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BEP-DATE

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SPSC-PECORDS/REPORTING



September 10, 1999

Ms. Blanca S. Bayo, Director Division of Records and Reporting Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

# Re: Docket No. 990649-TP Sprint's Rebuttal Testimonies of Kent W. Dickerson and James W. Sichter

Dear Ms. Bayo:

Enclosed for filing is the original and fifteen (15) copies of Sprint's Rebuttal Testimonies of Kent W. Dickerson and James W. Sichter.

Please acknowledge receipt and filing of the above by stamping the duplicate copy of this letter and returning the same to this writer.

Thank you for your assistance in this matter.

Sincerely,

AFA AFP Charles J. Rehwinkel CAE CMU CJR/th CTR EAG LEG Enclosures MAS OPC PAL SEC WAW OTH BER-DATE 0937 SEP 108 FPSD-RECORDS/REPORTING.

I HEREBY CERTIFY that a true and correct copy of the foregoing was served by U.S. Mail or hand-delivery this 10<sup>th</sup> day of September, 1999 to the following:

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Charles J. Rehwinkel

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DOCKET NO. 990649-T	P
FILED: SEPTEMBER 10, 199	9

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		REBUTTAL TESTIMONY
3		
4		KENT W. DICKERSON
5		
0 7	Q.	Please state your name, business address, employer and current position?
8		
9	Α.	My name is Kent W. Dickerson. My business address is 4210 Shawnee
10		Mission Parkway, Fairway, Kansas 66205. I am employed as Director -
11		Cost Support for Sprint/United Management Company.
12		
13	Q.	Are you the same Kent W. Dickerson who previously filed Direct
14		Testimony in this docket?
15		
16	А.	Yes.
17		
18	Q.	What is the purpose of your Rebuttal Testimony?
19		
20	А.	My Rebuttal Testimony responds to those portions of their direct
21		testimony relative to the monthly recurring and non-recurring costs of
22		Unbundled Network Elements (UNEs) for the following list of witnesses:
		DDCUMENT NUMBER-DATE
23		10937 SEP 10 8
		FPSC-RECORDS/REPORTING

1		BellSouth Telecommunications, Inc.
2		D. Daonne Caldwell, Walter Reid, Jerry Hendrix
3		
4		AT&T Communications of the Southern States, Inc. and
5		MCI Worldcom, Inc.
6		Dr. August H. Ankum
7		
8		<u>GTE Florida, Inc.</u>
9		Dennis B. Trimble, David G. Tucek
10		
11		Intermedia Communications Inc.
12		Julia O. Strow
13		
14		BellSouth Telecommunications, Inc.
15		Response to the Direct Testimony of D. Daonne Caldwell
16		
17	Q.	At page 5 of her Direct Testimony Ms. Caldwell proposes a cost study
18		methodology which would allow BellSouth to compute UNE costs based
19		on a premise that a mix of old and new technologies will continue to be
20		economic and to exist in BellSouth's actual network into the future.

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Does the cost methodology proposed by Ms. Caldwell comply with the
 FCC's methodology?

3

No. In its First Report and Order in Docket 96-98 the FCC considered 4 Α. fully, and specifically rejected, the cost study methodology proposed by 5 6 Ms. Caldwell. Paragraphs 683 through 685 of the FCC order discuss this 7 issue and concludes, "We, therefore, conclude that the forward-looking pricing methodology for interconnection and unbundled network 8 elements should be based on costs that assume that wire centers will be 9 placed at the incumbent LEC's current wire center locations, but that the 10 11 reconstructed local network will employ the most efficient technology for 12 reasonably foreseeable capacity requirements." (emphasis added) I can only conclude that Ms. Caldwell's reference to "old" technology means 13 embedded plant, some of which is most certainly not the most efficient 14 technology. To the extent embedded technologies are less efficient than 15 currently available technologies, the FCC TELRIC pricing rules, in effect, 16 do not allow the mix of old embedded and new technologies 17 contemplated in Ms. Caldwell's testimony. 18

19

Q. Based on the direct testimony of Ms. Caldwell, which describes
 BellSouth's various cost study models and methods do you believe it is
 possible for this Commission to judge at this time the extent to which
 BellSouth's use of those models and methods comply with the FCC's
 TELRIC pricing rules?

6

7 Α. No. Based on my experience with producing TELRIC UNE cost studies for 8 Sprint, as well as reviewing the studies proposed by numerous RBOCs and CLEC industry parties, I do not believe a decision can be made based on 9 the information contained in this high level discussion. In my experience, 10 a judgment of a specific cost study's compliance with the FCC TELRIC 11 costing and pricing rules can only be rendered after a detailed review of 12 the cost study inputs, model, and results. In July of this year I had an 13 opportunity to review BellSouth's UNE platform (UNE-P) cost study and 14 Ms. Caldwell's direct and rebuttal testimony relative to Docket No. 15 10692-U in Georgia. Based upon that review, I concluded that the 16 BellSouth UNE-P cost study sponsored by Ms. Caldwell did not comply 17 with the FCC TELRIC pricing rules. 18

19

Consistent with her testimony in this docket, Ms. Caldwell's testimony ł and sponsored cost study in Georgia attempted to justify UNE-P cost 2 estimates based on a network which uses, in part, embedded Universal 3 Digital Loop Carrier (UDLC), which is not the most efficient technology for 4 combined loop and switch ports. Ms. Caldwell argued in favor of this 5 more expensive embedded network design, in part, because this network 6 7 design currently exists and will presumably continue to exist in BellSouth's embedded network several years into the future. This 8 approach clearly violates the FCC pricing rules which require a TELRIC 9 standard assuming a reconstructed network using the most efficient 10 technology currently available. 11

