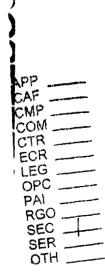


#### ATTACHMENT B

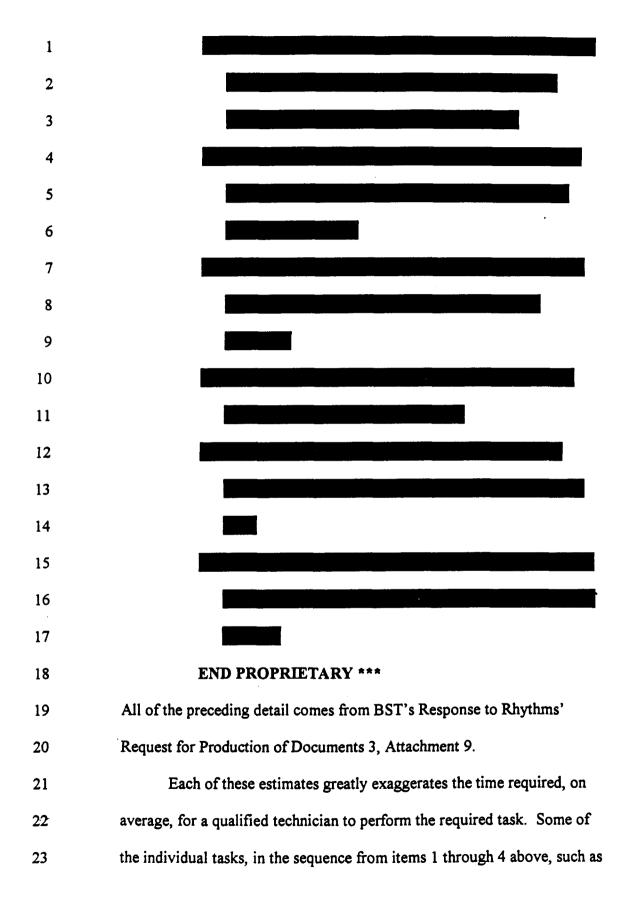
BellSouth Telecommunications, Inc. FPSC Docket No. 990649-TP Request for Confidential Classification Page 1 of 1 8/30/00

#### 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

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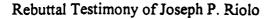
1		item 1, can be accomplished in a minute or less. Considering the entire
2		series of tasks in sequence (including setup time), I estimate that it might
3		take an average of 25 minutes in total.
4		Likewise, the cumulative *** BST PROPRIETARY END
5		<b>PROPRIETARY</b> *** presumed error rate reflected in items 5 and 6 is
6		completely inconsistent with the performance level I would expect. Even
7		being extremely conservative and retaining BST's task times, I
8		recommend allowing BST to include only a maximum of a 5% occurrence
9		for each type of error.
10	Q.	Please summarize the findings you have just presented.
11	A.	The following table compares the BST reported times by function with the
12		times I believe are appropriate for either a forward-looking cost study of a
13		basic loop, including an xDSL loop, or a realistic study of a designed loop

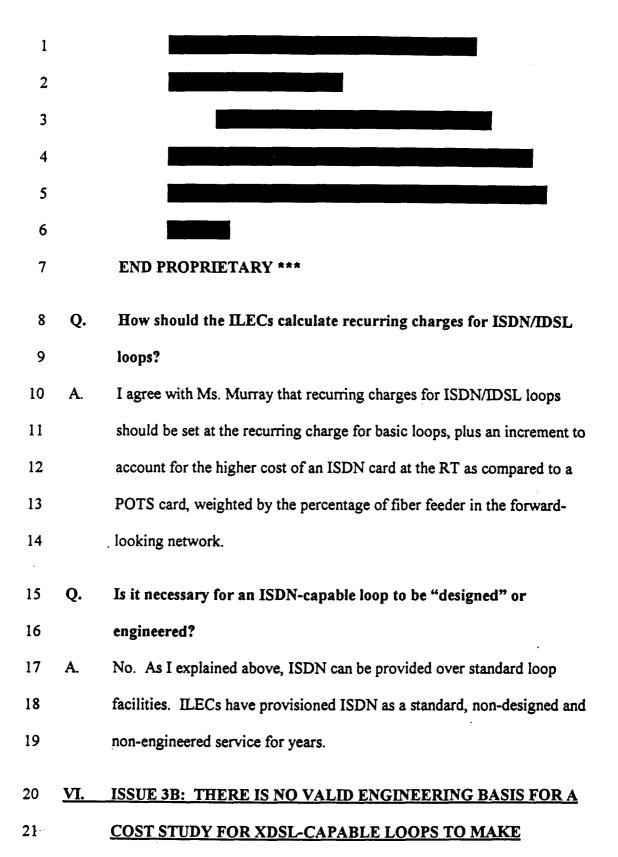
14 process.

