $10.37 or 71% **END PROPRIETARY** *** of Sprint's proposed ISDN adder. In addition, Sprint has assumed an unreasonably high cost for an ISDN line card as compared to a POTS line card. *** **BST, GTE AND SPRINT PROPRIETARY** Sprint's ISDN line card costs are more than twice the estimates presented by either BST or GTE. Sprint's card costs should not differ significantly from those of the other incumbents operating in the state. Therefore, the Commission should adjust Sprint's RT ISDN line cards to bring them in line with BST's and GTE's (*i.e.*, reduce them by 50%). Using this estimate and correcting for Sprint's other errors, I calculate that fiber-fed ISDN-capable loops would require an additional *** **SPRINT PROPRIETARY** $78.40 **END PROPRIETARY** *** in investment per loop. This translates to an increase in loop prices of

DLC-RT Channel Unit Cards – Allocated based on number of services provided by card. If a card provides for four services by only two are working on the card, then 50% of the investment is assigned to each service.

[BST's Response to AT&T's Interrogatory 147.]

Third, BST assumes that an ISDN-capable loop must be "designed," including a test point access. Mr. Riolo explains why this needlessly inflates the cost of what is really a very standard offering.

Q. Is BST's proposed recurring charge for ISDN-capable loops reasonable?

A. No. BST's flawed approach to estimating ISDN costs leads to unreasonably high recurring charges. BST proposes a statewide average monthly recurring charge for ISDN-capable loops of $29.80, about 67% more expensive than BST's proposed charge for analog loops. BST's assumption that an ISDN-capable loop must be "designed" accounts for $2.33 of its cost increment for ISDN-capable loops. Based on BST's own estimate of RT line-card costs and fill, the incremental investment required for ISDN-capable loops versus analog loops would be approximately *** **BST PROPRIETARY** $125.80 **END PROPRIETARY** ***. I have been unable to determine the percentage of fiber loops assumed in BST's recurring cost study. However, if one assumes the current percentage of fiber-fed loops in BST's network (42.4% according to BST's Response to Rhythms' Interrogatory 83), the weighted additional investment needed for ISDN-capable loops as compared to SL-1 loops would be *** **BST PROPRIETARY** $53.34 **END PROPRIETARY**

*** . This translates to an ISDN adder of about *** **BST PROPRIETARY** $1.25 **END PROPRIETARY** *** per month. In contrast, BST's loop model (BSTLM©) ludicrously calculates almost *** **BST PROPRIETARY** $644 **END PROPRIETARY** *** in additional digital circuit investment per ISDN-capable loop.

III. THE COMMISSION SHOULD ADOPT NONRECURRING COSTS THAT REFLECT FORWARD-LOOKING COST PRINCIPLES AND EFFICIENT, PRO-COMPETITIVE PRACTICES.

A. The Incumbents Must Assume the Same Forward-Looking Network Architecture in Their Nonrecurring Cost Studies That They Assumed in Their Recurring Cost Studies for Voice-Grade Loops; However, None of the Incumbents Has Done So Across-The-Board.

Q. You stated in Section II.A above that each incumbent should have based all of its cost studies — both recurring and nonrecurring — on a single, consistent, forward-looking network architecture. Why is such consistency in network design assumptions important?

A. There are at least three reasons that recurring and nonrecurring cost studies for unbundled network elements should reflect a single, consistent, forward-looking network architecture.

efficiencies inherent in the forward-looking network design, the new network architecture will eliminate any need (and cost) to "qualify" loops as suitable for DSL-based services because all loops will be "pre-conditioned" to be DSL-capable. In other words, once SBC has fully deployed the technology embodied in Project Pronto, all loops will be "DSL-capable loops."

In fact, BST's own internal documents of earlier this year show that BST has reached a similar conclusion, *** **BEGIN BST PROPRIETARY** and done so in part because of anticipated competition from new entrants.

> ADSL capabilities will need to be deployed in the near term at thousands of digital loop carrier sites. The rapid ADSL deployment that will be required over the next few years to meet high speed data demand *and competition* is a very important step for our company [BellSouth]. The use of these directives will permit you to optimize the design of our high-speed network.

END PROPRIETARY *** [ADSL Planning Directives, RL: 00-01-021BT, February 14, 2000, transmittal letter, BST's Response to AT&T's Request for Production of Documents 62 (emphasis added).]

Q. Do the incumbents appear to agree conceptually that recurring and nonrecurring cost studies should reflect a single, consistent set of technology and network architecture assumptions?