12

I am concerned that BellSouth seeks to gain the Commission's pre-13 approval of their cost study models and methodologies in Phase I of this 14 15 docket based only on the high level discussions in their cost witnesses' testimony. I acknowledge it is more difficult to take exception with Ms. 16 Caldwell's brief discussion of old and new technologies without the 17 benefit of seeing this erroneous premise in practice, as I have done in 18 Georgia. This is why I urge the Commission to withhold a final decision 19 on any parties' cost models and detailed study methodologies until their 20

1		true merit can be judged in light of their application and completed cost
2		results accompanied by documented inputs.
3		
4		I do, however, believe the Commission can easily rule in Phase I of this
5		docket, that any cost study that fails to reflect a forward-looking network
6		design composed entirely of the most efficient technology available, fails
7		to comply with the FCC TELRIC pricing rules for UNEs and UNE
8		combinations.
9		
10		Response to the Direct Testimony of Walter S. Reid
11		
12	Q.	Mr. Reid's testimony contains a discussion of BellSouth's Shared and
13		Common Cost study model and methodology. Based on Mr. Reid's
14		testimony can you determine if BellSouth's model and methodology
15		meets the FCC's TELRIC pricing rules?
16	Α.	No. Similar to my discussion of Ms. Caldwell's testimony, I do not believe
17		a decision can be made from the high level discussion contained in Mr.
18		Reid's testimony. I believe an informed and final evaluation of any
19		parties' shared and common cost study model and methodology can only
20		be made after a thorough review of the model, documented inputs and

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1 model results. I would caution the Commission to withhold its final 2 judgment on BellSouth's shared and common cost study model and 3 methodology until its application, documented inputs and results can be 4 reviewed in full.

5

I can, however, share at this time some concerns I have with BellSouth's 6 Shared and Common cost study methodology based on Mr. Reid's 7 description starting at line 23 on Page 8 of his direct testimony. Mr. 8 9 Reid's testimony reads, "BellSouth's study recognizes that total costs can 10 be placed into four clearly identifiable categories. First, there are the "direct wholesale costs." These are the costs which are clearly and directly 11 assignable to the "wholesale" function. Costs of switches, for example, 12 would fit into this category." Mr. Reid goes on to explain how the relative 13 proportions of wholesale and retail direct and shared costs are used to 14 assign common costs between wholesale and retail functions. 15

16

To the extent that Mr. Reid means to say that the cost of switches is a cost that could logically be assigned 100% to the wholesale operation, i would certainly have to disagree. Obviously numerous *retail* services rely on the deployment and use of switches within BellSouth and other

carriers' networks. The cost of switches is not a cost that is assignable
 100% to wholesale functions. Therefore, an assignment of 100% of the
 cost of switches to the wholesale function would then render all resulting
 common cost allocations invalid due their linkage to erroneous
 classification of switching costs as a 100% wholesale direct cost.

6

Additionally, I am wary of Mr. Reid's classification of General Purpose 7 Computers, Land and Buildings (Non COE), Human Resources and Office 8 Equipment as Shared Costs. I would expect these costs to more logically 9 be classic examples of costs common to BellSouth's entire operation. I 10 believe BellSouth would have to fully segregate their wholesale and retail 11 operations for these cost categories in order to classify them as "shared" 12 versus "common" costs. Such a segregated wholesale versus retail 13 operation for these common cost functions would then be suspect as to 14 the efficiency of such an arrangement. Only when allowed to thoroughly 15 review BellSouth's completed cost study in Phase II of this docket will any 16 party be able to determine the full extent and impact of possibly 17 erroneous wholesale/retail shared and common cost assignments in 18 BellSouth's Shared and Common cost study. 19

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## Response to the Direct Testimony of Jerry Hendrix

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Q. In his testimony at page 6, Mr. Hendrix proposes the use of two price
zones for UNE loops. He proposes a Zone A composed of the averaged
loop costs for BellSouth's retail tariff rate groups 5 through 12, and a
Zone B composed of the averaged loop costs for rate groups 1 through 4.
Does Mr. Hendrix's two-zone proposal comply with the Federal Act's
requirements to price UNEs at cost?

9

No. The price distortion that would result from Mr. Hendrix's two Zone 10 Α. averaging proposal is so extreme that it would not pass reasonable 11 judgment for being based on cost. In Exhibit KWD Rebuttal - 1, I present 12 a straight forward analysis of the wire center level loop costs compared to 13 the average resulting from grouping those same wire center level loop 14 costs into BellSouth's proposed Zones A and B. The analysis contains loop 15 costs computed using both the FCC HCPM model and the BCPM, each 16 with default inputs. Simply put, both of these model results demonstrate 17 that BellSouth's proposal results in two proposed prices for unbundled 18 loops that are on average either less than one-half of, or greater than two 19 times the wire center level cost. The average distortion for Zone A wire 20

center cost versus Zone A composite cost is 118% and 122% for Zone B.
 The distortion of Mr. Hendrix's proposal is so extreme as to make the
 price and cost relationship unrecognizable. Clearly a much greater
 degree of deaveraging will be required if the prices of UNE loops
 purchased from BellSouth are cost based as required by law.

7 Q. Mr. Hendrix's response to the Commission's question regarding price 8 deaveraging for UNE combinations makes only brief reference to 9 "loop/port UNE combinations". Containing your assessment to the FCC's 10 initial list of UNEs for the moment, are there additional combinations to 11 be considered?

