Andrew D Shore Senior Regulatory Counsel

BellSouth Telecommunications, Inc 150 South Monroe Street Room 400 Tallahassee, Florida 32301 (404) 335-0743

January 28, 2002

Mrs. Blanca S. Bayó
Director, Division of the Commission
Clerk and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Docket No. 990649-TP (UNE Docket)

Dear Mrs. Bayó:

Enclosed is an original and fifteen copies of BellSouth Telecommunications, Inc.'s revised Direct Testimony of Daonne D. Caldwell, and an original and fifteen copies of the revised Surrebuttal Testimony of Daonne D. Caldwell, which we ask that you file in the captioned docket. Please note, that in order to assist the Commission and the parties in identifying the changes to the testimony, we have also attached a redlined version of the testimony.

A copy of this letter is enclosed. Please mark it to indicate that the original was filed and return the copy to me. Copies have been served to the parties shown on the attached Certificate of Service.

Sincerely,

Andrew D. Shore

Cc: Parties of Record
Marshall M. Criser III
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Nancy B. White

00990-02 thru00993-02

CERTIFICATE OF SERVICE Docket No. 990649A-TP

I HEREBY CERTIFY that a true and correct copy of the foregoing was served via

Email and Federal Express this 28th day of January, 2002 to the following:

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(+) Signed Protective Agreement

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		DIRECT TESTIMONY OF D. DAONNE CALDWELL
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 990649A-TP
5		(120-DAY ITEMS)
6		NOVEMBER 8, 2001
7		AMENDED JANUARY 28, 2002
8		
9	Q.	PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.
10		
11	A.	My name is D. Daonne Caldwell. My business address is 675 W. Peachtree St.,
12		N.E., Atlanta, Georgia. I am a Director in the Finance Department of BellSouth
13	٠	Telecommunications, Inc. (hereinafter referred to as "BellSouth"). My area of
14		responsibility relates to the development of economic costs.
15		
16	Q.	ARE YOU THE SAME D. DAONNE CALDWELL THAT PREVIOUSLY
17		FILED TESTIMONY IN THIS DOCKET?
18		
19	A.	Yes.
20		
21	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
22		
23.	A.	In its May 25, 2001 Order No. PSC-01-1181-FOF-TP ("Order") in this docket, the
24		Florida Public Service Commission ("Commission") outlined a number of issues
25		that required responses by BellSouth within 120 days. The Order listed the

i	following as 120-day items: (1) Hybrid Copper/Fiber XDSL-capable loop, (2)
2	xDSL nonrecurring costs that exclude the Design Layout Record ("DLR"), test
3	point, and order coordination, (3) network security and inventory issues, (4)
4	network interface device ("NID") costs, (5) explicit modeling of loops, and (6)
5	inflation. On September 24, 2001, BellSouth filed cost studies in this docket to
6	address these "120-day" issues. On October 2, 2001, however, the Commission
7	reversed its ruling on inflation in Order No. PSC-01-2051-FOF-TP; therefore,
8	revised cost studies were filed on October 8th to include the impact of inflation.
9	Further, on October 23, 2001, the Commission identified a number of issues
10	precipitating from BellSouth's filing, with the objective of resolving them during
1	this phase of the docket. My testimony responds to those issues associated with
12	cost development. In doing so, I will present and support the cost studies filed or
13	October 8, 2001 and subsequently revised on January 28, 2002.
14	
15	Issue I(a): Are the loop cost studies submitted in BellSouth's 120-day filing
6	compliant with Order No. PSC-01-1181-FOF-TP?
17	
8	Q. PLEASE EXPLAIN WHY THE LOOP COST STUDIES BELLSOUTH
19	FILED ON OCTOBER 8, 2001, AND SUBSEQUENTLY REVISED ON
20	JANUARY 28, 2002, COMPLY WITH ORDER NO. PSC-01-1181-FOF-TP.
21	
22	A. The Commission outlined a number of modifications that impact both the
23-	recurring and nonrecurring cost results for loops. Some of these adjustments are
24	relatively easy to implement, while others required BellSouth to not only expend
25	substantial resources, but also to alter the manner in which costs were developed.

1 The simpler Commission-ordered modifications reflected in BellSouth's October

2 8th and January 28, 2002 cost studies include:

3

4

5

Cost of Capital – The Commission set the forward-looking cost of capital for BellSouth at 10.24% (60/40 equity/debt ratio, debt = 7.3%, equity = 12.2%).

6

Depreciation - The Commission adjusted the economic lives for metallic cable
accounts and digital switching equipment. The Commission accepted BellSouth's
salvage values. The chart below compares BellSouth's initially proposed
economic lives and the ones ordered by the Commission. The Commissionordered lives are reflected in the studies filed on October 8, 2001 and January 28,
2002.

13

14

15		BellSouth	Commission -Ordered
16	Digital Switching	10	13
17	Aerial Metallic Cable	15	18
18	Underground Metallic Cable	14	23
19	Buried Metallic Cable	15	18
20	Submarine Metallic Cable	15	18

21

22

23-

24

25

BellSouth asked for reconsideration on two other depreciation modifications originally reflected in the Commission-ordered rates; i.e., modifications to analog switching equipment and to submarine fiber cable. In its October 2, 2001 ruling (Order PSC-01-2051-FOF-TP), the Commission agreed that the analog switching

1	equipment economic life should be retained as BellSouth's input. In that ruling,
2	however, the Commission rejected the other request and stated that the Order did
3	alter the submarine fiber cable life and that it should be set at 20 years. The cost
4	study reflects the analog switching equipment life of 1.6 years and the submarine
5	fiber cable life of 20 years.
6	
7	Taxes - The Commission ordered Florida-specific tax rates as follows: a combined
8	state and federal income tax rate of 38.57% and an ad valorem tax rate of .9515%.
9	Also, the "gross receipts tax" factor was set at .15%. The cost study reflects these
10	modifications.
11	
12	Each of the Commission-ordered adjustments discussed above impact the
3	development of the shared and common cost factors. Thus, BellSouth
14	appropriately reflected these modifications in the Shared and Common
5	Application, which develops the shared and common cost factors.
6	Additionally, the deaveraging of loops was based upon the methodology adopted
7	by the Commission and the details provided in Appendix B of the Order, which
8	listed the wire centers by zone.
9	
20	Q. YOU MENTIONED THAT THERE WERE ADDITIONAL COMMISSION-
21	ORDERED MODIFICATIONS THAT WERE MORE DIFFICULT TO
22	MAKE. WHAT WERE THOSE MODIFICATIONS?
23.	
24	A. The first modification that was more difficult to incorporate into the studies was the
25	nonrecurring work time estimates. The Order detailed the extensive examination

- of three representative UNEs; the ADSL loop, CCS7 Signaling and Interoffice
- 2 Transport DSO. Based on the Commission's analysis of these three UNEs,
- adjustments to the work time estimates were recommended and outlined as listed

4 below (Order, page 364):

6		
7	Category	Approved Adjustments for BellSouth's
8		Installation and Disconnect Work Groups
9		and Work Times
10	CRSG Incremental Time	Eliminate work times
11	CRSG	Reduce work times by 55%
12 13	rcsc	Reduce work times by 75%
14	SAC	Reduce work times by 50%
15	AFIG	Reduce work times by 50%
16 17	CPG	Reduce work times by 50%
18	UNEC Provisioning Variables	Eliminate work times
19		
20	UNEC	Reduce work times by 45%
21	WMC	Reduce work times by 65%
22	CO ISM	Reduce work time by 20%
23-		7, 200
24	SSI&M	Reduce work times by 35%
25		<u></u>

1	Category	Approved Adjustments for BellSouth's
2		Installation and Disconnect Work Groups
3		and Work Times
4	Travel	No Adjustment
5		
6	All other work groups	Reduce work times by 45%

These are the modifications BellSouth used to develop the nonrecurring costs contained in the cost studies. In order to implement these reductions, BellSouth went into each input file and recalculated the originally proposed time estimates. In fact, in order to allow review of BellSouth's calculations, the input files show the Commission's modifications in red. The Commission also ordered a 50/50 sharing of the cost of access to sub-loop elements, which is also reflected in both BellSouth's input files and cost results.

The other Commission-ordered modification that was difficult to implement was one specifically listed as a "120-day" item – the explicit modeling of "all cable and associated supporting structure engineering and installation placements." (Order, Page 242) BellSouth has provided, as ordered by the Commission, a "bottoms-up" study of outside plant cable and structures using the BellSouth

Telecommunications Loop Model ("BSTLM[©]"). Whenever possible, either actual data or subject matter experts' estimates have been used in the BSTLM. Execution of the "bottoms-up" directive required activities such as: code modifications to the

.

^{24 ° 1999} INDETEC International and BellSouth Corporation All Rights Reserved (BSTLM)

1	BSTLM, which BellSouth witness Mr. Stegeman addresses, review of outside
2	contractor contracts, weighting of contractor prices by relative use, development
3	structure sharing percentages, estimation of BellSouth placing and splicing hours
4	and determination of probabilities by terrain and density.
5	
6	
7	Q. ARE THERE OTHER MODIFICATIONS THAT HAVE BEEN MADE TO
8	THE NONRECURRING COSTS IN ADDITION TO THOSE CONTAINED
9	IN THE ORDER?
10	
11	A. Yes. As noted in the cost study there were further changes to nonrecurring cost
12	development that need to be considered. These modifications reduce the
13	provisioning time and thus, should reduce the nonrecurring cost. These additional
14	input changes are detailed on pages 25-30 of the cost study. For example, the
15	amount of time a loop is not found in LFACS was lowered from 58% to 20% and
16	Work Management Center ("WMC") time was set at 2 minutes (down from 15).
17	
18	Q. PLEASE PROVIDE AN OVERVIEW OF THE INPUTS USED IN
19	BELLSOUTH'S "BOTTOMS-UP" COST DEVELOPMENT.
20	
21	A. BellSouth's "bottoms-up" inputs were obtained from two basic sources. First
22	Outside Plant Contractor costs for each district in Florida were reviewed. These
23.	contracts provided the individual work item price, e.g. the price to place a pole, to
24	bore a driveway, or to bury a cable. BellSouth then used the amount of usage that
25	occurred during 2000 to develop an average contractor cost for each type of activi

1	Attachment 3 in Appendix B of the cost study details the calculations performed to
2	develop the contractor cost input associated with pole placement, conduit, manhole,
3	and their placements, buried cable placement, etc.
4	
5	The second input source was the Outside Plant Construction Management
6	("OSPCM") system. The OSPCM is the same system used by BellSouth's Network
7	organization to estimate job costs. Attachment 4 in Appendix B of the cost study
8	provides the source code data and assumptions taken from the OSPCM system for
9	the development of splicing and placing time inputs.
10	
11	Q. CAN YOU PROVIDE A DESCRIPTION OF THE SOURCES AND
12	ASSUMPTIONS USED IN THE DETERMINATION OF EACH
13	CATEGORY OF INPUT IN THE "BOTTOMS-UP" ANALYSIS?
14	
15	A. Yes. The following discussion will describe how each category of input, as they
16	correspond to the BSTLM input tables, was derived. Attachment 1 in Appendix B
17	of the cost study displays the resulting input.
18	
19	Aerial Structure Contract Labor
20	Contract labor costs for placing poles were obtained from actual outside contractor
21	contracts in each district in Florida. Each district contractor's price was weighted
22	by the amount of usage in the district in 2000 to arrive at a weighted average price
23	for an average size pole placement in the state. Contract labor associated with
24	placement of anchors was also obtained from the outside contractor contracts in
25	each district in Florida. Guys are placed by BellSouth personnel, and the time

1 required to install a guy was obtained from the OSPCM system. 2 3 Aerial Structure (Material) 4 Pole material prices were also obtained from actual outside contractor contracts in 5 each district in Florida. Each district contractor's price was weighted by the 6 amount of usage in the district in 2000 to determine a weighted average material 7 price for an average size pole in the state. The material costs of anchors and guys 8 are exempt material and are captured in the exempt material loading for poles. 9 10 **Buried Excavation Contract Labor** 11 While the BSTLM input tables were modified to allow contractors' buried 12 excavation prices to vary dependent on the terrain type, agreements between 13 BellSouth and its outside contractors do not differentiate prices by terrain type. 14 Therefore, all excavation cost values are the same, regardless of terrain type. 15 Excavation costs were determined in the same manner as the aerial structure 16 contract labor costs. Contract labor costs for buried excavation activities were 17 obtained from actual outside contractor contracts in each district in Florida. Each 18 district contractor's price was weighted by the amount of usage in the district in 19 2000 to arrive at a weighted average price per foot for buried excavation in the 20 state. 21 22 **Underground Excavation Contract Labor** 23. While the BSTLM input tables were modified to allow contractors' underground 24 excavation prices to vary dependent on the terrain type, the agreements between 25 BellSouth and its outside contractors do not differentiate prices by terrain type.