A. All three incumbents signed the stipulation in this proceeding, which provides in part that "[t]he recurring and nonrecurring studies should assume the same network design." [Joint Stipulation, filed December 7, 1999.] Despite its

A. No. BST proposes to levy a $120.98 "Unbundled Loop Modification – Additive" (Element A.17.4) nonrecurring charge for all DSL-capable loops, except UCL-Long loops. The manner in which BST calculates this proposed charge would over-recover even BST's inflated estimate of "conditioning" costs.

Q. How does BST calculate its proposed "Unbundled Loop Modification – Additive"?

A. BST starts with the following assumptions:

> Typically, BellSouth will unload ten pairs per conditioning request for ULM-Short. It is expected that on average two pairs will be ordered initially by the CLEC, four pairs will be used by BellSouth, and the remaining four pairs will be ordered in the future by the same or different CLEC. The costs of the last four pairs is determined as an Unbundled Loop Modification – Additive (A.17.4). This additive applies to ADSL-capable, HDSL-capable, and UCL-Short loops.

[BST cost study filing, Section 6, at 34-35.] BST further assumes that: (1) the average cost to deload each pair is $70.68; (2) the demand for DSL-capable loops from 2000 to 2002 will be *** **BST PROPRIETARY** 17,313 loops; and (3) 7,408 of those 17,313 loops (43%) **END PROPRIETARY** *** will need to be "conditioned."

Based on these assumptions, BST calculates the additive as the cost of deloading one pair ($70.68) times the number of pairs for which BST does not

however, those costs shall be recovered from the carrier who is requesting the customized system.

[Order No. PSC-96-1579-FOF-TP, at 87, emphasis added.]

Q. Why is BST's proposed recurring charge for mechanized access to loop makeup information overstated?

A. BST contends that the loop makeup database interfaces will require an enormous *** **BST PROPRIETARY** $22.8 million **END PROPRIETARY** *** investment in computer equipment, software, and right to use ("RTU") fees. To this extraordinary investment, BST has added an additional *** **BST PROPRIETARY** $10.7 million **END PROPRIETARY** *** in consulting services and third party software support for 2000-2002. The limited detail that BST has provided supporting its assumptions shows clearly that BST's investment is excessive. For example, BST proposes to recover a *** **BST PROPRIETARY** $6.1 million investment in "Midrange Computers," which apparently includes, among other things, 20 servers at a cost of over $200,000 each, and almost 400 desktop personal computers. **END PROPRIETARY** *** [Loop Qualification Database workpapers, file FLLQDB.XLS, Input sheet.] BST has provided no justification for any of the costs included in this "investment." The high level of BST's claimed "investments" lends credence to the view that BST is attempting to have competitors subsidize the upgrading of its own legacy systems.

Q. Is the nonrecurring charge BST proposes to charge for manual loop qualification reasonable?

A. No. Again, it is important to remember that it is the competitor that must evaluate the loop data to determine if the loop qualifies for any particular retail service. Therefore, the task that BST should have studied is the time required to pull loop information, print it and transmit it to the competitor. The cost for manual loop qualification should include nothing more than a few minutes time for a technician to retrieve the relevant data from LFACS or other relevant databases and get that information to the competitor. As Mr. Riolo establishes in his testimony, a generous average time for such a task would be no more than 30 minutes. Even if one assumes a $50 labor rate, the total cost would only be about $25. In contrast, BST has assumed *** **BST PROPRIETARY** over three hours of engineering time and over an hour for service inquiry tasks [Service Inquiry with Loop Make-Up workpapers, file FLQSI.XLS, WP100 sheet] **END PROPRIETARY** *** for "Service Inquiry with Loop Make-Up." These inefficiencies lead to BST's overstated estimate of $189.37 for manual loop qualification. This is *** **BST AND SPRINT PROPRIETARY** almost eight times **END PROPRIETARY** *** Sprint's proposed nonrecurring charge of $23.99 for manual loop qualification.

Q. Is Sprint's proposed nonrecurring charge for loop qualification reasonable?

A. No. Although Sprint's proposed price for manual loop qualification is more reasonable than BST's proposed price for the same process, Sprint has failed

1) 16 minutes for "Actual placement and/or removal of cross connection jumpers, performance of line and station transfer work, or bearing of connect through."
2) 15 minutes to "Check loop pair(s) for continuity, and/or dial tone before leaving cross connect box, LST, PXJ, RXJ, BCT location."
3) 20 minutes for "Time spent 'hooking up' test equipment and performing operational test from the network interface."
4) 19 minutes for "Technician closes out service order on CAT and/or on phone with the ICM."
5) 45 minutes for an "Attempt to resolve problems with continuity of the loop or lack of dial tone" on 30% of all lines.
6) 56 minutes of "Time spent in trouble resolution following failure test performed at the network interface" on 21% of all loops.