12

A. Yes. ILECs, including BellSouth, commonly combine the network elements of loop and transport facilities when provisioning certain retail and access services. As such, the loop-transport UNE combination most certainly meets the requirements of FCC Rule 51.315 (b) in that it is currently combined in the ILEC network. Therefore, the policy issue of price deaveraging for the UNE combination of loop/transport should be addressed in this Phase I of the Commission's docket.

1 AT&T Communications of the Southern States, Inc. and MCI Worldcom, 2 Inc.

### 3 Response to the Direct Testimony of Dr. August Ankum

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Starting at line 17 on page 18 of his Direct Testimony, Dr. Ankum 5 Q. proposes that the cost of collocation must assume "... that new and 6 efficient central office buildings have been constructed that permit 7 efficient, least-cost, collocation arrangements. Particularly inappropriate 8 would be to include costs associated with reconfigurations of the central 9 offices, such as the costs of clearing of space, to accommodate 10 collocation:..." Do you agree with his proposed treatment of 11 reconfiguration costs? 12

13

A. No. Dr. Ankum's testimony in this area mistakenly ignores the FCC's First
 Report and Order in CC Docket No. 98-147 which sets rules relative to
 multiple collocation issues. Contained in this order (starting at paragraph
 50) is a section titled "f. Space Preparation Cost Allocation" which
 concludes "We conclude, based on the record, that incumbent LECs must
 allocate space preparation, security measures, and other collocation
 charges on a pro-rated basis so the first collocator in a particular

1		incumbent premises will not be responsible for the entire cost of site
2		preparation." This FCC order provides clear direction that LECs are
3		entitled to recover the cost of preparing collocation space on a pro-rated
4		basis; Dr. Ankum's suggestion that these costs can be ignored by
5		assuming central office buildings constructed in anticipation of
6		collocation is in obvious conflict with the FCC collocation rules.
7		
8	Q.	At line 11 on page 43 of his Direct Testimony, Dr. Ankum maintains that
9		if a LEC " can make a reasonable prediction as to the average non-
10		recurring costs incurred in the provision of a network element." " it
11		could make sense to spread these costs out over the economic life of the
12		facilities by recovering them through recurring rather than through non-
13		recurring charges." Do you agree?
14		
15	Α.	No. I fail to see how an ability to accurately predict a non-recurring cost
16		then provides the justification to recover it in a manner inconsistent with
17		fundamental nature of the cost. This violates the basic principle of cost
18		causation that Dr. Ankum discusses in his own testimony. At line 6 on
19		page 41 his testimony reads, "Consistent with Principle #5 - that costs
20		should follow cost causation - cost should be recovered in the manner in

1		which they are incurred. This means that in general, recurring costs
2		should be recovered through recurring charges and non-recurring, one-
3		time, costs should be recovered through non-recurring charges." An
4		ability to accurately predict a non-recurring cost fails to justify a direct
5		violation of this cost principle, upon which Dr. Ankum and I are in
6		apparent agreement.
7		
8	Q.	Dr. Ankum maintains that non-recurring charges should be based on
9		TELRIC. Do you agree?
10		
11	Α.	Yes. As is the case with recurring charges, it makes sense to assume a
12		level of non-recurring cost that results from the use of the best available
13		industry practices and least-cost technologies that would be logically
14		expected of a firm operating in a competitive environment. Most
15		importantly, the FCC TELRIC pricing rules require use of this standard for
16		pricing UNEs.
17		
18	Q.	Starting on line 17 of page 44, Dr. Ankum discusses his belief that non-
19		recurring charges (NRCs) should be estimated assuming the use of an
20		efficient OSS. He maintains the assumption that an efficient OSS serves to

exclude inefficient manual labor costs from NRC functions such as service
 orders, which are processed without the benefit of an efficient electronic
 OSS. Is this a reasonable approach?

4

I agree in part with Dr. Ankum's discussion. I agree that ILECs must offer 5 Α. to CLECs the option of placing service orders using an efficient electronic 6 7 OSS platform. It follows from this that the associated service order NRC 8 would be calculated upon this reality. I suspect this high level agreement, however, will not completely eliminate some disagreement among the 9 parties on the details of this calculation. I have found this to be true when 10 dealing with real world issues as to how errors in the service order 11 information provided by CLECs are corrected and how this reality is 12 13 reflected in electronic service order NRC cost estimates. This is the type of detail I expect will be addressed in Phase II of this proceeding. 14

15

Absent from Dr. Ankum's discussion is any mention of manual service order NRCs. Sprint's experience in selling UNEs is that some CLECs prefer to utilize a manual service order process despite the availability of a fully operable electronic OSS interface alternative. Certain CLECs choose to continue a manual process of sending a written order over a fax machine,

which must then be manually entered into Sprint's order systems. This l also requires that errors contained in the CLEC provided information 2 must be corrected manually via phone conversations and typing in 3 corrected information. I fully expect that the CLECs choosing to 4 continue with a manual process have valid reasons for their decision to 5 do so. The point I would ask the Commission to acknowledge is that the 6 ILEC either works with these CLECs and fulfills their service orders using a 7 manual process or denies them service. Sprint chooses to provide the 8 manual service order process where CLECs choose not to use the 9 available electronic OSS platform. It logically follows from this that the 10 ILEC is entitled to recover its costs of this manual process forced upon it 11 by CLEC choice. Sprint has computed and applies either an automated 12 13 OSS service order NRC or a manual service order NRC in accordance with 14 CLECs' use of these two alternatives.