1 Therefore, all underground excavation cost input is the same regardless of terrain 2 type. Underground excavation costs were determined in the same manner as the 3 buried excavation contract labor costs. Contract labor costs for underground 4 excavation activities were obtained from actual outside contractor contracts in each 5 district in Florida. Each district contractor's price was weighted by the amount of 6 usage in the district in 2000 to calculate a weighted average price per foot for 7 underground excavation in the state. 8 **Structure Sharing** 9 BellSouth only expects to share in the cost of buried structure approximately 6% of 10 the time in Florida. When sharing occurs, BellSouth has assumed that BellSouth 11 and two other parties will share in the cost of buried placement. Therefore, buried 12 sharing is calculated as follows: 13 14 94% X 100% = 94% 15 $6\% \times 33.33\% = 2\%$ 16 Total 96% 17 The 96% reflects the amount of buried structure cost assigned to BellSouth. 18 19 For aerial plant sharing, BellSouth owns approximately 40% of the poles in its 20 territory in Florida. Therefore, BellSouth has used 40% as the amount of pole 21 costs assigned in its cost studies. 22 23. For underground sharing, BellSouth rarely, if ever, shares conduit placement costs 24 with another party. BellSouth does lease a small amount of its conduit space to 25 others and has included that amount in the underground sharing percentage as

1	follows:		
2			
3		Duct feet in Florida	192,128,640
4		Leased to others	129,754
5		Assigned to BellSouth	99.93%
6			
7	Facility Shari	ng (between feeder and dist	<u>ribution)</u>
8	The BSTLM p	provides the ability for sharing	of structure between feeder and
9	distribution ca	bles when both are located alo	ong the same path; however, this type
10	of sharing of s	tructure rarely occurs according	ng to Network subject matter experts.
11	This lack of sh	naring between feeder and dist	ribution occurs for many reasons
12	including the f	fact that placement of feeder a	nd distribution cables do not always
13	coincide in tin	ning, often access to distribution	on cables is needed more frequently
14	than manhole	spacing for feeder cable would	l allow, etc. Based on the fact that
15	experts predic	t very little sharing of structur	e between distribution and feeder,
16	BellSouth has	assumed that when both are fo	ound on the same path that sharing of
17	structures occi	urs 25% of the time in a forwa	rd-looking environment. While
18	BellSouth beli	eves the actual sharing will be	eless, the 25% reflects the expected
19	upper limit.		
20			
21	Media Sharir	ng	
22	In BellSouth's	s previous filing, the Media Sh	naring table was populated with input
23.	values that res	sulted in a 50%/50% sharing o	f structure between copper and fiber
24	when both cop	pper and fiber cables were place	eed on, or in, the same structure. These
25	values were n	ot used in previous filings sinc	e all structure costs resulted from

either in-plant factors or pole/conduit factors in the BellSouth Cost Calculator rather than from the BSTLM, itself. However, since the BSTLM is calculating structure costs in this filing, the BSTLM approach was changed to improve the logic previously provided through this table. Now, instead of using the Media Sharing table, the logic of the updated BSTLM apportions, on both distribution and feeder routes that have both copper and fiber cables, the costs of structure (poles, trenching, etc.) between the media based on the number of DS0 equivalents on each cable. This is consistent with how DLC common equipment, fiber, and the structure for fiber are apportioned in the model. Additionally, in its Order in this docket, the Commission found with respect to the use of DS0 equivalents: "Of the two factors, competitive impact or causal linkage, we believe that where possible, cost causal connections should get the nod when designing cost models. Thus, based on the evidence, we find that the BSTLM method of allocating shared investments based on DS0 equivalents is reasonable." (Order, Page 134) Feeder Distribution Interface (FDI) Placing Hours The BSTLM is designed to assume that FDIs are placed by telephone company personnel (i.e., placement hours X labor rate), however, FDIs are typically placed by outside contractors in BellSouth. This inconsistency in the BSTLM approach and BellSouth input was not discovered in time to correct the model. Therefore, BellSouth has taken contractor costs and converted them to hours by dividing the contractor costs by the BellSouth installation labor rate. Further, the outside plant contracts have a fixed placement cost for FDIs weighing between 101 and 800 pounds, another cost for 801 to 1700 pounds, and a third price for 1701 to 4000

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pounds. These contractor costs for various weights have been used for each

2	format of the BSTLM input table.
3	
4	Aerial Structure Placing Hours (Telco)
5	Since outside contractors place poles for BellSouth, this table is only used for the
6	time to place a guy, which is handled by BellSouth personnel.
7	DTBT Splicing and Placing Hours
8	Times for closure and setup, cross connects and splicing were obtained from the
9	OSPCM system used by BellSouth to estimate job costs for internal purposes.
10	While the material prices for terminals of sizes 100 pairs or less are exempt
11	material, the labor to install these terminals is not. Therefore, the times are
12	populated for all sizes of terminals.
13	
14	Media Splicing and Placing Hours
14 15	Media Splicing and Placing Hours Times for placing and splicing aerial, buried and underground copper and fiber
15	Times for placing and splicing aerial, buried and underground copper and fiber
15 16	Times for placing and splicing aerial, buried and underground copper and fiber cables were obtained from the OSPCM system used by BellSouth to estimate job
15 16 17	Times for placing and splicing aerial, buried and underground copper and fiber cables were obtained from the OSPCM system used by BellSouth to estimate job costs for internal purposes. Since outside contractors place buried cable, buried
15 16 17 18	Times for placing and splicing aerial, buried and underground copper and fiber cables were obtained from the OSPCM system used by BellSouth to estimate job costs for internal purposes. Since outside contractors place buried cable, buried
15 16 17 18 19	Times for placing and splicing aerial, buried and underground copper and fiber cables were obtained from the OSPCM system used by BellSouth to estimate job costs for internal purposes. Since outside contractors place buried cable, buried placing costs are zero in this table.
15 16 17 18 19 20	Times for placing and splicing aerial, buried and underground copper and fiber cables were obtained from the OSPCM system used by BellSouth to estimate job costs for internal purposes. Since outside contractors place buried cable, buried placing costs are zero in this table. FDI Splicing
15 16 17 18 19 20 21	Times for placing and splicing aerial, buried and underground copper and fiber cables were obtained from the OSPCM system used by BellSouth to estimate job costs for internal purposes. Since outside contractors place buried cable, buried placing costs are zero in this table. FDI Splicing Times for FDI splicing were obtained from the OSPCM system used by BellSouth
15 16 17 18 19 20 21 22	Times for placing and splicing aerial, buried and underground copper and fiber cables were obtained from the OSPCM system used by BellSouth to estimate job costs for internal purposes. Since outside contractors place buried cable, buried placing costs are zero in this table. FDI Splicing Times for FDI splicing were obtained from the OSPCM system used by BellSouth

applicable FDI size in the BSTLM after being converted to labor hours to fit the

only the cost of various activities associated with placing the structure for cable, but also the likelihood that each of those activities will occur in various density zones and various terrain types. Actual data regarding these probabilities by density and terrain type does not exist. However, BellSouth's subject matter experts previously reviewed the default percentages used in the BenchMark Cost Proxy Model ("BCPM") and found them to be a reasonable reflection of BellSouth experience in various terrain and density combinations. Additionally the Commission approved the use of these "percent activities" in the Universal Service Fund ("USF") Docket No. 980696-TP. BellSouth used those same percentages in this filing. Modifications were required, however, since the BCPM included nine density zones and separated feeder from distribution. The BSTLM, on the other hand, includes a breakdown into three density groups (which are groupings of the density zones) - urban, suburban and rural - and combines feeder and distribution into one table. Thus, BellSouth combined the feeder percent activities previously approved by the Commission such that areas with fewer than 200 lines per square mile are classified as rural, areas with between 201 and 5000 lines per square mile are treated as suburban, and areas with more than 5000 lines per square mile are considered urban.

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Other Material Loadings

While BellSouth has used the capabilities of the BSTLM to develop a "bottomsup" approach to determining installation and engineering costs, there remain certain items of investment that are calculated via factors. Those items include sales tax, exempt material, supply expense, and other items such as indirect labor costs, right of way and tree trimming associated with initial cable placements, and

1	interest during construction. These items are included in this filing in the Material
2	Loading table. Attachments 5 and 5A in Appendix B to the cost study provide a
3	description and explain the development of these factors.
4	
5	Pole, Guy and Anchor, and Manhole Spacing
6	Pole spacing was determined by examining 12/31/00 ARMIS Report 43-08 for
7	Florida to determine the number of poles in the state relative to the sheath distance
8	of aerial cable in the state. Worksheets displaying the development of the pole
9	spacing input are shown in Attachment 1 of Appendix B to the cost study. The
10	number of poles owned by BellSouth in Florida were adjusted by the percentage of
11	poles owned by BellSouth to arrive at the total number of poles to which BellSouth
12	cable is attached in Florida. Then, this adjusted number of poles was divided into
13	the aerial sheath feet in Florida. The result was 112 feet of aerial sheath per pole.
14	BellSouth rounded this up to an even 120 feet. This result is extremely
15	conservative given the fact that this methodology assumes only one existing
16	BellSouth sheath on each pole line route, when in reality there are often two or
17	more sheaths on a given pole line. If one were to assume 1.5 sheaths, on average,
18	per pole line, the spacing interval would drop to approximately 75 feet.
19	
20	Anchor and guy spacing is estimated to be every 500 feet (roughly every 4 poles)
21	and manhole spacing is assumed to be every 625 feet based on subject matter
22	expert estimates.
23-	
24	Underground Conduit and Manhole Contractor Costs
25	Conduit duct costs and manhole costs, like the underground excavation contract

1 labor costs, were also obtained from actual outside contractor contracts in each 2 district in Florida. Each district contractor's price was weighted by the amount of 3 usage in the district in 2000 to determine a weighted average price for furnishing 4 and installing conduit and manholes in the state. As specified in the contracts, 5 contractors charge to place manholes on a per cubic foot basis. Therefore, the 6 BSTLM inputs for manhole costs were based upon the total cubic feet of the 7 different sizes. 8 9 Engineering 10 The BSTLM's internal logic in the previous filing (August 2000) calculated 11 engineering as a loading on material. For the 120-day filing, the BSTLM logic has been modified to now calculate engineering costs by applying factors to the 12 13 total of non-engineering investments (i.e., as a loading on material, installation 14 labor, sales tax, and other loadings.) The engineering factors used and included in 15 the January 28, 2002 filing are account-specific and were developed from the 16 same data source previously used to derive in-plant factors, the 1998 State and Local Sales Taxes, Resource Tracking Analysis and Planning ("RTAP") System, 17 18 and Special Report/File 542 - 1998 Investments. The basic factor calculation is 19 (TELCO Engineering + Vendor Engineering)/(TELCO Labor + Vendor Labor + 20 Exempt Material + Non-exempt Material + Other) 21 22 Outside Contractor Use (Engineering Rules) This input table was not used in the previous filing by BellSouth since all 23. 24 contractor and BellSouth labor was calculated via in-plant factors in the Cost Calculator. This table directs the BSTLM to use either contractor installation or 25

2		BellSouth personnel). Since poles are placed by contractors and guys are placed
3	-	by BellSouth personnel, the table was modified to include a third option for Poles
4		("B" indicates that both contractor and BellSouth installation is required).
5		Additionally, even though not used, this table was populated in the previous filing
6		and two entries required correction. The indicators for DTBT and FDI were
7		changed from "Y" to "N" to reflect the fact that BellSouth personnel placed FDIs
8		(see discussion of FDI placing hours above) and terminals.
9		
10	Q.	HOW DO THE RECURRING COSTS OBTAINED FROM USE OF THE
11		"BOTTOMS-UP" APPROACH COMPARE TO COSTS USING IN-PLANT
12		FACTORS?
13		
14	A.	Some of the element costs have increased, while others have decreased, even
15		though all costs are based on the same "bottoms-up" input values and BSTLM
16		algorithms. For example, the Service Level 1 ("SL1"), SL2, ISDN, and 4 wire
17		DS1 loops have increased in every zone as compared with the current
18		Commission-ordered rates. On the other hand, 2 wire and 4 wire UCL-Long loops
19		have decreased in every zone. Additionally, for a given element, one deaveraged
20		zone cost may have increased while another zone cost has decreased. For
21		example, the 2 wire UCL-Short loop's zone 1 cost increased while zones 2 and 3
22		decreased. Exhibit DDC-1_120 compares BellSouth's "bottoms-up" cost study to
23 _		the revised Commission-ordered rates contained in Appendix A of Order PSC-01-
24		2051-FOF-TP. (The Commission-ordered rates are those that reflect the impact of
25		inflation.) As one can see from reviewing this exhibit, the differences do not seem

BellSouth personnel installation ("Y" indicates contractor while "N" indicates

1	to follow any pattern.
2	
3	Issue 1(b): Should BellSouth's loop rates or rate structure previously approved
4	in Order No. PSC-01-1181-FOF-TP be modified? If so, to what
5	extent, if any, should the rates or rate structure be modified?
6	
7	Q. FROM A COST PERSPECTIVE, WHAT IS YOUR OPINION ON THIS
8	ISSUE?
9	
10	A. First, the Commission must also consider Order PSC-01-2051-FOF-TP, which re-
11	instated the impact of inflation. Once the decisions contained in that ruling are
12	considered, there is no reason to modify the loop rates or the rate structure. From
13	the discussion I have presented on the input development, one can see that the
14	"bottoms-up" approach taken by BellSouth is a much more complex study of loop
15	costs than the previously filed study based upon the use of in-plant factors and
16	structure loading factors. BellSouth continues to believe, however, that the use of
17	in-plant factors and structure loading factors produces reasonable, accurate results
18	and that the ordered rates should remain as is. Cost studies produce estimates of
19	cost, not absolute results. While the "bottoms-up" approach produces very specific
20	results, these results are a combination of a much larger number of influencing
21	variables and inputs than was present under the factor approach. Under the
22	"bottoms-up" method, depending upon the customer location, the type and size of
23.	facilities, and number of services, the costs can vary substantially, as Exhibit
24	DDC-1_120 illustrates. In contrast, in-plant and loading factors reflect

experienced cost relationships between material prices and labor/engineering costs.