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

1		terminal. This is true over any reasonable projection of average demand
2		for ISDN service. To the extent that ILECs further inflate ISDN costs
3		based on the presumption that they will somehow incur additional central
4		office costs (such as line cards at the central office) to provide
5		ISDN/IDSL-capable loops, that presumption has no basis in fact.
6	Q.	Do BST's loop directives support your statement that the only cost
7		differential between ISDN/IDSL and POTS lines is the cost of the
8		channel cards when provisioned over fiber/DLC?
9	А.	Yes. BST "Loop Technology Deployment Directives" [RL: 98-09-
10		019BT, December 8, 1998] clearly indicate that ISDN is not so different
11		from POTS:
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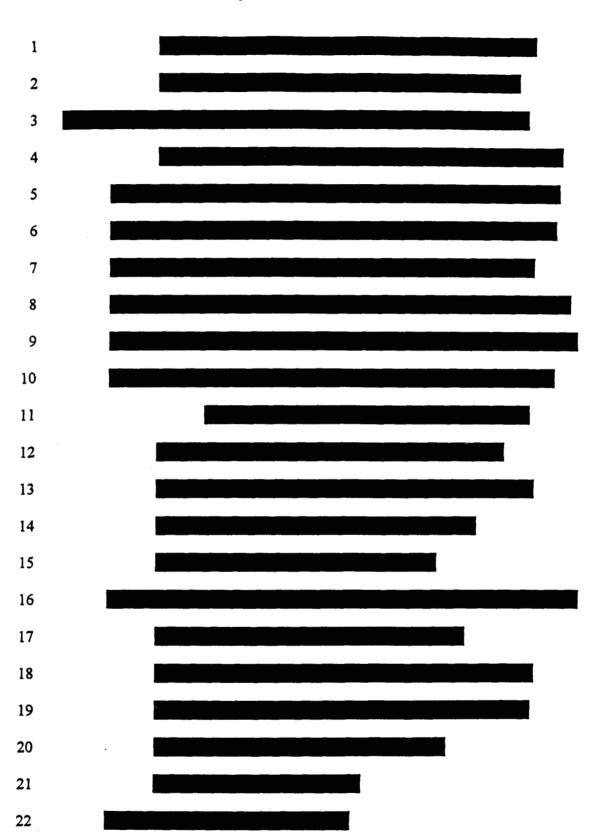