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## 16 GTE Florida, Inc.

17 Response to the Direct Testimony of Dennis B. Trimble

Q. At page 9 of his testimony Mr. Trimble states that "... only unbundled
 loops exhibit the cost and market characteristics for which geographic
 price deaveraging would be appropriate." Do you agree?

4

No. Mr. Trimble and I are in apparent agreement that switching and Α. 5 transport costs vary significantly between differing geographic areas. 6 While my data indicates much greater switching cost variances (\$0.0183 7 up to \$0.009076) than conceded by Mr. Trimble (\$0.003 to \$0.006), 8 9 either set of data indicates very material relative differences in switching costs. With miniscule explanation, however, Mr. Trimble concludes no 10 "significant social gains" will likely result for switch UNE price 11 deaveraging. I hope to avoid an esoteric debate on the topic of 12 "significant social gains" by pointing out that the degree of switching cost 13 variances conceded by Mr. Trimble equates to a monthly cost difference 14 in the range of \$4 - \$7 depending on a customer's monthly usage 15 volumes. I am confident that \$4 to \$7 monthly cost variances are very 16 material to the business case and operations of CLECs. I do not believe 17 cost variances of this magnitude can be ignored and still meet the 18 requirements of the FCC deaveraged TELRIC pricing rules. 19

20

1	Q.	Mr. Trimble states in his testimony at page 10 that " interoffice facility
2		prices reflect distance considerations as well as traffic and volume
3		considerations, and thus already reflect a deaveraged price structure."
4		How do you respond?

5

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Mr. Trimble's testimony would seem to indicate that we are in agreement 6 Α. 7 on the point that interoffice facility (transport) costs vary significantly 8 based on traffic volumes and distance. This is illustrated in my Direct Testimony Exhibits KWD 6-9. It is uncertain what prices Mr. Trimble is 9 10 referencing when he claims transport prices are already deaveraged. To the extent he is referencing state or interstate tariff offerings, I must 11 point out these prices are generally far in excess of the TELRIC cost of 12 transport services. They would therefore be unacceptable for pricing 13 deaveraged UNE Transport facilities. 14

15

Q. Mr. Trimble claims it is impossible to estimate the forward-looking cost
 of NRCs without knowing the outcome of the Commission's docket to
 establish OSS performance measures. Do you agree?

19

Α. No. While I would agree that potential NRC cost impacts can arise from 1 2 defining OSS performance measures, I do not believe this potential leaves us helpless to proceed with reasonable NRC cost estimates. Sprint has a 3 list of 30 appropriately differentiated forward-looking cost based NRCs. 4 5 Our approach to this cost work is to assume the use of efficient industry practices and automated systems, where applicable, resulting in service 6 order processing and installation quality on par with Sprint's retail 7 8 service. GTE needs to complete similar forward-looking cost analyses, 9 which will allow the competitive market to move forward. Any necessary modifications to NRCs associated with some yet to be determined OSS 10 performance standard should be addressed when and if that future 11 potential need actually materializes. Meanwhile it is not logical to delay 12 the competitive market rollout in Florida, which is a likely outcome if no 13 forward-looking NRC prices for UNEs are available as suggested by Mr. 14 Trimble. 15

16

17 Q. Contrary to Mr. Trimble's urging to this commission that ILECs not be 18 required to file NRC studies for UNEs during Phase II of this docket, do 19 you see benefits in the simultaneous review of UNE MRC and NRC cost 20 studies?

A. Most definitely. There are logical relationships that exist between MRCs and NRCs for properly conducted TELRIC cost studies. A joint review of both the MRC and NRC for a particular UNE in Phase II of this docket is needed to ensure a fair and proper consistency between the two cost studies.

6

7 For example, my experience is ILECs often conduct the MRC TELRIC studies for UNE loops using cable fill factors which provide sufficient 8 cable pair so as to negate the need for bridged pairs in the forward-9 looking least cost network. Conversely, I have seen instances where the 10 ILEC then proposed an NRC for loop conditioning relative to removing 11 bridge taps in the embedded network. This inconsistent approach 12 requires the CLEC pay a higher MRC to fund the additional cable pairs 13 assumed to be installed in the forward-looking network, while at the 14 same time paying an additional NRC to remove bridged taps due to a lack 15 of sufficient cable pairs in the embedded network. As the ILEC cost 16 studies flip flop between a selective use of the forward-looking versus 17 embedded network design, this results in the worst of all possible 18 outcomes for CLECs. 19

20

Similarly, TELRIC studies for unbundled loop MRCs properly assume the 1 use of Next Generation Digital Loop Carrier (NGDLC) equipment to meet 2 service quality needs in the least cost, most efficient manner. Often, 3 however, one sees ILEC NRC studies which fail to acknowledge the 4 installation cost savings possible due to the remote provisioning 5 capabilities of these NGDLC devices. Once again, without the assurance 6 of proper consistency, the CLEC is asked to pay higher MRCs without 7 receiving the benefit of reduced NRCs which logically flow from the 8 forward-looking network design. 9

10

Finally, I have commonly seen CLEC sponsored NRC cost studies, which claim exceedingly low installation costs due to the assumed existence of digital cross connect systems (DCS) at every central office location. A review of their MRC cost studies however often finds the cost of the assumed DCS devices noticeably absent.

16

These examples illustrate to the Commission the absolute need for consistency between the network design assumptions used in MRC and NRC cost studies as well as the over-riding need to review these studies at the same time.