END PROPRIETARY ***

All of the preceding detail comes from BST's Response to Rhythms' Request for Production of Documents 3, Attachment 9.

Each of these estimates greatly exaggerates the time required, on average, for a qualified technician to perform the required task. Some of the individual tasks, in the sequence from items 1 through 4 above, such as

item 1, can be accomplished in a minute or less. Considering the entire series of tasks in sequence (including setup time), I estimate that it might take an average of 25 minutes in total.

Likewise, the cumulative *** **BST PROPRIETARY** 51% **END PROPRIETARY** *** presumed error rate reflected in items 5 and 6 is completely inconsistent with the performance level I would expect. Even being extremely conservative and retaining BST's task times, I recommend allowing BST to include only a maximum of a 5% occurrence for each type of error.

Q. Please summarize the findings you have just presented.

A. The following table compares the BST reported times by function with the times I believe are appropriate for either a forward-looking cost study of a basic loop, including an xDSL loop, or a realistic study of a designed loop process.

Group / Function	BST Reported Time	Realistic Time Assuming a Forward-Looking Process with No Design	Realistic Time Assuming BST's Engineered/ Designed Loop Process

terminal. This is true over any reasonable projection of average demand for ISDN service. To the extent that ILECs further inflate ISDN costs based on the presumption that they will somehow incur additional central office costs (such as line cards at the central office) to provide ISDN/IDSL-capable loops, that presumption has no basis in fact.

Q. Do BST's loop directives support your statement that the only cost differential between ISDN/IDSL and POTS lines is the cost of the channel cards when provisioned over fiber/DLC?

A. Yes. BST "Loop Technology Deployment Directives" [RL: 98-09-019BT, December 8, 1998] clearly indicate that ISDN is not so different from POTS:

***** BST PROPRIETARY**

ISDN can be treated in a POTS-like manner when served via NGDLC systems using the large TR-303 interface. [Exec. Sum. Pg. 1.]

3.02 TR-303 has been approved for the RELTEC NGDLC/FITL systems with both the 5ESS and DMS-100. TR-303 has also been approved for the Alcatel/DSC NGDLC systems with the 5ESS and approval is pending with the DMS-100. The deployment of large platform TR-303 interfaces supporting widely deployed NGDLC systems will allow ISDN to be provisioned in a more POTS-like manner and will eliminate virtually all unique

facilities required to serve ISDN for new system placements. ... [Page I1.]

Once the TR-303 system is established, the economics of providing ISDN over digital loop carrier or metallic based facilities is much the same as that for POTS. [Page I2.]

END PROPRIETARY *

Q. How should the ILECs calculate recurring charges for ISDN/IDSL loops?

A. I agree with Ms. Murray that recurring charges for ISDN/IDSL loops should be set at the recurring charge for basic loops, plus an increment to account for the higher cost of an ISDN card at the RT as compared to a POTS card, weighted by the percentage of fiber feeder in the forward-looking network.

Q. Is it necessary for an ISDN-capable loop to be "designed" or engineered?

A. No. As I explained above, ISDN can be provided over standard loop facilities. ILECs have provisioned ISDN as a standard, non-designed and non-engineered service for years.

VI. ISSUE 3B: THERE IS NO VALID ENGINEERING BASIS FOR A COST STUDY FOR XDSL-CAPABLE LOOPS TO MAKE

services and other broadband services to the substantial majority of SBC end users using currently available DLC technology, will produce that benefit by delivering "annual cost structure improvements ... targeted to reach $1.5 billion by 2004 ... with network improvements paying for themselves on an NPV basis." [*See* SBC Investor Briefing No. 211, SBC Announces Sweeping Broadband Initiative, October 18, 1999, at 10, attached as Exhibit _____ (TLM-3) to Ms. Murray's testimony.]