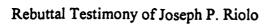
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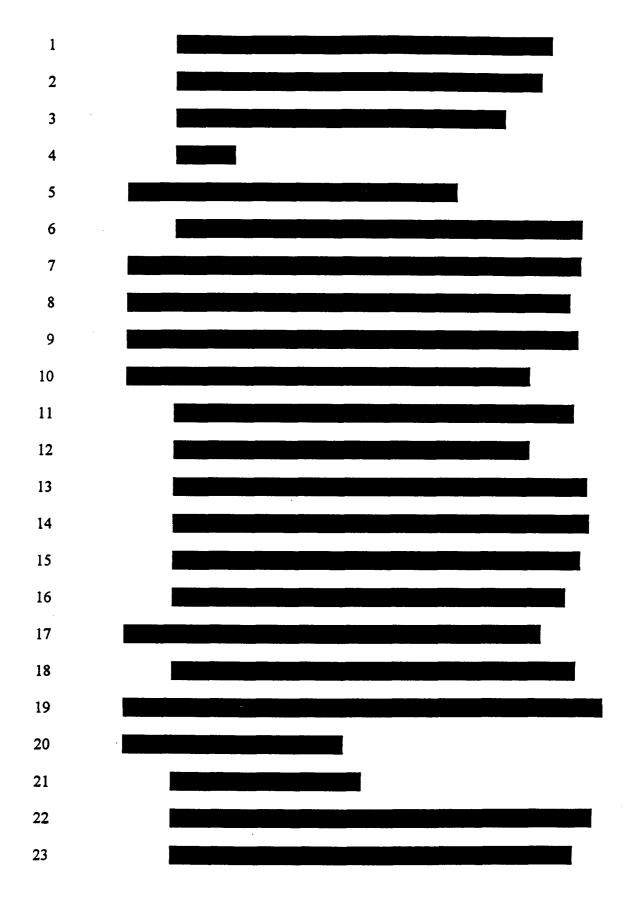
1.		services and other broadband services to the substantial majority of SBC
2		end users using currently available DLC technology, will produce that
3		benefit by delivering "annual cost structure improvements targeted to
4		reach \$1.5 billion by 2004 with network improvements paying for
5		themselves on an NPV basis." [See SBC Investor Briefing No. 211, SBC
6		Announces Sweeping Broadband Initiative, October 18, 1999, at 10,
7		attached as Exhibit (TLM-3) to Ms. Murray's testimony.]
8	Q.	Do the Florida ILECs intend to provide their own broadband services
9		and unbundled loops over fiber/DLC systems?
10	А.	Yes. Sprint witness Mr. McMahon, for example, notes at page 17 of his
11		direct testimony, when discussing xDSL, that "[i]n the near future, this
12		technology will also be available via NGDLCs in Sprint's local networks."
13		BST admits that it is currently testing DLC systems for this purpose and
14		that they will be available in the near future. [BST's Response to
15		Rhythms' Interrogatories 78-81.] BST's "Loop Technology Deployment
16		Directives" [RL: 98-09-019BT, December 8, 1998] provide a great deal of
17		evidence that BST has in fact steadily been moving in this direction since
18		at least 1998, if not longer. Indeed, in its loop directives, BellSouth stated:
19		***BEGIN BST PROPRIETARY
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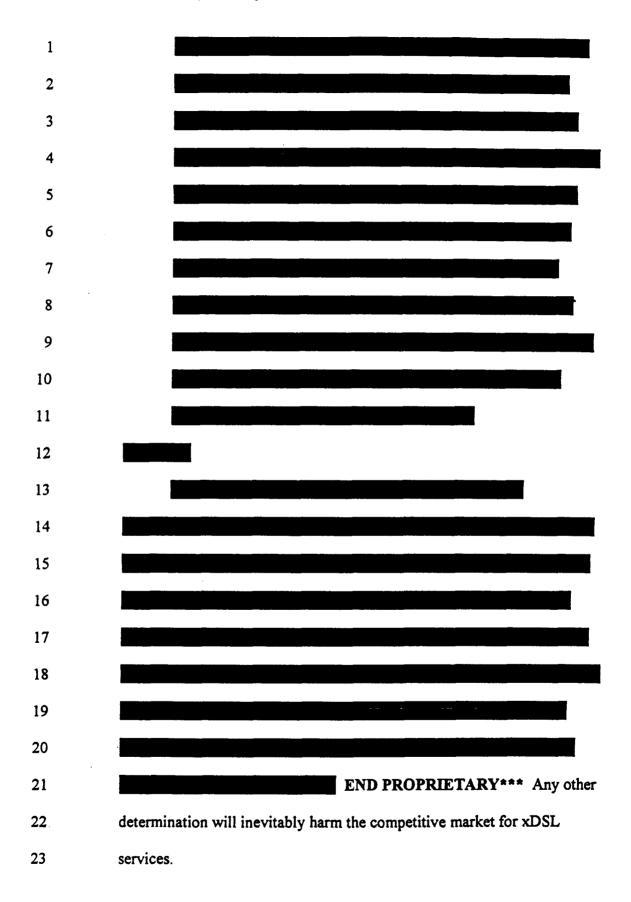