- 1 Intermedia Communications Inc.
- 2 Response to the Direct Testimony of Julia O. Strow
- 3

4	Q.	In her testimony at page 6 Ms. Strow discusses " a number of
5		geographic factors that influence costs." She discusses items such as "3)
6		the extent to which the ILEC deploys Integrated Digital Loop Carrier and
7		Digital Subscriber Line technology in its loops; 4) the amount of optical
8		fiber deployed in loops and interoffice routes; and 5) whether the ILEC
9		deploys wireless technologies in its infrastructure." Please respond.

10

Although it seems out of character with the rest of Ms. Strow's testimony, 11 Α. the wording in this section of her testimony seems to suggest that the 12 ILEC's embedded network mix of IDLC and UDLC, fiber vs. copper or 13 wireless technology would enter in UNE deaveraging decisions. Assuming 14 this is a correct reading of Ms. Strow's testimony, I cannot agree. Clearly 15 the FCC TELRIC UNE pricing rules do not allow the relative presence of 16 these technologies in the embedded network to enter into the 17 determination of geographically deaveraged prices for UNEs. 18

19

1	Q.	On page 12 of Ms. Strow's testimony she maintains that ILECs be
2		prevented from imposing non-cost-based glue charges on UNE
3		combinations? Do you agree?
4		
5	Α.	Yes. The FCC TELRIC pricing rules require deaveraged UNE prices be
6		based on cost plus a reasonable level of forward-looking common cost.
7		Non-cost-based glue charges, such as the 46% and 63% margin markups
8		proposed by BellSouth in the Georgia Docket No. 10692–U, are obviously
9		contrary to the FCC TELRIC pricing rules.
10		
11		I need to clarify, however, that Ms. Strow's suggestion to bury the cost of
12		cross-connects in the UNE cost for loops or transport is contrary to my
13		experience in both performing and reviewing cost studies. Cross-connect
14		requirements vary depending on the UNE loop type and volume of
15		purchase requested, and are best considered on a stand alone basis from
16		the loop or transport UNEs.
17		
18	Q.	Do you agree with Ms. Strow's assertion that the presence of term and
19		volume discounts within an ILEC's retail business require term
20		and volume discounts be made available for UNEs?

1 A. No, but I must be clear. I will address volume discounts first.

Relative to the monthly recurring charges (MRC) for UNEs, a properly 2 constructed TELRIC cost study already reflects the full economies 3 achievable from one network serving the entire demand for that 4 particular network element. As the total network element demand has 5 already been considered in the MRC cost estimate, there are no additional 6 cost reducing volume economies available. Further, a properly 7 constructed TELRIC MRC cost study reflects a wholesale perspective in 8 estimating recurring billing and customer service expenses. 9

10

11 Therefore, these economies have already been considered as well.

Sprint's cost analysis however has shown that some economies are possible when performing certain non-recurring ordering and provisioning functions for multiple versus singular UNEs. For example, cost savings are possible when installing multiple loops at the same customer's premises at the same time. Sprint's NRC for unbundled loop installations are differentiated between a "1 line or first line" NRC and a lower NRC for "additional lines on same order & same location".

19

Moving now to the issue of term discounts, which Ms. Strow maintains 1 bring UNE cost saving benefits, I believe Ms. Strow is mistaken in this 2 area. Again, a properly constructed TELRIC study reflects the ultimate 3 economies possible when serving the entire demand for a UNE over the 4 entire economic life of the underlying equipment used to provide the 5 UNE. The calculation of TELRIC MRCs assumes no idle plant or additional 6 costs due to customer churn over this economic life. Functions such as 7 order processing and installation are non-recurring functions for which 8 CLECs are charged only on an as-incurred basis, so there is no logical 9 association of this with term discounts on MRCs. In actuality, the term 10 11 discounts offered on ILEC retail and access services are possible because these services are not held to a TELRIC pricing standard. The non-12 discounted price for these services generally contain a margin sufficiently 13 above cost that allows for the downward price flexibility of term 14 discounts. This is not the case with UNEs priced at TELRIC. 15

16

17 Q. Does this conclude your rebuttal testimony?

18 A. Yes.

# Methods for Sprint's Study of Bell South's Proposed Rate Zones

On page 6 of Jerry Hendrix's testimony, Bell South proposes two rate zones for geographically deaveraging loops. Zone A includes Rate Groups 5 through 12 and Zone B includes Rate Groups 1 through 4. The purpose of the analysis is to show the great variability of cost among Bell South's exchanges in Florida. The attached analysis is based on the results of loop costs derived from BCPM version 3.1 and HCPM version 2.6 (June 2, 1999 update) runs with default inputs. The loop costs for the HCPM model were identified through adding distribution, feeder, and concentrator unit costs for each exchange. BCPM loop costs were estimated through a default run for loop investment only.

The attached results show the deviations from the weighted average by exchange. The weighted average cost was found through weighting each exchange's Loop Cost by the percent of the total number of lines in each Rate Zone. Lines from BCPM were used for the BCPM calculations and lines from HCPM were used for the HCPM calculations.

According to BCPM loop cost results, Bell South's costs vary from \$14.54 to \$82.94, while HCPM loop cost results vary from \$2.56 to \$119.22. Weighted averages for BCPM are \$34.47 and \$23.63 for Zones A and B respectively. Weighted averages for HCPM are \$17.14 and \$8.06 for Zones A and B respectively. For Zone A, on average BCPM loop costs differ from the weighted average by 117.5 percent, while HCPM loop costs differ by 150.0 percent. For Zone B, on average BCPM differs by 121.9 percent, while HCPM differs by 148.6 percent. An average of absolute differences was found by identifying the absolute value of the deviations from the weighted average. For Zone B, the results of both models indicate that on average the exchange loop costs will be over \$12 higher or lower than the weighted average loop costs will be over \$5 higher or lower than the weighted average loop cost.