Q. Do the Florida ILECs intend to provide their own broadband services and unbundled loops over fiber/DLC systems?

A. Yes. Sprint witness Mr. McMahon, for example, notes at page 17 of his direct testimony, when discussing xDSL, that "[i]n the near future, this technology will also be available via NGDLCs in Sprint's local networks." BST admits that it is currently testing DLC systems for this purpose and that they will be available in the near future. [BST's Response to Rhythms' Interrogatories 78-81.] BST's "Loop Technology Deployment Directives" [RL: 98-09-019BT, December 8, 1998] provide a great deal of evidence that BST has in fact steadily been moving in this direction since at least 1998, if not longer. Indeed, in its loop directives, BellSouth stated:

> ***BEGIN BST PROPRIETARY** Recent approvals of projects to replace existing feeder and distribution facilities in Atlanta and South Florida with a fiber distribution network to deliver integrated voice and

> broadband services (known as IFITL) have accentuated the importance of the fiber distribution deployment strategy.

[Loop Technology Deployment Directives, Introduction, Page 2.]

The Loop Technology Deployment Directives also state that all BST feeder placement should use fiber facilities [Executive Summary, Page 1] and that BST has limited all new DLC deployment to systems known to be ready to support broadband service and to be GR-303 compliant. [Page 2 and Major Issues, Page 2.] BST anticipates that this requirement will produce "significant savings in both the switch and loop portions of the network." [Major Issues, Page 2.] According to BST:

> Next Generation Digital Loop Carrier (NGDLC) is the first choice vehicle for all new narrowband facility placements. These systems support both metallic and fiber distribution systems and are an integral part of the emerging broadband/narrowband strategies.

[Loop Technology Deployment Directives, Executive Summary, Page 1.]

This key BST directive further states as follows:

> Minimize investments in metallic cable, conventional DLC systems, and associated equipment; maximize investments in NGDLC/FITL in anticipation of integrated broadband/narrowband systems.

[*Id.*, Executive Summary, Page 2] and

> Dedicated special service capacity should be established in each NGDLC node to allow grooming of special services *and unbundled loops* at the RT via electronic cross-connects.

[*Id.*, Executive Summary, Page 3, emphasis added.]

BST's ADSL Planning Directives [BST's Response to AT&T's Request for Propduction of Documents 62, ADSL Planning Directives, RL:00-01-021BT, September 14, 2000 "ADSL Planning Directives"] further demonstrate that BST has been and is continuing to advance its DSL deployment plans over loops that traverse fiber-fed loops.

> ADSL capabilities will need to be deployed in the near term at thousands of digital loop carrier sites. The rapid ADSL deployment that will be required over the next few years to meet high speed data demand *and competition* is a very important step for our [BellSouth's] company. The use of these directives will permit you to optimize the design of our high-speed network.

[ADSL Planning Directives, transmittal letter (emphasis added).]

These directives go on to state that BST will "[u]se new ADSL capabilities in both Alcatel and Marconi NGDLC systems beginning in the third quarter of 2001." [Id., at 2.]

NGDLC ADSL Capabilities

Both Alcatel Litespan® and Marconi DISC*S® NGDLC systems will have ADSL channel units in the future. It is expected that

these alternatives will be tested, approved, and fully documented by mid year 2001. This should include all operations systems interfaces required for service activation and service assurance. Therefore, Remote DSLAMs or Mini-RAMs should not be needed for sites serviced by NGDLC after mid 2001. Furthermore, for NGDLC sites to be equipped for ADSL between now and mid 2001, ADSL remotes should be limited to mini-RAMs if the ADSL demand through mid 2001 can be met by 16-32 lines of Mini-RAM capacity. This will permit us [BellSouth] to move the ADSL lines to the NGDLC platform in 2001 and avoid large startup costs for remote DSLAM cabinets now.

[Id., at13.]

Thus, it is apparent that even BST agrees that it will be implementing xDSL over fiber-fed loops within one year. In establishing loop rates in this proceeding based on forward-looking design principles, it is essential that the Commission establish rates based on the ILECs' forward-looking NGDLC, DSL-over-fiber-capable networks and capture the increased efficiency that can be expected as a result of the related plant improvements. This is needed to insure that competitors will have an equal ability to use the ILECs' available capability in the same manner and timeframe as the incumbents. **END PROPRIETARY***** Any other determination will inevitably harm the competitive market for xDSL services.

Q. Are any of the ILECs providing conditioning as part of their federally tariffed DSL offerings without charging their customers for such conditioning?