1		
2		Furthermore, the "bottoms-up" approach introduces an extensive set of new inputs
3		that can be questioned, criticized and manipulated by intervening parties. While
4		BellSouth is not afraid of this scrutiny, it does not believe that the end-result of
5		such an effort will produce either a better quality result or a more "TELRIC-
6		compliant" result.
7		
8		Issue 2(a): Are the ADUF and ODUF cost studies submitted in BellSouth's
9		120-day filing compliance filing appropriate?
10	Q.	WHY DID BELLSOUTH FILE ADUF AND ODUF COSTS IN THIS PHASE
11		OF THE DOCKET?
12		
13	A.	Even though the Commission's Order did not specifically include these elements
14		in the 120-day requirement, substantial changes to the study inputs necessitated
15		that BellSouth advise the Commission. The costs for the DUF elements BellSouth
16		filed reflect the applicable Commission-ordered modifications I discussed
17		previously. As I explain below, BellSouth is revising the DUF element costs
18		further and is filing a revised cost study simultaneously with this testimony (Cost
19		Study - Revision 2).
20		
21	Q.	PLEASE BRIEFLY EXPLAIN WHAT THE ADUF AND ODUF
22		ELEMENTS ARE AND HOW THE COSTS WERE DEVELOPED.
23-		
24	A.	In fact, there are three different daily usage offerings; Access Daily Usage Files
25		("ADUF"), Optional Daily Usage Files ("ODUF"), and Enhanced Optional Daily

1	Usage Files ("EODUF"). Each of the offerings provides electronic billing data to
2	the ALECs:
3	•
4	ADUF - information of end user's daily originating and terminating access carrier
5	messages. BellSouth extracts and distributes call detail on these access messages.
6	
7	ODUF - call detail information for billable messages transported through
8	BellSouth's network and processed in BellSouth's CRIS (Customer Records
9	Information System) billing system. BellSouth extracts and distributes call detail
10	on messages such as, Measured Local, IntraLATA Toll, and operator-handled calls
11	if the ALEC purchases Operator Services from BellSouth. This element is
12	applicable to both UNEs and resale.
13	
14	EODUF - usage data for local calls that originate from resold, flat-rated business
15	and residential lines. BellSouth extracts and distributes call detail on these
16	messages.
17	
18	BellSouth has developed unique programs at the ALEC's request in order to
19	extract the billing data they requested, in a format such that they can bill their end-
20	users. The costs associated with this on-going process and the computer resources
21	required to implement and support the programs are reflected in BellSouth's cost
22	study. These costs are incremental to BellSouth's normal billing process.
23	
24	Q. WHY WERE THESE COST STUDIES FOR THE DAILY USAGE FILE
25	("DUF") ELEMENTS REVISED?

2	A. When BellSouth developed the cost study inputs in the original filing (August	
3	2000), the actual number of records was low and rather stagnant. The project	ed
4	demand reflected this trend. Since the time the original cost study was filed in	ı th
5	docket, however, BellSouth experienced a dramatic increase in the number of	
6	message records. The increase in the number of resale to UNE-P (combination	n)
7	conversions may have caused this upswing. Since the cost results for the DU	F
8	elements are demand-dependent, BellSouth included the DUF elements as par	t of
9	the 120-day items. In fact, in gathering cost input for the most recently initiat	ed
10	generic cost docket in BellSouth's region (Georgia Docket No. 14361-U),	
11	projected demand for ADUF and ODUF has increased over what was filed on	
12	October 8 th in Florida. (The EODUF demand has decreased, increasing the co	sts
13	slightly.) Exhibit DDC-1_120 displays the results of updating this demand. A	ls I
14	mentioned previously, concurrent with the filing of this testimony, BellSouth	is
15	filing its revised cost study to incorporate this change in demand to the DUF	
16	elements. Only the DUF results changed from the study filed on October 8, 2	001
17	The DUF elements were not impacted by any of the revisions made with the	
18	January 28, 2002 filing.	
19		
20	Issue 2(b): Should BellSouth's ADUF and ODUF rates or rate structure	
21	previously approved in Order No. PSC-01-1181-FOF-TP be	
22	modified? If so, to what extent, if any, should the rates or rate	
23,	structure be modified?	
24		
25	Q. WHAT IS YOUR OPINION ON THIS ISSUE?	

1		
2	A.	The Commission should consider the updated information on DUF costs filed here.
3		BellSouth, in good faith, has advised this Commission of a supportable change to a
4		cost study input. Since the change results in a reduction of ADUF and ODUF
5		rates, the intervening parties would not be adversely affected by a decision to
6		consider the revised cost study. Let me clarify one point, the issue here is whether
7		or not the rates should be revised. It is NOT a question of whether or not DUF
8		rates are appropriate. This issue has already been litigated in the first phase of this
9		proceeding and the Commission established rates in both Order No. PSC-01-1181-
10		FOF-TP and in Order No. PSC-01-2051-FOF-TP, which considered inflation.
11		
12		Issue 3(a): Are the UCL-ND loop cost studies submitted in BellSouth's 120-day
13		filing compliant with Order No. PSC-01-1181-FOF-TP?
14		
15	Q.	WHY DID BELLSOUTH FILE A COST STUDY FOR UCL-ND IN THIS
16		PHASE OF THIS DOCKET?
17		
18	A.	One of the "120-day" requirements identified by this Commission was to
19		determine xDSL nonrecurring costs that exclude the Design Layout Record
20		("DLR"), test point, and order coordination. The Unbundled Copper Loop - Non-
21		Designed ("UCL-ND") fulfills that obligation. In addition, this all copper loop
22		offering satisfies the Commission's requirement that BellSouth provision SL1
23 .		loops and guarantee not to roll them onto another facility or convert them to
24		another technology. The UCL-ND gives the ALECs what they need to provide
25		xDSL service, but does not unduly restrict BellSouth in providing voice grade

1		service over the most efficient technology.
2		
3	Q.	HOW DOES THE UNBUNDLED COPPER LOOP - NON-DESIGNED
4		DIFFER FROM THE UNBUNDLED COPPER LOOPS PREVIOUSLY
5		FILED BY BELLSOUTH IN THIS DOCKET?
6		
7	A.	As the name implies, these loops do not go through the design process BellSouth
8		utilizes to provision UCL-Short and UCL-Long loops. Thus, they are not
9		provisioned with a test point and a DLR will not be provided. Additionally, the
10		UCL-ND loop will not have a specific length limitation. Since its resistance is
11		restricted to 1300 ohms, however, the UCL-ND loop generally will be 18,000 feet
12		or less. However, in some cases, the length may be longer based on gauge.
13		
14		Even though the DLR is not provided with the UCL-ND loop, ALECs may request
15		an Engineering Information document from BellSouth (element A.1.8). This
16		document provides loop make-up information, similar to a DLR. The October 8 th
17		cost study also includes the cost development for this optional element. The cost
18		of Element A.1.8 was not impacted by the January 28, 2002 revision.
19		
20	Q.	HOW DOES THE RECURRING COST OF UCL-ND LOOPS COMPARE
21		TO OTHER TYPES OF LOOPS?
22		
23,	A.	The table below compares the statewide average recurring cost of an SL1, SL2,
24		ADSL, HDSL, UCL-Short and UCL-Long to the UCL-ND loop based on the
25		"bottoms-up" approach.

1				
2		A.1 .1	2-Wire Analog Voice Grade Loop - Service Level 1	\$19.52
3	•	A.1.2	2-Wire Analog Voice Grade Loop - Service Level 2	\$21.72
4		A.6.1	2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop	\$15.6 6
5		A.7.1	2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop	\$13.60
6		A.13.1	2-Wire Copper Loop short	\$15.66
7		A.13.7	2-Wire Copper Loop – long	\$32.19
8		A.13.12	2-Wire Copper Loop - ND	\$15.21
9				
10	N	ote that the	UCL-ND loop is less than both an UCL-Short loop and	d an SL1 loop,
11	ar	d significa	ntly less than the UCL-Long loop. This is consistent w	ith the fact that
12	te	st points ha	we been removed and that the UCL-ND has no length r	estriction, but
13	is	generally l	ess than 18,000 feet because of the 1300-ohm resistance	e limit. In
14	n	nning the (Copper-Only scenario in the BSTLM, the loop limit was	s set at 24,000
15	fe	et in order	to capture those loops that potentially would still meet	the 1300-ohm
16	re	striction, b	ut exceed the 18,000 feet limit. In fact, the average loop	length for the
17	U	CL-ND gei	nerated by the BSTLM is 13,258 feet.	
18	Q. H	OW DOE	S THE NONRECURRING COST OF UCL-ND LO	OPS
19	C	OMPARE	TO OTHER TYPES OF LOOPS?	
20				
21	A. T	ne nonrecu	rring cost of an UCL-ND is less than the nonrecurring c	osts associated
22	w	ith designe	d loops. Additionally, it is less than the SL1 because it	is an all-
23.	co	pper loop	and thus, a plug-in does not have to be provisioned in the	ne digital loop

-24-

24

25

carrier system.

1	Q.	ARE THERE OTHER ADJUSTMENTS TO THE COST STUDY THAT
2		ARE REQUIRED DUE TO THE UCL-ND OFFERING?
3		
4	A.	Yes. As I mentioned previously, this type of loop is non-designed. Thus, no test
5		point is provisioned. ALECs, however, may desire a joint acceptance test to
6		benchmark the transmission quality of the loop and to ensure compatibility with
7		the xDSL service they wish to provide. These testing parameters include, but are
8		not limited to, testing for non-loading, balance of pair, and continuity from the
9		main distribution frame ("MDF") to the network interface device ("NID").
10		BellSouth filed Testing Beyond Voice (A.19 elements) previously in this docket.
11		These costs, however, only considered testing a designed loop that had been
12		conditioned. The adjusted loop testing elements also consider testing parameters
13		for non-designed loops (SL1 or UCL-ND)
14		
15		
16		Issue 3(b): What modifications, if any, are appropriate and what should the
17		rates be?
18		
19	Q.	SHOULD THIS COMMISSION USE THE COSTS FILED HERE TO SET
20		RATES FOR UCL-ND ELEMENTS?
21		
22	A.	No. As discussed in response to Issue 1(b), BellSouth does not believe that the
23 .		"bottoms-up" approach develops a more representative result than the use of
24		factors. Let me note that BellSouth has also filed the UCL-ND elements in Docket
25		No. 960786-TP (271 docket) based on the use of in-plants and loading factors.

1		Those cost studies reflect the Commission-ordered adjustments except for the re-
2		instatement of inflation. BellSouth requests that the Commission establish rates
3		for the UCL-ND related elements in Docket No. 960786-TP once inflation is
4		considered.
5		
6		Issue 4(a): What revisions, if any, should be made to NIDs in both the BSTLM
7		and the stand-alone NID cost study?
8		Issue 4(b): To what extent, if any, should the rates or rate structure be modified?
9		
10	Q.	ARE REVISIONS REQUIRED TO THE CALCULATION OF BOTH
11		TYPES OF NID COSTS?
12		
13	A.	No. Adjustments are not required to both the NTD cost considered in the BSTLM
14		and to the stand-alone NID costs. The stand-alone NID costs, however, do require
15		revision. Let me explain.
16		At pages 192-93 of Order No. PSC-01-1181-FOF-TP, the Commission noted an
17		inconsistency in the treatment of exempt/miscellaneous material for the stand-
18		alone NID and the exempt/miscellaneous material associated with the NID when it
19		is provisioned with the loop (via the BSTLM).
20		
21		Typically, the NID is provisioned with the loop at the time the residence or
22		business is constructed and the drop wire is placed and treated as capitalized
23	-	investment. For most cable placements in BellSouth's studies, exempt material is
24		recovered through an In-Plant factor; however, a different approach is taken for the
25		NID and drop. BellSouth, in the BSTLM, directly identifies items normally

1 captured in an In-Plant factor (labor, exempt materials, sales tax, etc.) for the 2 capitalized drop and NID. 3 4 Thus, because the NID investment generated by the BSTLM already considers 5 exempt material, taxes, labor, etc., the BellSouth Cost Calculator does not need to 6 apply the In-Plant factors to drop and NID investments. BellSouth reflected this by 7 assigning special "sub-FRCs" to the drop and NID. These special sub-FRC codes 8 are 22C-01 or 45C-01. The "01" sub-FRCs instruct the BellSouth Cost Calculator 9 not to apply In-Plant factors to those items of plant. Therefore, BellSouth's NID 10 costs associated with unbundled loops are correct and no "double-counting" of In-11 Plant costs associated with the NID or drop occurs. 12 13 On the other hand, Stand-Alone NID/NID Access is a separate UNE offering 14 designed for situations where the existing NID is not suitable for ALEC connection 15 and where BellSouth terminates its loop directly to the inside wire, or at the 16 ALEC's request. BellSouth charges a nonrecurring fee for the installation of, 17 material for, and cross connect (if appropriate) to the stand-alone NID. The standalone NID material (housing, interface, and protectors) is exactly the same as the 18 19 NID placed with the loop. As found by the Commission in its Order, BellSouth 20 did not apply exempt materials in the stand-alone NID study. In fact, BellSouth 21 should indeed have included exempt material in its stand-alone NID costs. 22 BellSouth has included this adjustment in this filing. Further, these are the 23 appropriate costs to be used to establish rates for Stand-Alone NID/NID Access 24 elements.