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Rebuttal Testimony of Joseph P. Riolo Are any of the ILECs providing conditioning as part of their federally **Q**. tariffed DSL offerings without charging their customers for such conditioning? Yes. BellSouth performs conditioning as part of its offering and appears Α. not to charge for the conditioning. \*\*\* BEGIN BST PROPRIETARY END PROPRIETARY\*\*\* [Outside Plant Engineering Methods and Procedures for BellSouth® ADSL Service, 915-800-019PR, at 7, Sept. 30, 

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1	<b>A</b> .	Yes. According to discovery responses, BST is currently using CSA and
2		has been since 1982:
3		New outside plant loop facilities placed today are
4		based primarily on digital loop carrier platforms and
5		associated fiber and/or copper distribution facilities using
6		Fiber/Carrier Serving Area (FSA/CSA) design concepts to
7		provide both voice grade and digital services.
8		[BST's Response to Rhythms' Interrogatory 62.] BST has also stated that:
9		Since the introduction of CSA design in 1982,
10		BellSouth (formerly Southern Bell/South Central Bell) has
11		used CSA design guidelines for new cable facilities where
12		digital loop carrier is used for feeder facilities, although
13		BellSouth does not employ these guidelines in every
14		instance.
15		[BST's Response to Rhythms Interrogatory 67.]
16		BST has also assumed CSA design in its recurring unbundled loop
17		cost study. [See BST, Milner Direct at 23, and BST's Response to
18		Rhythms First Set of Interrogatory No. 84.]
19	Q.	Other than adopting the CSA guidelines 18 years ago, has BST given
20		any indication of its plans to modernize its network in such a way as
21		to eliminate load coils?
22	Α.	Yes. As I discussed in Section VI. above, *** BEGIN BST
23		PROPRIETARY

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1		
2		END PROPRIETARY ***
3		Such systems are free of load coils.
4	Q.	What type of outside plant design does GTE use?
5	A.	According to discovery responses, GTEFL has used its Electronic Serving
6		Area ("ESA") and Customer Access Facilities ("CAF") guidelines in the
7		design of outside plant for approximately 10 years. (I do not know what
8		GTE used before that time.) [GTE's Response to Rhythms' Interrogatory
9		44.]
10	0	
10	Q.	What load coil guidelines are dictated under GTE's guidelines?
11	A.	GTE's guidelines appear to be *** GTE PROPRIETARY similar to
12		CSA guidelines. Specifically, GTE's guidelines restrict the usage of load
13		coils and bridged tap in a similar manner in all but the most rural
14		applications. [See, e.g., GTE cost study at Tab 30 34-35.] GTE's
15		guidelines are largely market-based but call for migration to substantially
16		CSA-like design that GTE refers to as an "Electronic Serving Area" or
17		"ESA" in even "Moderately Competitive Markets." [See, e.g., GTE cost
18		study at Tab 30 47-51.] In areas that are more than "Moderately
19		Competitive," GTE's guidelines call for even stricter/more xDSL-friendly
20		designs. Therefore, assuming that competition exists and is increasing in
21		GTE's Florida service areas, CSA-based cost analysis might be
22		conservative for GTE. END PROPRIETARY *** Moreover, GTE's

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1	transitions the network towards present-day engineering standards. (The
2	ILECs should have been unbridging their pairs since the introduction of
3	the Serving Area Concept in 1972.)
4	Third, transmission of voice-grade service on these working
5	circuits is improved because the insertion loss, caused by the bridged tap,
6	is removed.
7	Fourth, the unbridged working circuits provide a base of
8	preconditioned pairs that could be utilized for future services that are
9	incompatible with excessive bridged tap; the ILECs could provision loops
10	for those services via a line and station transfer to one of the unbridged
11	working circuits in lieu of opening cable splices to unbridge an individual
12	pair at the time of the future service request. The ILECs should provide
13	these line and station transfers at no cost, should the ILECs decide not to
14	unbridge spare pairs. Indeed, as I showed above, *** BEGIN BST
15	PROPRIETARY
16	END
17	<b>PROPRIETARY ***</b> [See ADSL Deployment Directives at 7.]
18	Fifth, the unbridged working services now have less exposure to
19	maintenance problems, which will result in reduced customer trouble
20	reports.
21	Sixth, "conditioning" working service precludes the need to re-
22	enter a working splice on numerous occasions to "condition" one pair at a
23	time, which potentially causes customer outages.