Differences between the model results are from different input data sources and different assumptions. Differences in line counts are the result of the different sources of data that each model uses. BCPM uses data from BLI, while HCPM uses data from PNR.

Disclaimer: This study is for illustrative purposes of the relative differences in geographic loop costs and is not an endorsement of either model's default inputs for estimating Bell South's forward looking UNE loop costs.

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Florida - Bell South Exchange Cost Based on Bell South's Proposed Rate Deaveraging Zones (Testimony of Jerry Hendrix, Page 6, lines 6-9) Zone B

		HCPM 2.6 (June 2, 1999)				BCPM 3.1		
	Γ		Deviation	Percent		Deviation	Percent	
		Loop	from W.	Deviation	Loop	from W.	Deviation	
Rate Zone	Exchange Name	Cost	Avg.	from W. Avg.	Cost	Avg.	from W. Avg.	
1	Cedar Kevs	\$42.82	\$25.68	249.8%	\$53.72	\$19.25	155.9%	
2	Cross City	\$43.65	\$26.51	254.7%	\$57.20	\$22.73	166.0%	
2	Old Town	\$49.11	\$31.97	286.5%	\$65.73	\$31.26	190.7%	
3	Belle Glade	\$11.14	\$(6.00)	65.0%	\$22.66	\$(11.81)	65.7%	
3	Bunnell	\$35.76	\$18.62	208.6%	\$51.09	\$16.62	148.2%	
3	Chiefland	\$37.90	\$20.76	221.1%	\$56.91	\$22.44	165.1%	
3	Chipley	\$32.68	\$15.54	190.6%	\$50.92	\$16.46	147.7%	
3	Flagler Beach	\$12.66	\$(4.48)	73.9%	\$29.02	\$(5.44)	84.2%	
3	Fernandina Beach	\$11.07	\$(6.07)	64.6%	\$29.06	\$(5.41)	84.3%	
3	Green Cove Springs	\$22.60	\$5.46	131.9%	\$38.30	\$3.83	111.1%	
3	Graceville	\$42.49	\$25.35	247.9%	\$55.41	\$20.95	160.8%	
3	Keystone Heights	\$24.26	\$7.12	141.6%	\$43.42	\$8.95	126.0%	
3	Marathon	\$12.25	\$(4.89)	71.5%	\$28.97	\$(5.50)	84.1%	
3	North Key Largo	\$11.03	\$(6,10)	64.4%	\$40.88	\$6,41	118.6%	
3	Pahokee	\$11.52	\$(5.62)	67.2%	\$27.52	\$(6.94)	79.9%	
3	Palm Coast	\$10.71	\$(6.43)	62.5%	\$30.09	\$(4.38)	87.3%	
3	Sunny Hills	\$80.15	\$63.01	467.6%	\$67.75	\$33.28	196.6%	
3	Vernon	\$62.80	\$45.66	366.4%	\$82.94	\$48.47	240.6%	
4	Big Pine Key	\$19.04	\$1.90	111.1%	\$35.95	\$1.48	104.3%	
4	DeLeon Springs	\$19.57	\$2.43	114.2%	\$41.32	\$6.85	119.9%	
4	Islamorada	\$15.75	\$(1.39)	91.9%	\$32.65	\$(1.82)	94.7%	
4	Key Largo	\$11.57	\$(5.57)	67.5%	\$28.85	\$(5.62)	83.7%	
4	Key Largo	\$12.50	\$(4.63)	73.0%	\$31.05	\$(3.42)	90.1%	
4	Key West	\$8.37	\$(8.77)	48.9%	\$22.02	\$(12.44)	63.9%	
4	Lake City	\$24.06	\$6.92	140.4%	\$38.88	\$4.41	112.8%	
4	New Smyrna Beach	\$11.19	\$(5.95)	65.3%	\$29.68	\$(4.79)	86.1%	
4	Oak Hill	\$26.59	\$9.45	155.1%	\$43.09	\$8.63	125.0%	
4	Palatka	\$18.18	\$1.04	106.1%	\$34.33	\$(0.14)	99.6%	
4	Pomona Park	\$29.69	\$12.55	173.2%	\$49.57	\$15.10	143.8%	
4	Pierson	\$40.35	\$23.21	235.4%	\$56.60	\$22.14	164.2%	
4	Sugarloaf Key	\$20.00	\$2.86	116.7%	\$39.22	\$4.75	113.8%	
4	St. Augustine	\$9.51	\$(7.63)	55.5%	\$27.13	\$(7.34)	78.7%	
4	St. Augustine	\$13.63	\$(3.51)	79.5%	\$26.13	\$(8.33)	75.8%	
4	St. Augustine	\$12.52	\$(4.62)	73.1%	\$29.53	\$(4.94)	85.7%	
4	St. Augustine				\$51.45	\$16.98	149.3%	
4	Welaka	\$29.82	\$12.68	174.0%	\$48.05	\$13.59	139.4%	
4	Yankeetown	\$39.69	\$22.56	231.6%	\$57.40	\$22,94	166.5%	
	Min	\$8.37	\$(8,77)	48.9%	\$22.02	\$(12.44)	63.9%	
	Max	\$80.15	\$63.01	467.6%	\$82.94	\$48.47	240.6%	
	Difference	\$71.78			\$60.91			
	Average*		\$12.86	148.6%		\$12.32	121.9%	

Bell South's proposed Rate Grouping \$17.14

\$34.47

\*Average Deviation is based on the absolute difference from loop cost and weighted average.