1	Issue5 (a):	What is a "hybrid copper/fiber xDSL-capable loop" offering and
2		is it technically feasible for BellSouth to provide it?
3		
4	(b)	Is BellSouth's cost study contained in the 120-day compliance
5		filing for the "hybrid copper/fiber xDSL-capable loop" offering
6		appropriate?
7		
8	(c)	What should the rate structure and rates be?
9		
0	Q. THE CO	MMISSION'S ORDER STATED "WE BELIEVE BELLSOUTH IS
1	OBLIGA	TED, IF TECHNICALLY FEASIBLE, TO PROVIDE HYBRID
2	COPPER	WFIBER *DSL-CAPABLE LOOPS TO DATA ALECS." WHAT
13	COST SU	UPPORT HAS BELLSOUTH FILED IN SUPPORT OF THE
14	HYBRID	COPPER/FIBER LOOP?
15		
16	A. BellSouth	filed the recurring and nonrecurring costs associated with providing data
7	ALECs th	ne ability to utilize a loop served by fiber-fed digital loop carrier ("DLC")
18	systems (i.e., loops comprised of fiber feeder and copper distribution) to offer
19	digital sul	bscriber line ("DSL") services to their end-users, without unbundling
20	packet sw	ritching. The distribution portion of the loop is comprised of a dedicated
21	2-wire ph	ysical transmission facility which is connected to a dedicated 16-port
22	Digital St	abscriber Line Access Multiplexer ("DSLAM"). From the DSLAM, a
23 .	dedicated	DS1 is required through the DLC remote terminal ("RT") to the central
24	office ter	minal ("COT") to the ALEC's collocated space in the central office.
25	Evhibit F	NDC-2 120 depicts the components of the Hybrid Copper/Fiber Ioon.

1		BellSouth witness Mr. Jerry Kephart addresses the feasibility issue and discusses
2		why this configuration fulfills the Commission's directive. I address how the costs
3		were developed.
4		
5		The BSTLM developed the investments associated with the DS1 component of the
6		Hybrid Copper/Fiber Loop. Let me note that this sub-loop feeder DS1 is not the
7		same as the unbundled sub-loop feeder - 4-wire DS1 (element A.9.2) also filed in
8		this docket. The sub-loop feeder DS1 (A.9.2) includes the feeder portion of all
9		DS1 loops. These include DS1 loops served by both copper feeder and those
10		served by fiber feeder facilities to a remote DLC terminal. The Hybrid
11		Copper/Fiber DS1 (element A.20.1), on the other hand, only considers locations
12		served via a remote DLC terminal served by fiber. Thus, all of the locations used
13		in the calculation of the sub-loop feeder - 4-wire DS1 are not included in the cost
14		calculation of the Hybrid Copper/Fiber DS1. The material prices for the 16-port
15		DSLAM were obtained from vendor contracts.
16		The nonrecurring costs reflect the work activities required to connect and turn-up
17		the DS1 and the 2-wire transmission facility onto the DSLAM. In order to make
18		this a functional loop and to reflect the manner in which the loop will be
19		provisioned, the individual network components must be summed into (1) System,
20		(2) DS1, and (3) Activation elements.
21		
22	Q.	PLEASE DESCRIBE WHICH COMPONENTS ARE CONSIDERED IN
23		THE SYSTEM, DS1, AND ACTIVATION COSTS.
24		
25	A.	The System element represents the cost of the DSLAM (element A.20.3) with an

1	administrative DS1 (A.20.1), which is used for BellSouth's management of the
2	DSLAM. This administrative DS1 does not terminate at the ALEC's collocation
3	space. Instead, it terminates into a DSL hub bay in order to allow BellSouth to
4	control the provisioning, maintenance, and repair of the xDSL Hybrid
5	Copper/Fiber loop. The cost of the administrative DS1 does not differ from the
6	DS1 that terminates into the ALEC's collocation space.
7	
8	The DS1 element accounts for the cost of the fiber DS1 that essentially connects
9	the DSLAM at the RT to the ALEC's collocated space in the central office. The
10	recurring cost is equal to the Hybrid Copper/Fiber DS1 (element A.20.1). The
11	nonrecurring cost is the sum of the DS1 establishment element (A.20.2) and the
12	nonrecurring cost associated with the Sub-loop Feeder per 4-wire DS1 element
13	(A.9.2). Let me note that the nonrecurring cost for A.9.2 was not restudied since
14	the Commission has set a rate for this element. Rather, the rate (\$133.77) was
15	hard-coded into the Final Cost Summary.
16	The Activation nonrecurring cost is the sum of the channel activation cost (element
17	A.20.4) and the nonrecurring cost associated with the 2-wire distribution sub-loop
18	(element A.2.2).
19	Issue 6: In BellSouth's 120-day filing, has BellSouth accounted for the impact
20	of inflation consistent with Order No. PSC-01-2051-FOF-TP?
21	
22	Q. WHAT IS YOUR RESPONSE TO THIS ISSUE?
23 _	
24	A. BellSouth's cost studies are in compliance with the Commission's directive on
25	inflation. Order No. PSC-01-2051-FOF-TP states: "we hereby reconsider our

2	a misinterpretation and misrepresentation of the facts presented." (Page 5) Thus,
3	the Commission found that the application of inflation factors to both the
4	investment and to labor rates is appropriate. The cost study filed on October 8,
5	2001 reflects the impact of inflation based on factors originally filed in this docket.
6	BellSouth made no adjustment to the inflation application in the January 28, 2002
7	filing.
8	
9	Issue 7: Apart from issues 1-6, is BellSouth's 120-day filing consistent with
10	the orders in this docket?
11	
12	Q. WHAT IS YOUR RESPONSE TO THIS ISSUE?
13	
14	A. The cost studies filed by BellSouth incorporate all of the adjustments ordered by
15	this Commission. I have described the modifications as part of this testimony.
16	Further, the cost study contains a detailed discussion of the adjustments made by
17	BellSouth in order to comply with the Commission's directive.
18	
19	Q. DOES THIS CONCLUDE YOUR TESTIMONY?
20	
21	A. Yes.
22	
23	
24	
25	

decision to reject BellSouth's proposed inflation factor, because it was based upon

1

					Staff Rec		
			Zone	Recurring	(9/11/01)	Difference	% Difference
A.1	2-WIRE A	NALOG VOICE GRADE LOOP					
	A.1 1	2-Wire Analog Voice Grade Loop - Service Level 1	1	\$14 5 9	\$12.79	\$1.80	14.1%
			2	\$19 77	\$17.27	\$2,50	14.5%
			3	\$60.06	\$33.36	\$16.72	50 1%
	A.1.2	2-Wire Analog Voice Grade Loop - Service Lavel 2	1	\$16.79	\$14 60	\$2.29	15.8%
			2	\$21.98	\$19 57	\$2 41	12.3%
			3	\$62.29	\$37 82	\$14.47	38 3%
	SUB-LOO	Δ.					
Y.5	A 2.1	Sub-Loop Feeder Per 2-Wire Analog Voice Grade Loop	1	\$7.89	\$8.05	-\$0.18	-2 0%
	P1 6.1	200-coch Lagor Lat Suiza Versoff Long Crams rock	ż	88 92	\$10.87	-\$1.01	-9.3%
			3	\$20.50	\$21.00	-80.50	-2 4%
	A22	Sub-Loop Distribution Per 2-Wire Analog Voice Grade Loop	1	\$10.57	\$7.81	12.96	38.9%
	A2.2	200-Took paraboton, say 5,44/4 Mained April Guine Confe	ż	\$13.38	\$10.27	\$3.11	30.3%
			3	\$33.37	\$19.85	\$13.52	68.1%
		O. b. Loon Oles Brothe flow & Miller Annalog Malan Consta Lane	1	\$14.87	38.12	\$8.78	83.1%
	A 2.11	Sub-Loop Distribution Per 4-Wire Analog Voice Grade Loop	ž	\$32.09	\$10.96		192.8%
			3			#21.13	
			3	\$43.02	\$21.18	\$21.84	103.1%
	A.2.14	2-Wire Intrabuilding Network Cable (INC)		\$3.96	\$3,50	\$0.46	13 1%
	A2.15	4-Wire intrabuilding Network Cable (INC)		\$9.37	\$8.66	\$2.89	40.3%
		4 this timestand inside sent his.			45.55		
	A 2.24	Sub-Loop - Per 4-Wire Analog Voice Grade Loop / Feeder Only	1	\$17.50	\$17.26	\$0.24	1.4%
		,	2	\$29.30	\$23.29	\$8.10	26.2%
			3	\$56.70	346 00	\$10.70	23.8%
	A.2.26	Sub-Loop - Per 2-Wire ISDN Digital Grade Loop / Feeder Only	1	\$18.78	\$17.04	\$1.72	10.1%
			2	\$24.14	\$23.00	\$1.14	5.0%
			3	\$47.58	\$44.43	\$3.16	7.1%
	A.2.29	Sub-Loop - Per 4-Wire 56 or 54 Kbps Digital Grade Loop / Feeder Only	1	\$18.58	\$16.66	-\$0.12	-0.6%
		And stock to a true as at an order pulling or any order of any	ż	\$27.02	\$25.12	\$1.90	7.6%
			3	229.60	\$48.71	-\$19.02	-39.0%
	A.2.30	Sub-Loop - Per 2-Wite Copper Loop / Feeder Only	•	\$6 27	87.25	-\$0.96	-13.6%
	100,00	Sales and the state of the sales of the sale	ż	\$5.58	\$9.79	44.21	-43.0%
			3	\$4.30	\$18.92	-314.62	-77.3%
	A.2.32	Sub-Loop - Per 4-Wire Copper Loop / Feeder Only		\$12.01	\$14.22	42.21	-16.5%
	71,000	OLD Last (Or 1 1114 deploy and) 1 and Oly	ź	\$9 85	\$19.20	\$9.35	-48 7%
			3	\$9.16	\$37.09	427.01	-78.2%
	A.2.40	Sub-Loop - Per 2-Wire Copper Loop / Distribution Only	ĭ	\$9.12	\$6.25	82 87	45.9%
		CONTRACTOR	ż	\$10.93	\$8.44	\$2.49	29.5%
			3	\$15,00	\$15.30	-80.30	-1.8%
	A.2.42	Bub-Loop - Per 4-Wire Copper Loop / Distribution Only	ĭ	\$12.11	\$6.20	36,91	132.9%
	A.Z.42	SOURCOOD . Let 4-1416 Orither English regulations of sh	ż	817.39	\$7.02	\$10.37	147.7%
			3	\$24,66	\$13.55	\$11,13	82.1%
			•	********	410.00	4.1110	4. 17
A4	4WIRE A	NALOG VOICE GRADE LOOP					
	A.4.1	4-Wire Analog Voice Grade Loop	1	\$29,36	\$23 62	\$8.97	27.7%
		,	2	859.21	\$31 07	\$28.14	90.6%
			3	\$97.26	\$60.02	\$37.24	62.0%
A.F	2-WIRE 18 A.S.1	DN DIGITAL GRADE LOOP	1	\$26.14	\$21.76	\$3.38	15.5%
	441	2-Wire ISDN Digital Grade Loop	ģ	\$36.33	229.39	\$5.05	20.3%
			3	\$47.42	866.70	\$10.88	18 8%
		Laurence Control Charmed	1	997.42 925.14	\$21.76	\$3.36	15.5%
	A.5.6	Universal Digital Channel	ż	\$35.33	\$29.38	25.95	20.3%
			3	\$67.42	\$56.70	\$10.85	18.8%
			3	401 42	400.70	410 00	100.070