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

3	Q.	How can the use of "in-plant" loading factors lead to substantial
4		overstatement of the costs that BST would actually incur to install plant?
5	А.	Two examples from BST's recurring cost studies illustrate this point. First,
6		consider the cost to install a line card or channel unit in a remote terminal.
7		Although the electronics on the line cards for various types of service (e.g.,
8		ISDN vs. POTS) differ, the labor time required to "plug-in" the different types
9		of cards should be essentially the same. That is not the result that BST obtains
10		using its "in-plant" factor approach. Instead, the "in-plant" factor
11		methodology implicitly assumes that it costs BST *** BST PROPRIETARY
12		END PROPRIETARY *** as much to install an ISDN line card
13		as it costs to install a POTS line card, simply because BST assumes the same
14		relationship between the investment cost of the two card types.
15		Second, consider the costs to install various sizes of copper cable.
16		Cable installation costs exhibit what economists call "economies of scale"
17		because the cost to install larger cables does not differ substantially from the
18		cost of installing smaller cables. In other words, on a per-pair basis, installing
19		a 3,000-pair copper cable is much less expensive than installing a 25-pair
20		cable. Again, that is not the result that BST obtains using its "in-plant" factor
21		approach. Instead, BST assumes that the cost to install cables will increase in
22		direct proportion to the increased investment in those cables. The installation
23		cost for a 3,000-pair copper cable in BST's model therefore is more than ***

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#### 1 Q. Is Sprint's proposed ISDN adder reasonable?

2 No. Sprint's proposed monthly recurring charge additive of \$14.60 is A. excessive. This is especially apparent when compared to Sprint's proposed 3 two-wire analog prices: Sprint's proposed ISDN adder represents an increase 4 of almost 58% over the statewide average of Sprint's proposed monthly 5 analog loop prices. Because the adder is not deaveraged, it represents an even 6 higher percentage of loop prices in high-density areas. For example, for loops 7 8 within "Band 1," Sprint's proposed price for ISDN-capable loops is more than 9 double its proposed price for analog loops. As I have explained, Sprint has incorrectly inflated central office and 10 remote terminal costs for digital loops; this appears to account for about \*\*\* 11 SPRINT PROPRIETARY \$10.37 or 71% END PROPRIETARY \*\*\* of 12 13 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 14 card. \*\*\* BST, GTE AND SPRINT PROPRIETARY 15 16 Sprint's card costs should not differ significantly from those of the other 17 incumbents operating in the state. 18

20 Using this estimate and correcting for Sprint's other
21 errors, I calculate that fiber-fed ISDN-capable loops would require an
22 additional \*\*\* SPRINT PROPRIETARY \$78.40 END PROPRIETARY
23 \*\*\* in investment per loop. This translates to an increase in loop prices of

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	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
	<b>END PROPRIETARY</b> ***. 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 <b>*** BST PROPRIETARY</b> END PROPRIETARY

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1		***. This translates to an ISDN adder of about *** <b>BST PROPRIETARY</b>
2		END PROPRIETARY *** per month. In contrast, BST's loop model
3		(BSTLM©) ludicrously calculates almost <b>*** BST PROPRIETARY</b> \$644
4		END PROPRIETARY *** in additional digital circuit investment per ISDN-
5		capable loop.
6	III.	THE COMMISSION SHOULD ADOPT NONRECURRING COSTS
7		THAT REFLECT FORWARD-LOOKING COST PRINCIPLES AND
8		EFFICIENT, PRO-COMPETITIVE PRACTICES.
9		A. The Incumbents Must Assume the Same Forward-Looking
10		Network Architecture in Their Nonrecurring Cost Studies That
11		They Assumed in Their Recurring Cost Studies for Voice-Grade
12		Loops; However, None of the Incumbents Has Done So Across-
13		The-Board.
14	Q.	You stated in Section II.A above that each incumbent should have based
15		all of its cost studies — both recurring and nonrecurring — on a single,
16		consistent, forward-looking network architecture. Why is such
17		consistency in network design assumptions important?
18	А.	There are at least three reasons that recurring and nonrecurring cost studies for
19		unbundled network elements should reflect a single, consistent, forward-
20		looking network architecture.