A. Yes. BellSouth performs conditioning as part of its offering and appears not to charge for the conditioning.

> ***** BEGIN BST PROPRIETARY** [For BellSouth's Industrial Class DSL offering, t]he customer gets the ADSL performance that the existing loop conditions will support up to the maximum rates. If ADSL cannot be serviced on the existing loop a reasonable effort shall be made to provide the service. Briefly, that effort to serve the customer can consist of one or more of the following:
>
> A. Move the working line to another facility, including making a line and station transfer (LST).
>
> B. Remove detrimental loading.
>
> C. Remove service inhibiting bridge tap.
>
> . . .
>
> The Business Class service is guaranteed to provide the minimum data rate. If the ADSL line does not sync-up the loop make-up shall be examined to determine what loop conditioning can be done to provide the service. . . .
>
> **END PROPRIETARY***** [Outside Plant Engineering Methods and Procedures for BellSouth® ADSL Service, 915-800-019PR, at 7, Sept. 30,

A. Yes. According to discovery responses, BST is currently using CSA and has been since 1982:

> New outside plant loop facilities placed today are based primarily on digital loop carrier platforms and associated fiber and/or copper distribution facilities using Fiber/Carrier Serving Area (FSA/CSA) design concepts to provide both voice grade and digital services.

[BST's Response to Rhythms' Interrogatory 62.] BST has also stated that:

> Since the introduction of CSA design in 1982, BellSouth (formerly Southern Bell/South Central Bell) has used CSA design guidelines for new cable facilities where digital loop carrier is used for feeder facilities, although BellSouth does not employ these guidelines in every instance.

[BST's Response to Rhythms Interrogatory 67.]

BST has also assumed CSA design in its recurring unbundled loop cost study. [*See* BST, Milner Direct at 23, and BST's Response to Rhythms First Set of Interrogatory No. 84.]

Q. Other than adopting the CSA guidelines 18 years ago, has BST given any indication of its plans to modernize its network in such a way as to eliminate load coils?

A. Yes. As I discussed in Section VI. above, *** **BEGIN BST PROPRIETARY** BST's "Loop Technology Deployment Directives" give

repeated indications that BST has begun to systematically replace its copper feeder with fiber/NGDLC systems. **END PROPRIETARY** *** Such systems are free of load coils.

Q. What type of outside plant design does GTE use?

A. According to discovery responses, GTEFL has used its Electronic Serving Area ("ESA") and Customer Access Facilities ("CAF") guidelines in the design of outside plant for approximately 10 years. (I do not know what GTE used before that time.) [GTE's Response to Rhythms' Interrogatory 44.]

Q. What load coil guidelines are dictated under GTE's guidelines?

A. GTE's guidelines appear to be *** **GTE PROPRIETARY** similar to CSA guidelines. Specifically, GTE's guidelines restrict the usage of load coils and bridged tap in a similar manner in all but the most rural applications. [*See, e.g.,* GTE cost study at Tab 30 34-35.] GTE's guidelines are largely market-based but call for migration to substantially CSA-like design that GTE refers to as an "Electronic Serving Area" or "ESA" in even "Moderately Competitive Markets." [*See, e.g.,* GTE cost study at Tab 30 47-51.] In areas that are more than "Moderately Competitive," GTE's guidelines call for even stricter/more xDSL-friendly designs. Therefore, assuming that competition exists and is increasing in GTE's Florida service areas, CSA-based cost analysis might be conservative for GTE. **END PROPRIETARY** *** Moreover, GTE's

transitions the network towards present-day engineering standards. (The ILECs should have been unbridging their pairs since the introduction of the Serving Area Concept in 1972.)

Third, transmission of voice-grade service on these working circuits is improved because the insertion loss, caused by the bridged tap, is removed.

Fourth, the unbridged working circuits provide a base of preconditioned pairs that could be utilized for future services that are incompatible with excessive bridged tap; the ILECs could provision loops for those services via a line and station transfer to one of the unbridged working circuits in lieu of opening cable splices to unbridge an individual pair at the time of the future service request. The ILECs should provide these line and station transfers at no cost, should the ILECs decide not to unbridge spare pairs. Indeed, as I showed above, *** **BEGIN BST PROPRIETARY** BST performs line and station transfers at no charge in the provision of its federally tariffed DSL offering. **END PROPRIETARY** *** [*See* ADSL Deployment Directives at 7.]

Fifth, the unbridged working services now have less exposure to maintenance problems, which will result in reduced customer trouble reports.

Sixth, "conditioning" working service precludes the need to re-enter a working splice on numerous occasions to "condition" one pair at a time, which potentially causes customer outages.