		Zene	Recurring	Blaff Req (9/11/01)	Difference	% Difference
A.6	2-WIRE ASYMMETRICAL DIGITAL SUBSCRIBER LINE (ADSL) COMPATIBLE LOOP	1	\$14.49	\$12.65	\$1.84	14.5%
~**	5-MILE NO LIMITE MIGHT PARTIES AND MILE AND AND MILE TO ALL	ż	\$15.62	\$17.08	-\$1,46	-8.5%
		3	\$19.40	\$33,00	-\$13.60	-41,2%
	•	•	\$10.40	200.00	41000	71.24
A.7	2-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP	1	\$12.80	\$9 97	\$2.83	28.4%
		2	\$13 55	\$13,46	\$0.09	0.7%
		3	\$16.23	\$26.00	-\$8.77	-37 8%
A.8	4-WIRE HIGH BIT RATE DIGITAL BUBBCRIBER LINE (HDBL) COMPATIBLE LOOP	1	\$20.81	\$16.69	\$5.12	32.6%
		2	\$20.72	\$21,17	-\$0.46	-2.1%
		3	\$20.36	\$40.90	-\$20.54	-60.2%
A.P	4-WIRE D61 DIGITAL LOOP					
~*	A.9.1 4-Wire DS1 Digital Loop	1	\$95,13	\$73,44	\$21.69	29.5%
	ALEXT ALEXE DOLL DISSING COOP	ż	\$140.36	\$69.13	\$41.23	41.6%
		3	\$332.57	\$191,51	\$141.06	73.7%
	A.9.2 Sub-Loop Feeder Per 4-Wire DS1 Digital Loop	1	850.71	\$46.27	84.44	9.6%
	X92 Sub-Loop Feeder For 4-Wase Do1 Depter Loop	ż	\$89.84	340.27 342.45		
		3	\$291.77		\$27.21	43.6%
		•	\$291.77	\$120. 65	8171 12	141.8%
A.10	4-WIRE 19, 56 OR 64 KBPS DIGITAL GRADE LOOP					
	A.10.1 4-Wire 19, 56 or 54 Kbps Digital Grade Loop	1	\$31.42	\$26.39	\$5.03	19.1%
		2	\$49.21	\$35.62	\$13.69	38.2%
		3	\$61.39	\$68.82	47.43	-10.8%
A.12	CONCENTRATION PER SYSTEM PER FEATURE ACTIVATED (QUTSIDE CENTRAL OFFICE)					
	A.12.5 Unbundled Sub-loop Concentration - USLC Feeder Interface	1	\$71.04	\$45.17	\$26.87	57.3%
		2	\$84.15	\$80.97	\$23,18	38.0%
		a	\$241.84	\$117,79	8124.06	105.3%
A.13	2-Wire COPPER LOOP					
A. 13	A.13.1 2-Wire Copper Loop - short	1	\$14,49	\$12.65	\$1 84	14 5%
	Particle and the company of the comp	ż	\$16.62	\$17.08	-\$1.46	-8.5%
		3	\$19.40	\$33.00	-\$13.60	-41.2%
		J	419.70	\$35.00	-912.00	7128
	A.13.7 2-Wire Copper Loop - long	1	\$24.66	\$37.07	-\$12.41	-33.5%
		2	\$30.55	\$50.04	-\$19.40	-38.9%
		3	\$71.30	\$96.67	-425.20	-25.2%
•	A.13.12 2-Wire Unbundled Copper Loop - Non Deelgn	1	\$13.70	New	WALUE	EVALUE
		2	\$15.10	New	WALUE	#VALUE
		3	\$20.32	New	#VALUE!	#VALUE!
A14	4-WIRE COPPER LOOP					
A.17	A.14,1 4-Wire Copper Loop - short	1	\$22.86	\$18.03	\$4.82	26.7%
		2	\$26,92	\$24.34	\$1 58	8.5%
		3	\$32.54	\$47.02	-414.40	-30.8%
	A.14.7 4-Wire Cooper Loop - long	1	\$46.11	\$64.52	-\$18.41	-28.5%
	· cofe and conf	2	\$79.36	\$87.00	47.74	-8.9%
		3	\$110.46	\$106.25	457.79	-34.3%
A.15	UNBUNDLED NETWORK TERMINATING WIRE (NTW)					
W. IO	A.16 1 Unburided Network Terminating Wire (NTW) per Pair		\$.4572	\$0.2286	80,23	100.0%

		Zone	Recurring	8teff Red (9/11/01)	Difference	% Difference
A.16	HIGH CAPACITY UNBUNDLED LOCAL LOOP		\$386 88	\$8.882	\$0 OD	0.0%
	A.16.1 High Capacity Unbundled Local Loop - DS3 - Feotility Termination A.16.2 High Capacity Unbundled Local Loop - DS3 - Per Mile		\$10.92	\$10.32	\$0.00	0.0%
	A 16 15 High Capacity Unbundled Local Local - 533-1 - Facility Termination		\$426.60	\$426.60	\$6.00	0.0%
	A.16.16 High Capacity Unbundled Local Loop - 9TS-1 - Per Mile		\$10.92	\$10.82	\$0.00	0.0%
A.18			A			
	A.18.1 Channelization - Channel System OS1 to DS0		\$146.77 \$2.10	\$146.77 \$2.10	\$0.00 \$0.00	0.0%
	A 18 2 Interface Unit - Interface OS1 to DS0 - OCU-DP Card A 18.3 Interface Unit - Interface OS1 to DS0 - SRITE Card		\$3.66	\$3.66	\$0.00	0.0%
	A.18.4 Interface Unit - Interface DS1 to DS0 - Voice Grade Card		\$1.38	\$1 38	\$0.00	0.0%
	A.18.5 Channelization - Channel System DS3 to DS1		\$211 19	\$211.19	\$0.00	0.0%
	A.18.8 Interface Unit - Interface DS3 to DS1		\$13.76	\$13.76	\$0.00	0.0%
A.20	HYBRID COPPER/FIBER XDSL - CAPABLE LOOP					
	A.20. System DSLAM with Administrative DS1 A.20.1 Hybrid Copper Fiber xDSL - Capable Loop		\$150,08			
	A.20.3 16 - Port BSLAM, per DSLAM		\$374.90			
		1 -	\$624.97	New		
			\$174.92			
		_	\$374.90			
		2	\$549.82	Now		
			\$420.75			
			\$374 90			
		3	\$795.85	New		
	A.20,DS1 Copper/Fiber DS1 Into DSLAM					
	A 20.1 Hybrid Copper/Fiber xDSL - Capable Loop	1	\$150.08	Now		
		2	\$174.92	New		
		9	\$420.75	New		
	A.20.2 Hybrid Copper/Fiber D81, per D81					
	A.20.Active End User Activation	1	\$10.67	New		
	A.2 2 Sub-Loop Distribution Per 2-Wire Analog Voice Grade Loop	2	\$13.38	New		
		3	\$33,57	New		
8.0	UNBURDLED LOCAL EXCHANGE PORTS AND FEATURES					
B. 1	EXCHANGE PORTS					
	B.1.1 Exchange Ports - 2-Wire Analog Line Port (Res., Bus., Centrex, Coin)		\$1.40	\$1.40	\$0.0\$	0.0%
	B.1.3 Exchange Ports - 2-Wire DIO Port		86.73 854.95	\$8.73 \$54.95	\$0.00 \$0.00	0.0%
	9.1.4 Exchange Ports - DDITS Port B.1.5 Exchange Ports - 2-Wire ISON Port		\$6.83	36.63	\$0.00	0.0%
	B 1 6 Exohange Ports - 2-Wire ISON DS1 Port		\$82.74	\$82.74	\$0.00	0.0%
D.0	UNBUNDLED TRANSPORT AND LOCAL INTEROFFICE TRANSPORT					
5.2	INTEROFFICE TRANSPORT - DEDICATED - VOICE GRADE					
	D.2.1 Interoffice Transport - Dedicated - 2-Wire Voice Grade - Per Mile		8.0001	\$0,0001	80.00	0.0%
	D.2.2 Interettice Transport - Dedicated - 2- Wire Voice Grade - Facility Termination		\$26.32	\$26.32	\$0.00	0.0%
D.3	INTEROFFICE TRANSPORT - DEDICATED - DSG - \$464 KBPS		A 000	40.000	\$0.00	0.0%
	D.3.1 Interoffice Transport - Dedicated - DS0 - Per Mile		\$.0091 \$18.44	\$0.0091 \$18.44	\$0.00 \$0.08	0.0%
	D.3.2 Interoffice Transport - Dedicated - D60 - Facility Termination		410.77	410.74	40.00	
D.4	INTEROFFICE TRANSPORT - DEDICATED - D61		\$.1856	80,1856	\$0.00	0.0%
	D.4.1 Interoffice Transport - Dedicated - DB1 - Per Mite D.4.2 Interoffice Transport - Dedicated - DB1 - Facility Termination		\$86.44	\$86.44	\$0.00	0.0%
	71-4-5 RESIDENCE HERSPORT - Decisions - Co.) - Catality Lettinistical		******	*******	7.00	

			Zone	Recurring	8tmlf Rec (9/11/01)	Difference	% Difference
0.5	LOCAL CHANNEL - D 5,1 Local Civi	DEDICATED nnel - Dedicated - 2 Wire Voice Grade	1	\$22.97	\$21.94	\$1.03	4.7%
			2 3	\$46.76	\$29 62 \$57.22	\$17 14	57 9%
	D 5.2 Local Cha	umal - Dadicated - 4-Wire Voice Grade	1 2	\$24.08 \$47.87	\$22.81 \$30.79	\$1.27 \$17.08	5.6% 66.6%
			3		\$59 48	• • •	
	D.5 24 Local Cha	nnel - Dedicated - DS1	1 2	\$52.90 \$68.69	\$35.28 \$47.83	\$17.62 \$21.06	49 9% 44 2%
			3	\$275.93	\$92.01	\$180.92	109 8%
D.5		ISPORT - DEDICATED - DSS					
		- Transport - Declicated - DS3 - Per Mills - Transport - Declicated - DS3 - Facility Yermination		\$3,67 \$1,071.31	\$5.87 \$1,071.00	\$0.00 \$0.31	0.0% 0.0%
D.10		ISPORT • DEDICATED - STS-1 • Transport - Decicated - STS-1 - Per Mile		\$3.87	23.97	\$0.00	0.0%
		Transport - Declosed - STS-1 - Par Mae Transport - Declosed - STS-1 - Facility Termination		\$1,058.07	\$1,056.00	\$0.07	0.0%
D,12		REPORT - DEDICATED - 4-WIRE VOICE GRADE Transport - Dedicated - 4-Wire Voice Grade - Per Mile		\$.0091	80,0091	80 00	0.0%
		Transport - Decicated - 4-Wire Voice Grade - Facility Termination		\$22.58	\$22,58	\$0.00	0.0%
L.1	ACCESS DAILY USA			3,001658	80.014391	-\$0.01	-87.1%
		seasge Processing, por message da Transmission (CONNECT:DIRECT), per message		\$.00012460	\$0.0001297	\$0.00	4 0%
M .1		IAL DAILY UBLAGE FILE I Optional Daily usage File: Message Processing, Per Message		\$.236116	\$0.229109	\$0.01	2.6%
M.2	OPTIONAL DAILY U			\$.0000071	6 0.0000071	20 00	0.0%
		Daily Usage File: Recording, per Message Daily Usage File: Message Processing, Per Message		\$ 002505	\$0.00684	\$0.00	-63.4%
		Daify Usage File: Message Processing, Per Magnetic Tape Provisioned Daily Usage File: Data Transmission (CONNECT:DIRECT), Per Message		\$36.91 \$.00010376	\$48,96 \$0,0001061	-\$13 06 \$0 00	-25.7% -4.0%
P 0	UNBUNDLED LOOP	COMBINATIONS					
P.1		DE LOOP WITH 3-WIRE LINE PORT (RES, BUS, COIN, CENTREX, PEX) 3 LOOPPOR Combo (Res, Bus, Coin)					
		lire Voice Grade Loop hange Port - 2-Wire Line Port		\$13,75 \$1,17	\$12,94 \$1,17		
	P.1 2 EM	mulge ron - 2-vise time ron	1	814.92	\$14.11	\$0.81	5.7%
				\$18.23	\$17.06		
			2	\$1,17 \$19,20	\$1.17 \$18.23	\$1.17	6.4%
				848,00	831.87		
				\$1.17	\$1.17		
			3	\$50.16	\$33.04	\$17.12	51.8%
		3 Loop/Port Combo (PBX) //re Voice Grade Loop		\$13.75	\$12.94		
		hange Port - 2-Wire Line Port	,	\$1.17	\$1.17		
			1	\$14.62	\$14.11		
				\$18.23 \$1.17	\$17.06 \$1,17		
			2 '	\$19.40	818.23	\$1.17	6.4%
				\$46.99	\$31 87		
			3	\$1.17 \$50.16	\$1.17	\$17.12	61.8%
			3	agu.10	\$23.04	#17.1Z	01.076

	P 1.CENTF2-Wire VG Loop/Port Combo (Centrex)	Zone	Becurring	Staff Rec (9/11/01)	Difference	% Difference
	P 1.CENTF2-Wire Volce Grade Loop P 1 1 2-Wire Volce Grade Loop		\$13.75	\$12.94		
	P 1.2 Exchange Port - 2-Wire Line Port	_	\$1 17	\$1.17		
	•	1	\$14.92	\$14.11	\$0.81	6 7%
			\$18 23	\$17.06		
		_	\$1_17	\$1.17		
		2	\$19.40	\$18 23	\$1.17	6 4%
			\$48.99	\$31.87		
		. •	\$1 17	\$1,17		***
		3 -	\$60 16	\$33.04	\$17 12	51.8%
P. 3	2-WIRE VOICE GRADE LOOP WITH 2-WIRE DID TRUNK PORT					
	P.3 2-Wire VG Loop/2-Wire DID Trunk Port A.1.2.2-Wire Analog Voice Grade Loop - Service Level 2		\$16.79	\$23.21		
	P.3 2 Exchange Ports - 2-Wire DID Port for Combinations		\$8.71	\$8,71		
	LT & CYCLE COMP. S. ASSED IN LOST OF COMPONENTIAL	1 *	\$26.50	\$31.92	-\$8.42	-20.1%
			\$21 96	\$28.28		
			38 71	88,71		
		2 -	\$30.68	\$38.50	-\$6.31	-17.1%
			\$52.29	\$46.63		
			\$8.71	\$8.71		
		3 -	\$61.00	\$56.24	\$5.78	10 4%
P.4	2-WIRE ISON DIGITAL GRADE LOOP WITH 2-WIRE ISON DIGITAL LINE SIDE PORT P 4 ZW ISON Digital Grade Loop/ZW ISON Digital Line Side Port		\$19 87	824.71		
	P.4.1 2-Wire ISDN Digital Grade Loop P.4.2 Exchange Port - 2-Wire ISDN Line Side Port		\$7 38	\$7.38		
	P.4.2 Exchange Port - 2-Maile Corna Francoine Loui	1 *	\$27.25	\$32.00	-\$4.84	-15.1%
			\$29.25	\$30.77		
			\$7.38	\$7 38		
		2	\$36.63	\$38. 15	-\$1.52	-4.0%
			\$62.42	\$52,56		
			\$7.38	\$7.38	29,68	15.4%
		3	\$69.80	\$50.94	43.55	10.476
P.6	4-WIRE DS1 DIGITAL LOOP WITH 4-WIRE ISON DS1 DIGITAL TRUNK PORT					
	P 5 4W DS1 Digital Loop/4W ISDN DS1 Digital Trunk Port A.9.1 4-Wire DS1 Digital Loop		895,13	\$156.18		
	B.1.6 Exchange Poits - 4-Wire ISON DS1 Port		\$82.74	\$82.74		
	O' HA CHAMBA I AIM A THUR CONT PORT I AND	1 '	\$177.86	\$238,92	-\$61 OE	-25.6%
			\$140.36	\$161.87		
			\$82.74	\$82,74		
		2	\$223.00	\$264.61	-\$41.62	-15.7%
			\$332.67	\$274.25		
			\$82.74	\$82.74		
		3	\$415.91	\$366.98	\$58.32	16.3%