		HCF	PM 2.6 (June :	2, 1999)		BCPM 3.1		
			Deviation	Percent	[	Deviation	Percent	
		Loop	from W.	Deviation	Loop	from W.	Deviation	
Rate Zone	Exchange Name	Cost	Avg.	from W. Avg.	Cost	Avg.	from W. Avg.	
5	Archer	\$31.13	\$23.07	386.4%	\$50.20	\$26.57	212.4%	
5	Brooksville	\$18.20	\$10.14	225.9%	\$36.33	\$12.70	153,7%	
5	Bronson	\$43,35	\$35.29	538.0%	\$58.78	\$35,14	248.7%	
5	DeBary	\$10.06	\$2.00	124,9%	\$27.78	\$4.15	117.6%	
5	DeBary	\$10.77	\$2.71	133.6%	\$28.05	\$4,41	118.7%	
5	Deland	\$10.49	\$2.43	130.2%	\$27.68	\$4.05	117.1%	
5	Ft. Pierce	\$11.59	\$3.53	143.8%	\$28.48	\$4.84	120.5%	
5	Jensen Beach	\$9.78	\$1.72	121.4%	\$27.38	\$3.75	115.9%	
5	Hawthorne	\$38.37	\$30.31	476,1%	\$58.71	\$35.07	248.4%	
5	Lynn Haven	\$14.47	\$6,42	179,6%	\$33,75	\$10.12	142.8%	
5	Micanopy	\$47.21	\$39,15	585.9%	\$62.62	\$38,99	265.0%	
5	Newberry	\$36.95	\$28.89	458.5%	\$55.78	\$32.15	236 0%	
5	Panama City Beach	\$10.85	\$2.79	134.7%	\$34.82	\$11.19	147 4%	
Š	Panama City	\$13.24	\$5.19	164 4%	\$30.71	\$7.08	130.0%	
5	Panama City	\$9.01	\$0.95	111.8%	\$25.85	\$2.22	109.4%	
5	Trenton	\$43.58	\$35.52	540.9%	\$59.41	\$35.78	251.4%	
5	Titusville	\$10.61	\$2.55	131 7%	\$26.31	\$2.68	111 396	
5	Vero Beach	\$8.66	\$0.61	107.5%	\$27.04	\$3.41	114 4%	
5	Vero Beach	\$9.86	\$1.80	122.4%	\$27.06	\$3.43	114.5%	
5	Weekiwachee Springs	\$13.59	\$5.54	168 7%	\$33.87	\$10.23	143.3%	
š	Weekiwachee Springs	\$10.39	\$2.34	129.0%	\$29.81	\$6.18	126 296	
5	Youngstown-Fountain	\$48.93	\$40.88	607.3%	\$70.75	\$47.12	299 4%	
ě	Castonment	\$14.45	\$6.30	170 4%	\$32.47	\$8.84	137 4%	
ê	Dunellon	\$26.71	\$18.65	331 5%	\$48.24	\$24.60	204 1%	
ě	Deutone Reach	\$6 37	\$/1.60\	70.0%	\$20.24	\$(2.64)	88.8%	
6	Daytona Beach	\$7.57	\$(0.40)	03.0%	\$73.33	\$(0.30)	08.7%	
6	Daytona Beach	\$10.09	\$203	136 304	\$26.33	\$3.10	113 194	
6	Daytona Beach	\$0.50 \$0.13	\$2.83 \$0.07	100.070	\$25.02	\$1.10	105 094	
6	Daytona Beach	40,13	\$0.07 \$0.53	100.5%	\$25.02	¢1.05	107.5%	
6	Culf Prooze	\$0.00 \$10.46	\$0.05 \$2.40	100,3%	\$23.41	\$1.77 \$1.79	120.2%	
6	Guil Breeze	\$10.40	92.40 61.16	129.070	\$20.41 \$34.46	44.10 \$7.63	120.270	
6	Gainesville	49.22 60.60	\$1.10 \$0.62	114.470	Φ24.10 \$34.31	Φ0.03 €0.69	102.270	
0	Gamesville	90.00 ¢06.05		205 004	924.31 ¢40.35	40.00 \$18.67	170 294	
0	Haba Cound	\$20.20 \$40.75		323.070	440.20 600.00	\$10.02 #E 00	400.070	
0		\$10.25 \$40.40		127.270	₽Z0.03 \$44.04	40.20 #17.60	174 504	
D C	Holley Navarre		\$10.04 \$50.60	224.070		\$17.00 ¢20.07	174,370	
D C	Jay		400.0Z	120.270	\$02,3U	430.07 ¢470	∠04.376 100.784	
0	Sepastian	\$10.23 \$45.40	ΦΖ.Ι/ #7.24	127.070	420.40 \$20.60	44.70 ¢0.00	120.270	
0	Million	\$10.40 #440.00	\$7.34 \$444.47	191,1%	002.00 074.00	49.00 ¢49.00	130.170	
B	Base			14/9./%		\$40.3U \$14.47	304.470	
ò		310.0U	- Φ0.74 Φ/0.60	200.3%	404.01 604.00	φ11.17 ec.20	404.60/	
D C	Pensacola	\$7.37 #0.50	\$(0.69)	91.4%	\$24.UZ	QU.39	101.070	
6	Pensacola	\$8.59 \$40.00	\$U.54	100.0%	\$24.75	\$1.1Z	104.770	
D É		<b>⊅1∠.9</b> 8	\$4.92 #C 00	101.170	⊕∠0,40 \$24.50	04.03 \$40.06	120.4170	
0	Perísacola	\$14.29 \$0.67	\$0.23 #4.64	100.00/	004.09 600 40	\$10.90 \$10.90	140.470	
0	Perisacola	\$9.67	\$1.51	120.0%	\$23.4Z	⊅(U.21) ■C.45	99.1%	
0	Port St. Lucie	\$10.65	\$2.59	152.1%	330.08	\$0.45 \$0.57	12/.3%	
0	Port St. LUCIE	98.37	\$0.32	103.9%	\$20,20	\$2.57	110.9%	
6	Sebastian	\$35.49	\$27.44	440.5%	\$52.07	\$28.44	220.3%	
6	Sebastian	\$12.83	\$4.77	159.2%	\$32.64	\$9.01	138.1%	
6	Stuart	\$9.92	\$1.86	123.1%	\$27.05	\$3.42	114.5%	
7	Cocoa Beach	\$10.32	\$2.26	128.1%	\$35.96	\$12.32	152.2%	