1		efficiencies inherent in the forward-looking network design, the new network
2		architecture will eliminate any need (and cost) to "qualify" loops as suitable
3		for DSL-based services because all loops will be "pre-conditioned" to be
4		DSL-capable. In other words, once SBC has fully deployed the technology
5		embodied in Project Pronto, all loops will be "DSL-capable loops."
6		In fact, BST's own internal documents of earlier this year show that
7		BST has reached a similar conclusion, *** BEGIN BST PROPRIETARY
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15		END PROPRIETARY *** [ADSL Planning Directives, RL: 00-01-021BT,
16		February 14, 2000, transmittal letter, BST's Response to AT&T's Request for
17		Production of Documents 62 (emphasis added).]
18	Q.	Do the incumbents appear to agree conceptually that recurring and
19		nonrecurring cost studies should reflect a single, consistent set of
20		technology and network architecture assumptions?
21	A.	All three incumbents signed the stipulation in this proceeding, which provides
22		in part that "[t]he recurring and nonrecurring studies should assume the same
23		network design." [Joint Stipulation, filed December 7, 1999.] Despite its
		Page 47

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1	A.	No. BST proposes to levy a \$120.98 "Unbundled Loop Modification –
2		Additive" (Element A.17.4) nonrecurring charge for all DSL-capable loops,
3		except UCL-Long loops. The manner in which BST calculates this proposed
4		charge would over-recover even BST's inflated estimate of "conditioning"
5		costs.
6	Q.	How does BST calculate its proposed "Unbundled Loop Modification –
7		Additive"?
8	А.	BST starts with the following assumptions:
9		Typically, BellSouth will unload ten pairs per conditioning
10		request for ULM-Short. It is expected that on average two
11		pairs will be ordered initially by the CLEC, four pairs will be
12		used by BellSouth, and the remaining four pairs will be ordered
13		in the future by the same or different CLEC. The costs of the
14		last four pairs is determined as an Unbundled Loop
15		Modification – Additive (A.17.4). This additive applies to
16		ADSL-capable, HDSL-capable, and UCL-Short loops.
17		[BST cost study filing, Section 6, at 34-35.] BST further assumes that: (1)
18		the average cost to deload each pair is \$70.68; (2) the demand for DSL-
19		capable loops from 2000 to 2002 will be <b>*** BST PROPRIETARY</b>
20		END PROPRIETARY ***
21		will need to be "conditioned."
22		Based on these assumptions, BST calculates the additive as the cost of
23		deloading one pair (\$70.68) times the number of pairs for which BST does not
		Page 91

	Direc	t and Rebuttal Testimony of Terry L. Murray
1		however, those costs shall be recovered from the carrier who is
2		requesting the customized system.
3		[Order No. PSC-96-1579-FOF-TP, at 87, emphasis added.]
4	Q.	Why is BST's proposed recurring charge for mechanized access to loop
5		makeup information overstated?
6	A.	BST contends that the loop makeup database interfaces will require an
7		enormous *** BST PROPRIETARY END PROPRIETARY
8		*** investment in computer equipment, software, and right to use ("RTU")
9		fees. To this extraordinary investment, BST has added an additional $***$ BST
10		PROPRIETARY END PROPRIETARY *** in consulting
11		services and third party software support for 2000-2002. The limited detail
12		that BST has provided supporting its assumptions shows clearly that BST's
13		investment is excessive. For example, BST proposes to recover a *** BST
14		PROPRIETARY
15		
16		END PROPRIETARY
17		*** [Loop Qualification Database workpapers, file FLLQDB.XLS, Input
18		sheet.] BST has provided no justification for any of the costs included in this
19		"investment." The high level of BST's claimed "investments" lends credence
20		to the view that BST is attempting to have competitors subsidize the
21		upgrading of its own legacy systems.

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	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 <b>*** BST</b>
	PROPRIETARY
	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 <b>*** BST AND SPRINT</b>
	PROPRIETARY END PROPRIETARY *** Sprint's
·	proposed nonrecurring charge of \$23.99 for manual loop qualification.
<b>)</b> .	Is Sprint's proposed nonrecurring charge for loop qualification
2.	reasonable?
\	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
	Page 104