			Zone	Recurring	Staff Rec (9/11/01)	Difference	% Difference
P.6	P.6-1	E0 2-WIRE VOICE GRADE LOOP WITH DEDICATED D81 INTEROFFICE TRANSPORT Final 2W VG in 081 A 12 2-Wire Analog Voice Grade Loop Service Level 2 D.4 2 Interoffice Transport - Dedicated - D51 - Facility Termination A 18 1 Channellation - Channel System 051 to D50 A 18 4 Interface Unit - Interface Q51 to D50 - Voice Grade Card		\$16.79 \$88.44 \$146.77 \$1.38			
		William Historica crim - Historica (22), or 1200 - A construence crime	1	\$253.58 \$21.98	\$251 09	\$2 29	0.9%
			2	\$88 44 \$146 77 \$1.38 \$258.57	\$256 15	\$2.41	0.9%
				\$52.29 \$86.44 \$146.77			
			3	\$1.38 \$256.88	\$274,41	\$14.47	5.3%
	P 8-2	Per Mile D.4.1 (reeroffice Transport - Dedicated - D81 - Per Mile		\$.1866	\$0.1868	\$0.00	0.0%
	P 6-3	Additional 2W VG in same DS1 A.1.2.2-Wire Ansiog Votes Grade Loop - Service Level 2 A.18.4 Interface Unit - Interface OS1 to DS0 - Votes Grade Card	1	\$16.79 \$1.38 \$18.17	\$15.88	\$2.29	14.4%
			2	\$21.98 \$1.38 \$23.36	\$20.96	\$2 41	11 5%
			3	\$52.29 \$1.38 \$53.67	\$39 20	\$14.47	36 9%
P.7	P.7-1	ED 4-WHIE VOICE GRADE LOOP WITH DEDICATED DISTINTEROFFICE TRANSPORT First 4W VG in DS1 A.4.1 4-Wire Analog Voice Crude Loop D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination A.18.1 Channetzation - Channet System DS1 to DS0 A.18.4 Interface Unit - Interface DS1 to DS0 - Voice Grade Card		\$29.39 \$86.44 \$146.77 \$1.38			
			1	\$265,90 \$59,21	\$250.61	\$6.34	2 5%
			2	\$88.44 \$146.77 \$1.36 \$295.50	326 7.86	\$28.14	10.5%
			,	567 26 \$88.44 \$148.77			
			3	\$1,36	8296.61	\$37.24	12.6%
	P.7-2	Per Mita D.4 1 Interoffice Transport - Dedicated - DS1 - Per Mile		\$.1866	80.1866	\$0.00	0.0%

			Zone	Becurring	Staff Rec (9/11/01)	Difference	% Difference
	P 7-3	Adultional 4W VG in serine DS1 A.4.1 4-Wire Analog Voice Grade Loop A.18 4 Interface unit - Interface CS1 to DS0 - Voice Grade C4rd	, -	\$29.39 \$1.08 \$30.77	\$24,40	\$6.37	26.1%
			2 .	\$59.21 \$1.38 \$50.59	\$32 46	\$28.14	96 7%
			3	\$97.26 \$1.38 \$98.84	\$61.40	\$37.24	60.7%
P.8	EXTENDE P 8-1	20 4-WIRE 56 OR 64 XEPS DIGITAL LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT Final AW 56 / 64 in DS1 A.10 1.4-Wire 19, 56 or 64 Kbps Digital Grade Loop D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination A.18.1 Charmelization - Charmel System DS1 to DS0 A.18.2 Interface Unit - Interface DS1 to DS0 - OCU-DP Card	, .	\$31.42 \$88.44 \$146,77 \$2.10 \$268,73 \$49.21 \$88.44 \$146,77	\$263,70	\$6 03	1.9%
			2	\$2.10 \$286.62 \$61.39 \$68.44 \$146.77 \$2.10	\$272.93	\$13.59	5.0%
			3	\$298.71	\$306.13	-87.42	-2.4%
	P.8-2	Per Mile 0.4.1 interoffice Transport - Dedicated - D61 - Per Mile		\$.1866	\$0.1866	\$0.00	0.0%
	P.8-3	Additional 4W 56 / 64 in same DS1 A.10.1 4-Wire 19, 56 or 64 Kbps Digital Glads Loop A.18.2 Interface Unit - Interface DS1 to DS0 - DCU-DP Card	1	\$31.42 \$2.10 \$33.62	\$28.46	95.03	17.7%
			2	\$49.21 \$2.10 \$51.31	\$37.72	\$13.66	96.0%
			3	\$2,10 \$2,10	\$70.92	-67.43	-10.5%

P.11	EXTENDE	D 4-Wire det digital Loop with dedicated det interoffice transport	Zone	Recurring	Staff Rec (9/11/01)	Difference	% Difference
	P 11-1	Fixed A.9.1 4-Wire DS1 Digital Loop D 4.2 interorfice Transport - Dedicated - OS1 - Facility Terminetion	1	\$96.13 \$86.44 \$183.57	\$161 88	\$21 69	13.4%
			2	\$140.36 \$88.44 \$228.80	\$187.57	\$41 23	22 0%
			3	\$552.67 \$68.44 \$421.01	\$276.95	\$141.08	50.4%
	P 11-2	Per Mile D 4.1 interoffice Transport - Dedicated DS1 - Per Mile		8,1868	\$0.1866	\$0.00	0.0%
P.18	EXTENDE P 13-1	WIRE DB1 DIGITAL LOOP WITH DEDICATED DG1 INTEROFFICE TRANSPORT First DB1 in DB3 A.9.1 4-Wire DS1 Digital Loop D.6.2 interoffice Transport - Dedicated - DB3 - Facility Termination A.18.5 Chernelization - Chemnel System DB3 to DB1		\$96.13 \$1,071.31 \$211.19			
		A.18.5 Interface Unit - Interface DS3 to DS1	1	\$13.76 \$1,391.39 \$140.36	\$1,369.39	\$22 00	1 6%
			2	\$1,071.01 \$211.19 \$13.76 \$1,436.62	\$1,395.08	\$41.54	3.0%
				\$302.67 \$1,071.31 \$211.19 \$13.76			
			3	\$1,828.83	\$1,467.48	\$141.37	9 5%
	P.13-2	Per Mile D.8.1 Interoffice Transport - Dadicated - DS3 - Per Mile		\$3.87	\$3.67	\$0.00	0.0%
	P.13-3	Additional DS1 in serne DS3 A 9.1 4-Wire DS1 Digital Loop A 18.5 Interface Unit - Interface DS3 to DS1	1	\$95.13 \$13.76 \$108.66	\$87.2 0	\$21.00	24.9%
			2	\$140.35 \$13,78 \$154.12	\$112.80	\$41.23	36.5%
			3	\$332.67 \$13.76 \$346.53	\$206.27	6141.06	64.7%
P.1\$	4-WIRE D	81 DIGITAL LOOP WITH DOTS PORT 4-Wise DS1 Digital Loop with DDTS Port		\$96.13			
		A.9.1 4-Wire D81 Digital Loop B 1.4 Exchange Porte - DDITS Port	1	\$54.95 \$150.07	\$128 38	821.66	16.9%
			2	\$140.36 \$54.95 \$195.30	8 154.08	\$41.22	28.8%
			3	\$302.57 \$54.95 \$367.52	\$246.46	\$141.06	67. 2%

P.16	2-WERE L	OOP/ 2 WIRE VOICE GRADE IO TRANSPORT/ 2 WIRE PORT	Zone	Heouring	Staff Rec (\$/11/01)	Ottlerence	% Difference
	P 16-1	Fixed A 1.2 2 Wire Analog Voice Grade Loop - Service Level 2 D 2 2 Intercritics Transport - Declosited - 2 - Wire Voice Grade - Facility Termination B 1 1 Exchange Ports - 2 - Wire Analog Lins Port (Res., Bus., Cartifax, Coln)	, -	\$16.79 \$25.02 \$1.40 \$43.52	\$41.22	\$2.30	5 8%
			2	\$21 98 \$26.32 \$1 40 \$48.70 \$52.29	\$46.29	\$2.41	5 2%
	P 18-2	Per Mile	3 -	\$25.32 \$1.40 \$70 02	\$64.54	\$14.46	22.4%
		D.2.1 Interoffice Transport - Dedicated - 2-Wire Voice Grade - Per Mile		\$.0061	\$0.0061	\$0.00	0.0%
P.23	P.20-1	ED 2-WIRE VOICE GRADE LOOP/2 WIRE VOICE GRADE INTEROFFICE TRANSPORT Fixed A.1.2.2-Wire Analog Voice Grade Loop - Service Level 2 D.2.2 Interoffice Transport - Dedicated - 2- Wire Voice Grade - Facility Termination	1 -	\$16.79 \$25.32 \$42.12 \$21.98 \$25.32 \$47.30	\$39 82 \$44,89	\$2.50 \$2.41	5,6% 5.4%
			3	\$52.29 \$25.32 \$77.61	\$62.14	\$14 47	22.9%
	P.23-2	Per Mile D.2.1 Interoffice Transport - Dedicated - 2-Wire Voice Grade - Per Mile		\$.0091	\$0 0001	\$0.00	0.0%
P.24	P.24-1	ED 4-WIRE VOICE GRADE LOOP/ 4 WIRE VOICE GRADE INTEROFFICE TRANSPORT Fixed A.4.1 4-Wire Analog Voice Grade Loop D.12.2 Interoffice Transport - Dedicated - 4-Wire Voice Grade - Facility Termination	1 ·	\$29,39 \$22,58 \$51,97 \$69,21 \$22,66 \$41.78 \$47,28 \$22,56 \$119,84	\$45.60 \$63.65 \$82.60	\$6.37 \$26.13 \$37.24	14.0% 82.4% 46.1%
	P.24-2	Per Mile D.12.1 Interoffice Transport - Dedicated - 4-Wire Voice Grads - Per Mile		8.0001	\$0.0091	\$0.00	0.0%

P.25	EXTENDE!	D DS3 DIGITAL LOOP WITH DEDICATED DS3 INTEROFFICE TRANSPORT	Zone	Recurring.	Staff Rec (W11/01)	Difference	% Ofference
	P 25-1	Fixed A 16.1 High Capacity Unbunded Local Loop - D83 - Facility Termination D.8.2 Interoffice Transport - Dedicated D63 - Facility Termination		\$386.86 \$1,071.31 \$1,456.19	\$1,457 68	\$0.01	9.0%
	P.25-2	Per Mile - Interoffice O.A.1 Interoffice Transport - Dedicated - DS3 - Per Mile		\$3.87	\$3.87	\$0.00	0.0%
	P.25-3	Per Mile - 0.53 Loop A. 16.2 High Capacity Unbundled Local Loop - 0.63 - Per Mile		\$10.92	\$10.92	\$0.00	0.0%
P.24	P.26-1	D STS1 DIGITAL LOOP WITH DEDICATED STS1 INTEROFFICE TRANSPORT Fixed A.18.15 High Capacity Unbundled Local Loop - STS-1 - Facility Termination D.10 2 Interoffice Transport - Dedicated - STS-1 - Facility Termination		\$426.60 \$1,056.07 \$1,482.67	\$1,482,60	\$0.07	0.0%
	P.26-2	Per Nille - Interoffice D 10.1 Interoffice Transport - Dedicated - STS-1 - Per Mile		\$3.87	\$3.87	\$0.00	0.0%
	P 26-3	Per Mile - Loop A.16.16 High Capecity Unbundled Local Loop - STS-1 - Per Mile		\$10.92	\$10.82	\$0.00	0.0%
P.50		81 LOOP WITH CHANNELIZATION WITH PORT First Voice Grade in D81 A.B.1.4 Wire D81 Digital Loop B.1.1 Exchange Ports - 2-Wire Analog Line Port (Res., Bus., Centrex, Coin) O.1.1 D4 Channel Bank Inside CO - System O.1.4 Unbundled Loop Concentration - POTS Cerd	2	\$95, 13 \$1.40 \$118.06 \$.6402 \$2(5.23) \$140.36 \$1.40 \$118.06 \$.6402 \$260.46 \$332.57 \$1.40 \$118.06 \$.6402 \$482.67	\$190.54 \$219.23 \$311.61	\$21.66 \$41.23 \$141.08	11.2% 18.6% 45.3%
	P.50.VQ-4	2. Additional Voice Grade in earne DS1 8.1.1 Exchange Ports - 2-Wire Analog Line Port (Res., Bus., Centrex, Coin) Q.1.4 Unbundled Loop Concentration - POTS Card		\$1.40 \$.6402 \$2.04	\$2.04	\$0.00	0.0%
	P 50.DKD-	1 First 2-Wire D/D in D61 A.9 1-Wire D81 Dotal Loop B.1.3 Exchange Ports - 2-Wire DID Port Q.1 1 D4 Channal Bent Inside CO - 8yetem Q.1 4 Unbundled Loop Concentration - POTS Card	1	\$96.13 \$8.73 \$118.05 8.6402 \$222.05 \$140.36 \$8.73 \$118.06 8.6402 \$287.78 \$332.57 \$8.73 \$118.06 \$.6402	\$200.57 \$228.66	\$21.60 \$41.22	
			3	\$460.00	\$318.94	\$141.00	44,2%

			Zone	Recurring	5tsff Pec (9/11/01)	Difference	% Difference
	P 50 DID-2	Additional 2-Wire DID in same DS1 8 1.3 Exchange Ports - 2-Wire DID Port Q 1.4 Unbundled Loop Concentration - POTS Card		\$8.73 \$ 8402 \$4.37	39 37	\$0.00	0.0%
	P 50.ISDN	First ISDN in DS1 A.9.1 4-Wire OS1 Digital Loop B.1 5 Exchange Polis - 2-Wire ISDN Port Q.1 1 D4 Channel Bank Inside CO - System		\$96.13 \$8.83 \$118.06			
		Q.1.3 Unburnaled Loop Concentration - ISDN (Brite Card)	1	\$2.92 \$224.94 \$140.36	\$203.25	\$21.66	10.7%
			2	\$8.83 \$118.06 \$2.92 \$270.17	\$228.94	\$41.23	18.0%
				\$332.57 \$8.53 \$118.06		• • • • • • • • • • • • • • • • • • • •	
		A 4 M 1 1994 1 1994	3	\$462.36	\$32 1 32	\$141.06	43.9%
	P 50.15UN	-Additional ISDN in same DS1 8.1 5 Exchange Ports - 2-Wire ISDN Port Q.1 3 Umbundled Loop Concentration - ISDN (Brite Cerd)		\$8.83 \$2.92 \$11.75	\$11.75	\$0.00	0.0%
P.51	EXTENDE P 51-1	D 2-WIRE ISON LOOP WITH DS1 INTEROFFICE TRANSPORT First 2-Wire ISON In DS1 A.5.1 2-Wire ISON Digital Grade Loop A.2.1 Interofice Transport - Declosied - DS1 - Facility Termination		\$25.14 \$88 44			
		D.4.2 interrings - United State - Tracking variations of the Control System DS1 to DS0 A.18.3 Interface Unit - Interface DS1 to DS0 - BRITE Card	1	\$146 77 \$5 66 \$284 01	1260.63	\$3.30	1.3%
				\$36.30 \$86.44 \$146.77 \$3.66			
			2	\$274 20 \$67 42 \$88.44	\$266 25	\$5.96	2.2%
			3	\$146.77 \$3.56 \$306.29	1296.40	\$10.98	3.4%
	P.51-2	Por Mile D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		\$.1866	\$0,1856	\$0.00	0.0%
	P.51-3	Additional 2-wire ID9N in same D61 A.S.1.2-Wire ISDN Digital Grade Loop A.1.6.3 interface Unit - interface DS1 to D90 - BRITE Card	1	\$25.14 \$3.86 \$26.80	\$25.42	\$3.38	193%
			2	\$36.35 \$3.86 \$38.90	\$32.04	\$6.96	21.7%
			3	\$67.42 \$3.64 \$71.08	\$80.42	\$10.66	17.8%

			Zone	Hecuring	Staff Rec (W11/01)	Difference	% Difference
P 52	EXTENDE P 52-1	ED 4-WIRE DIST DIGITAL LOOP WITH DEDICATED STS-1 INTEROFFICE TRANSPORT					
		A 8.1 4-Wire DS1 Digital Loop D 10.2 Interrolfice Transport - Dedicated - STS-1 - Facility Termination A 18.5 Channelization - Channel System DS3 to DS1		\$95.13 \$1,066.07 \$211.19			
		A 18 8 Interface Unit - Interface D83 to OS1	1	\$13.76 \$1,376.15	\$1,354.39	\$21.76	1.6%
				\$140.36 \$1,056.07 \$211.19			
			2	\$13.76 \$1,421,38	\$1,360.08	\$41,30	3.0%
				\$332.57 \$1,056.07 \$211.19 \$13.76			
			3	\$1,813.80	\$1,472.46	\$141.14	9.6%
	P.62-2	Per Mile D.10.1 Interoffice Transport - Dedicated - STS-1 - Per Mile		\$3.87	\$3 87	\$0.00	0.0%
	P.52-9	Additional DS1 in same S1S1 A.9 1.4-Wire DS1 Digital Loop A.18.6 interface Unit - Interface DS3 to DS1	1	\$95 13 \$13 75	867.20	\$21.50	24.9%
			-	\$140.36	******	•	
			٤	\$13.76 \$164.12	\$112.89	\$41.23	38.5%
			3	\$332.57 \$13.76 \$348 \$3	\$205.27	\$141.06	66.7%
P. 53	EXTEND	ED 3-WIRE VOICE GRADE LOOP WITH DEDICATED OBT INTEROFFICE TRANSPORT W/ 3/1 MUX Finit 2-Wire VQ In Finit DS1 to DS3					
	r.ad-i	A 1.2.2-Wire Analog Votos Grade Loop - Service Level 2 0.4.2 Intendifice Transport - Dedicated - DS1 - Facility Termination A.18.5 Channelization - Channel System DS3 to DS1		\$16.79 \$86.44 \$211.19 \$13.76			
		A 18.6 Interface Unit - Interface DS3 to DS1 A 18.1 Champetzation - Champet System DS1 to DS0 A 18.4 Interface Unit - Interface DS1 to DS0 - Voice Grade Card		\$146.77 \$1.38			
			1	\$478.34	\$476.04	\$2.30	0.5%
				\$21.98 \$86.44 \$211.19 \$63.76			
			2	\$146.77 \$1.38 \$463.52	8481,11	\$2.41	0.5%
			-	\$62.29	4		
				\$98.44 \$211.19 \$13.76 \$146.77			
			3	\$1.38 \$613.84	\$400.56	\$14.48	2.9%

			Zone	Recurring	Staff Rec (9/11/01)	Difference	% Difference
	D 53-2	Per Mile per DS1 O 4.1 interoffice Transport - Dedicated - DS1 - Per Mile		\$.1866	\$0.1856	\$0.00	0.0%
	P 53-3	Additional 2-Wire VG in seme DB1 A.1 2 2-Wire Analog Voice Grade Loop - Service Level 2 A.18.4 Interface Unit - Interface DB1 to DB0 - Voice Grade Card	1	\$16.79 \$1.38 \$18.17	\$15.85	\$2.29	14.4%
			2	\$21.98 \$1.38 \$23.36	\$20.96	\$2.41	11.6%
			3	\$52.29 \$1,36 \$53.67	\$39.20	\$14.47	36.9%
	P 53-4	Additional D81 in earne D83 D.4.2 Interoffice Transport - Dadicated - DS1 - Facility Termination A.18.1 Channetization - Channet System D81 to D80 A.18.5 Interface Unit - Interface D83 to O81		\$88.44 \$145.77 \$13.76 \$248.97	\$248.97	\$0.00	0.0%
P.84	EXTENDE P.54-1	ED 4-WIRE VOICE GRADE LOOP WITH DEDICATED 061 INTEROFFICE TRANSPORT W/3/1 MUX First 4-Wire VG in First D61 in D63 A.4.1 4-Wire Analog Voice Grade Loop D.4.2 Interoffice Transport - Dedicated - D51 - Facility Termination A.16.5 Channelization - Channel System 063 to D61 A.16.6 Interface Unit - Interface D63 to D61 A.16.1 Channelization - Channel System D61 to D60 A.16.4 Interface Unit - Interface D63 to D61 A.16.4 Interface Unit - Interface D63 to D60 A.16.4 Interface Unit - Interface D63 to D60 - Voice Grade Card		\$29.39 \$88.44 \$211,19 \$13,76 \$146,77 \$1,38			
			1	\$490.94 \$59.21 \$88.44 \$211.19 \$13.76 \$146.77	\$484.5 6	\$6.36	1.3%
			2	81.38 \$50.76 \$07.26 \$88.44 \$211.19 \$13.76 \$146.77	\$490.61	\$26.15	5.7%
			3	\$1.38 \$388.81	\$521.56	\$3 7.25	7.1%
	P.54-2	Per Mile per D81 D 4.5 Interoffice Transport - Dedicated - D61 - Per Mile		\$ 1050	80.1056	80.00	0 0%
	P.64-3	Additional 4-Wire VG in earne D81 A 4.1 4-Wire Analog Voice Grade Loop A 18.4 Interface Unit - Interface D61 to D80 - Voice Grade Card	1	\$29.36 \$1.38 \$30.77	\$24.40	\$0.57	26.1%
			2	\$59.21 \$1.36 \$80.66	\$32.46	829. 14	86.7%
			3	\$97.26 \$1.38 \$98.64	\$61.40	\$37.24	60.7%

			Zone	Recyrring	Staff Rec (9/11/01)	Difference	% Difference
	P 54-4	Additional DS1 in same DS3 D 4.2 interoffice Transport - Dedicated - D81 - Facility Termination A,18.1 Channetosation - Channel System O81 to D60 A,18.3 interface Unit - Interface DS3 to DS1		\$88.44 \$146.77 \$13.76 \$248.97	\$248.97	\$0.00	0 0%
P.55	EXTENDE P 55-1	ID 4-WIRE 56 OR 64 KBP6 DIGITAL LOOP WITH DEDICATED D61 INTEROFFICE TRANSPOR First 4-Wire in First O61 in D63	T W/ 3/1 MUX				
		A.10.1 4-Wire 19, 50 or 64 Kbps Digital Grade Loop D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination A.18.6 Channelization - Chennel System DS3 to DS1 A.18.6 Interface Unit - Interface DS3 to DS1 A.18.1 Channelization - Channel System DS1 to DS0		\$31.42 \$88.44 \$211.19 \$13.78 \$146.77			
		A. 18.2 Interface Unit - Interface DS1 to DS0 - OCU-DP Card	1 .	\$400.60	\$488.65	\$5.04	1.0%
				\$49.21 \$88.44 \$211.19 \$13.78 \$146.77			
			2	\$2.10 \$511.48	\$497.86	\$13.60	2.7%
				\$61.39 \$88.44 \$211.19 \$13.76 \$146.77			
			3	\$2 10 \$523.66	\$531.00	-67 42	-1,4%
	P.65-2	Per Mile per DS1 D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		\$.185 6	\$0.1866	\$0.00	d.0%
	P.65-3	Additional 4-Wire in seme DB1 A.10.1 4-Wire in, 55 or 64 Kbps Digital Grade Loop A.18.2 Intertace Unit - Intertace DB1 to DB0 - OCU-DP Card	,	\$31.42 \$2.10 \$20.59	\$25.40	85.03	17.7%
			2	\$49.21 \$2.10 \$51.31	\$37.72	\$13.50	36.0%
			3	\$61.39 \$2.10 \$63.49	\$70.92	47.43	-10.5%
	P.55-4	Additional D61 in earne D83 0.4.2 intercritics Transport - Dedicated - D81 - Facility Termination A.18.1 Channetzation - Channel System D81 to D80 A.18 6 Interface Unit - Interface D83 to D81		\$146.77 \$13.76 \$246.97	\$248.97	\$0.00	0.0%

Staff Rec

			Zone	Securing.	(9/11/01)	Difference	% Difference	
P.56	P 58-1	ED LOOP 2-WIRE MIDN WITH D61 INTEROFFICE TRANSPORT W/ 3/1 MUX First 2-Wire in First D61 in D63						
	P-06-1	A.5 1 2-Wite ISDN Didital Grade Loop		\$25,14				
		D 4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination		\$86.44				
		A.18.5 Channelization - Channel System DS3 to DS1		\$211.19				
		A.18 6 Insertace Unit - Interface DS3 to DS1		\$13.78				
		A.18,1 Channelization - Channel System DS1 to DS0		\$146.77				
		A.18.3 Interface Unit - Interface DS1 to DS0 - BRITE Card		\$3.56				
			1	\$486.97	\$485 58	\$3.39	0.7%	
				\$36.33				
				\$86.44				
				\$211.19				
				\$13.78 \$146.77				
				\$140.77 \$3,86				
			2	\$4\$0.16	\$493.20	\$5.96	1.2%	
				867 42				
				\$88.44				
				\$211.19				
				\$13.76				
				\$146,77				
				\$3.66				
			3	\$531.25	\$620.58	\$10 67	2.0%	
	P 56-2	Per Mile per DS1						
		D.4.1 Interoffice Transport - Dedicated - D81 - Per Mile		\$.1 85 6	\$0.1866	\$0.00	0.0%	
	P 66-3	Additional 2-Wire in same OSt						
		A.5.1 2-Wire ISON Digital Grade Loop	•	825.14				
		A.18.3 Interface Unit - Interface DB1 to DS0 - BRITE Card	•	\$3.66	Ant to	***	40.00	
			1	450.00	\$25.42	\$3.36	13,3%	
				\$36.33				
			2	£3.66 £38.50	#33.04	85.95	18.0%	
			2	4.0.90	\$33.04	QC. 90	16.074	
				\$67.42				
			3	\$3.66 \$71,08	\$80.42	\$10.66	17 6%	
			3	9/1.00	\$00.42	\$10.00	17 074	
	P.58-4	Additional DS1 in same DS3		\$88.44				
		O.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination A.18.1 Channelization - Channel System DS1 to DS0		\$146.77				
		A.18.6 Interface Unit - Interface DS3 to D61		\$13.76				
				\$248.97	\$248.97	\$0.00	0.0%	

P 37 EXTENDED 4-WIRE Set On SIGNAL LOOP WITH DEDICATED DSI INTEROFFICE TRANSPORT W 37 MUX P 37-1 First -Wins DSI ID-SIS AS 1 - First -Wins DSI D-SIS ID-SIS				Zone	Песитіла	Staff Rec (9/11/01)	Difference	% Difference
D 4.2 interortica Transpoor - Oedicated - CS1 - Facility Termination A.18.6 Chromotopian - Channel System DS31 o DS1 A.18.6 Intervious - Channel System DS31 o DS1 A.18.6 Intervious - Channel System DS31 o DS1 1	P 57					• • • •		
A 18.6 Chemodization - Channel System 0.83 to 0.81								
A.18 & Invertace Unit - Invertace DS3 to DS1								
1 \$400 EZ \$300.63 \$21.09 \$.5% 3140.30 \$300.44 \$211.19 2 \$450.75 \$412.52 \$41.23 \$10.0% 2 \$450.75 \$412.52 \$41.23 \$10.0% 2 \$450.75 \$412.52 \$41.23 \$10.0% 2 \$450.75 \$412.52 \$41.23 \$10.0% 2 \$450.75 \$412.52 \$41.23 \$10.0% 2 \$450.75 \$412.52 \$41.23 \$10.0% 2 \$41.23 \$10.0% 2 \$41.23 \$10.0% 2 \$41.23 \$10.0% 2 \$41.23 \$10.0% 2 \$41.23 \$40.00 \$14.10 \$27.9% 2 \$41.23 \$40.00 \$14.10 \$27.9% 2 \$41.23 \$40.00 \$14.10 \$27.9% 2 \$41.23 \$40.00 \$14.10 \$27.9% 2 \$41.23 \$40.00 \$14.10 \$27.9% 2 \$41.23 \$40.00 \$10.00								
100 100				1		\$366.53	\$21 69	5.6%
Section Sect								
Page State								
2 3453.75 8412.62 941.23 10.0% \$329.57 \$38.44 \$211 19 \$313.75 \$3 864.56 \$30.490 \$141.06 \$27.9% P.57-2 Per Mile per DS1 D 4.1 interroffice Trensport - Dedicated - OB1 - Per Mile P.57-3 Additional 4-Wire DB1 in serie DB3 A.1.4-Wire DB1 Digital Loop A16.6 interdece DB3 to DB1 D.4.2 interoffice Trensport - Dedicated - DS1 - Facility Termination \$38.44 2 \$315.56 \$201.00 \$41.29% \$31.76 \$38.44 2 \$21.56 \$201.00 \$41.29% \$38.44 2 \$21.56 \$201.00 \$41.29% \$38.44 2 \$21.56 \$201.00 \$41.20 \$20.5% \$322.57 \$313.76 \$38.84 2 \$24.56 \$201.00 \$41.20 \$20.5% \$322.57 \$313.76 \$38.44 2 \$24.56 \$30.40 \$40.9% \$38.44 2 \$31.66 \$40.9% \$38.44 2 \$31.66 \$31.66 \$30.40 \$40.9% \$38.44 2 \$31.66 \$31.76 \$30.40 \$31.20 \$31.								
P.67-2 Per Mile per DS1 D 4.1 Interroffice Transport - Dedicated - DB1 - Per Mile P.67-3 Additional 4-Wire DB1 in series DB3 A 1.1 4-Wire DB1 (DB1 Loop A 1.16, interroffice Transport - Dedicated - DB1 - Facility Termination P.67-3 Additional 4-Wire DB1 in series DB3 A 1.1 4-Wire DB1 (DB1 Loop A 1.16, interroffice Transport - Dedicated - DB1 - Facility Termination 1 \$107-30 \$11.76 \$140.36 \$11.76 \$107-30 \$175.64 \$201.20 \$41.20 \$20.6% \$332.57 \$313.76 \$398.44 2 \$224.256 \$30.10 \$41.20 \$20.6% \$332.57 \$313.77 \$20.27; \$141.06 48.0% P.68-1 Extended 4-Wire 16 OR 64 (ORPS Digital Grade Loop D.3.2 Interoffice Transport - Dedicated - DB0 - Facility Termination 1 \$149.87 \$44.21 \$18.44 2 \$18.67 \$46.21 \$18.44 2 \$18.67 \$46.21 \$18.44 2 \$18.67 \$46.21 \$18.44 2 \$18.67 \$46.21 \$18.44 2 \$18.67 \$46.21 \$18.44 2 \$18.67 \$46.21 \$18.44 2 \$18.67 \$46.21 \$18.44 2 \$18.67 \$46.21 \$18.44 2 \$18.67 \$46.21 \$18.44 2 \$18.67 \$46.21 \$18.44 2 \$18.67 \$46.21 \$18.44 2 \$18.45 3 \$46.21 \$18.44 2 \$18.45 3 \$46.21 \$18.44 3 \$79.84 \$47.42 \$46.57 \$46.57				2		\$412.52	841.23	10.0%
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P.57-2 Per Mile per DS1 D 4.1 Interroffice Transport - Dedicated - DS1 - Per Mile P.57-3 Additional 4-M/re DS1 in terms DS3 A.9.1 - 4-M/re DS1 Digital Loop A.16 interroffice Transport - Dedicated - DS1 - Facility Termination P.57-3 Additional 4-M/re DS1 in terms DS3 A.9.1 - 4-M/re DS1 Digital Loop A.16 interface Unit - Persistence DS3 to DS1 D.4.2 interroffice Transport - Dedicated - DS1 - Facility Termination 1 \$187.25 \$175.64 \$21.09 \$12.2% \$140.35 \$13.76								
P.67-2 Per Mile per DS1 D 4.1 Interroffice Transport - Dedicated - DS1 - Per Mile P.67-3 Additional 4-Wire DS1 In serine DS3 A.9.1 4-Wire DS1 Digital Loop A.16.6 interface Unit - Interface DS3 to DS1 D.4.2 interroffice Transport - Dedicated - DS1 - Facility Termination P.67-4 Signature Control of Sig								
D 4.1 Interoffice Transport - Dedicated - D61 - Per Mile				3		\$504.90	\$141.06	27.9%
A 9.1 4-Wire D61 Digital Loop A 18.6 interface Unit - Interface D63 to D61 A 18.6 interface Unit - Interface D63 to D61 B 18.78 B 28.44 B 1		P.67-2			8,1866	\$0,1858	\$0.00	0.0%
A 18.6 interface Unit - interface DS3 to DS1 D.4.2 interoffice Transport - Decicited - DS1 - Facility Termination A 18.6 interface Unit - interface DS3 to DS1 D.4.2 interoffice Transport - Decicited - DS1 - Facility Termination 1		P.57-3	Additional 4-Wire D81 in same D83					
D.4.2 Interoffice Transport - Decicated - DS1 - Facility Termination 1 \$107.33 \$175.84 \$21.09 12.3% \$140.35 \$13.76 \$28.44 2 \$22.266 \$201.03 \$41.23 \$20.5% \$332.57 \$13.76 \$28.44 3 \$324.77 \$293.71 \$141.06 48.0% P 56 EXTENDED 4-WIRE 60 OR 64 KBPS DIGITAL LOOP WITH D96 INTEROFFICE TRANSPORT P.58-1 Fixed A.10.14-Wire 19, 56 or 64 Kbps Digital Grade Loop S11.42 \$11.44 \$1								
1 \$197.30 \$175.64 \$21.69 12.3% \$140.36 \$13.76 \$38.44 2 \$242.66 \$201.33 \$41.23 20.6% \$332.57 \$13.76 \$28.44 3 \$340.477 \$293.71 \$141.06 48.0% P 50 EXTENDED 4-WIRE 56 OR 64 KBPS DIGITAL LOOP WITH DGG INTEROFFICE TRANSPORT P.58-1 Fixed A.10.1 4-Wire 19, 56 or 64 Kbps Digital Grade Loop 531.64 D.3.2 Interoffice Transport - Dedicated - DGG - Facility Termination 1 \$49.87 \$44.23 \$5.04 11.2% \$49.21 \$18.44 2 \$40.06 \$45.06 \$13.69 318.44 3 \$79.84 \$87.26 \$47.42 \$-6.6% P.58-2 Per Mite								
## 140.36 ## 151.76 ## 151			U.4.2 Interoffice Fransport - Dedicated - US1 - Priority Farmination	•		\$176.84	921 69	12.3%
### STATE				•	4 4 4 4 4	4170.04	441.00	12.00
### 2 \$88.44 2 \$247.56 \$201.33 \$41.29 20.6%					\$140.36			
2 \$242.56 \$201.33 \$41.23 \$0.6% \$3332.57 \$13.76 \$39.34 \$334.77 \$293.71 \$141.06 \$48.0% \$7.56 \$1.00								
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P 58 EXTENDED 4-WIRE 56 OR 64 KBPS DIGITAL LOOP WITH D96 INTEROFFICE TRANSPORT P.58-1 Fixed A.10.1 4-Wire 19, 56 or 64 Kbps Digital Grade Loop D.3.2 Interoffice Transport - Dedicated - D80 - Facility Termination 1 \$49.87 \$44.23 \$5.04 \$11.2% \$49.21 \$18.44 \$2 \$46.21 \$18.44 \$2 \$46.06 \$13.56 \$25.1% P.58-2 Per Miles				2	\$242.56	\$201.33	341 23	20.5%
P 58 EXTENDED 4-WIRE 86 OR 64 KBPS DIGITAL LOOP WITH D96 INTEROFFICE TRANSPORT P.58-1 Fixed A.10.1 4-Wire 19, 56 or 64 Kbps Digital Grade Loop S31 42 D.3.2 Interoffice Transport - Dedicated - D80 - Facility Termination S18 44 23 \$5.04 11.2% 4.40 1 349.87 \$44.23 \$5.04 11.2% 4.40 2 \$67.65 \$64.06 \$13.66 \$5.1% 4.50 25.1% 4.50 25.1% 4.50 25.1% 4.50 25.1% 4.50 25.1% 4.50 25.1%					\$332.57			
P 56 EXTENDED 4-WIRE 56 OR 64 KBPS DIGITAL LOOP WITH D66 INTEROFFICE TRANSPORT P.58-1 Fixed A.10.1 4-Wire 19, 56 or 64 Kbps Digital Grade Loop D.3.2 Interoffice Transport - Dedicated - D80 - Facility Termination 1 3142 518 44 518 44 518 44 23 \$5.04 \$11.2% 444 23 \$45.04 \$11.2% 4518 44 2 \$18.44 2 \$18.44 3 \$18.44 3 \$18.44 3 \$18.44 3 \$18.44 3 \$18.44 3 \$18.44 3 \$18.44 3 \$18.44 3 \$18.44 3 \$18.44 3 \$18.44 3 \$18.44								
P 58 EXTENDED 4-WIRE 86 OR 44 KBPS DIGITAL LOOP WITH D86 INTEROFFICE TRANSPORT P.59-1 Fixed A.10.1 4-Wire 19, 56 or 64 Kbps Digital Grade Loop D.3.2 Interoffice Transport - Dedicated - D80 - Facility Termination 1				_			****	
P.58-1 Fixed A.10.1 4-Wire 19, 56 or 64 Kbpe Digital Grade Loop \$31.42 \$18.44 \$1.50 \$1.2% \$1.50 \$1.20 \$1.50				3	\$434.77	\$293,71	8141.08	48.0%
A 10.1 4-Wire 19, 56 or 64 (tope Digital Grade Loop D.3.2 Interoffice Transport - Dedicated - 030 - Facility Termination 1 349 37 844 83 85.04 11.2% 4 49 21 \$15.44 2 \$37.85 \$45.06 \$13.66 26.1% 2 561.39 \$15.44 3 \$79.84 \$87.26 \$47.42 \$45.96 P.59-2 Per Nilte	P 58							
D.3.2 Interoffice Transport - Dedicated - D80 - Facility Termination 1 \$44.21 \$4.04 \$11.2% \$49.21 \$44.23 \$5.04 \$11.2% \$49.21 \$15.44 \$2 \$67.65 \$46.06 \$13.66 \$25.1% \$15.44 \$3 \$79.84 \$87.26 \$47.42 \$45.96 \$18.44 \$3 \$79.84 \$87.26 \$47.42 \$45.96 \$18.44 \$3 \$19.84 \$19.84 \$18.44 \$3 \$19.84 \$1		P.00-1			\$31 42			
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2 315.44 2 367.65 \$64.06 \$13.68 25.1% 3 513.68 25.1% 3 379.84 387.28 47.42 46.5% P.58-2 Per Nike				1	\$49 87	\$44 83	\$5.04	11.2%
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3 179.84 387.26 47.42 46.5% P.58-2 Per Nille								
P.58-2 Per Nille								يمع ۾
				3	\$79.84	387.26	47.42	-0.070
0.9.1 internitina Transport - Carlinetest - CRC - Per Mile \$,0001 \$0.0001 \$0.000 0.0%		P.58-2	Per Mile 0.3.1 interoffice Transport - Dedicated - DSO - Per Mile		\$,0001	\$0,0061	00.00	0.0%