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	HCPM 2.6 (June 2, 1999)			<del></del>	BCPM 3.1		
			Deviation	Percent		Deviation	Percent
		Loop	from W.	Deviation	Loop	from W.	Deviation
Rate Zone	Exchange Name	Cost	Avg.	from W. Avg.	Cost	Avg.	from W, Avg.
_							
<u> </u>	Cocoa Beach	\$6.80	\$(1.26)	84.3%	\$22.54	\$(1.10)	95.4%
7	Cocoa	\$9.57	\$1.51	118.7%	\$26.25	\$2.61	111.1%
7	Cocoa	\$9.08	\$1.02	112.6%	\$24.76	\$1.13	104.8%
7	Eau Gallie	\$8.85	\$0.80	109.9%	\$24.05	\$0.42	101. <b>8%</b>
7	Eau Gallie	\$7.70	\$(0.36)	95.6%	\$23.21	\$(0.42)	98,2%
7	Geneva	\$29.83	\$21.78	370.3%	\$46.71	\$23.08	197.7 <b>%</b>
7	Melbourne	\$9.58	\$1.52	118.8%	\$27.21	\$3.57	115.1%
8	Delray Beach	\$6.58	\$(1.48)	81.6%	\$22.37	\$(1.26)	94,7%
8	Delray Beach	\$6.52	\$(1.54)	80.9%	\$23.14	\$(0.50)	97.9%
8	Lake Mary	\$8.38	\$0.33	104.0%	\$22.11	\$(1.53)	93.5%
8	Lake Mary				\$23.61	\$(0.02)	99. <b>9%</b>
8	Sanford	\$10.30	\$2.24	127.8%	\$25.48	\$1.85	107.8%
8	Sanford				\$28.68	\$5.05	121.4%
8	Yulee	\$22.33	\$14.27	277.1%	\$36.97	\$13.34	156.5%
9	Baldwin	\$23.94	\$15.88	297.1%	\$45.28	\$21.65	191.6%
9	Jacksonville Beach	\$9.00	\$0.94	111.6%	\$26.91	\$3.27	113.9%
à	Jacksonville Beach	\$7.46	\$(0.60)	92.6%	\$22.83	\$(0.80)	96.6%
ğ	Jacksonville Beach	\$9.66	\$1.61	119.9%	\$24.11	\$0.48	102.0%
ă	Juniter	\$8.49	\$0.43	105.3%	\$25.06	\$1.43	106.0%
ő	Middleburg	\$19.63	\$10.57	231.2%	\$39.45	\$15.82	167.0%
o o	lulinaton	\$4.57	\$(3,40)	56 7%	\$18.33	\$(5.30)	77.6%
9	Julington	\$9.07 \$9.44	\$(0.73) \$(0.73)	104 794	\$74.00	\$0.65	102.8%
9	Julington	\$0.74 \$19.36	\$10.30	707.2%	\$24.28 \$33.54	\$0.00	1/1 094
9	Mossillo	\$10.00 \$24.59	\$10.30	420.0%	\$53.04 \$53.72	\$30.00	227 294
9	Maxville Orange Back	404.00 CO EA	\$20.JZ	106.04	\$03.75 \$03.86	\$00.03 \$0.00	100 094
9	Orange Park	40.04 60.04	40.40 00.60	100.0%	Φ23.00 Φ04.41	\$0.22 \$0.70	100.970
9	Orange Park	\$0.0Z	30.00 ¢0.46	107.0%	#24.41 #07.04	40.70 62.40	114 40/
9	Ponte Vedra Beach	\$10.21 #4.00	⊕2,10 ¢(2,42)	120.0%	927.04 #00.00	00.40 6(0.04)	114.470
9	west Paim Beach	\$4.93 #7.70	⊅(3,1Z) ©(0,07)	01.2%	a)∠U.3∠ ¢03.00	φ(0.01) ¢0.00	404.00/
9	west Paim Beach	\$7.79	\$(0.27)	90.7%	\$∠3.9Z	\$U.28	101.270
9	West Paim Beach	\$7.75	\$(0.31)	96.1%	\$23.79	\$0.16	100.7%
9	West Palm Beach	\$6.79	\$(1.27)	84.3%	\$22.32	\$(1.32)	94.4%
9	West Palm Beach	\$6.70	\$(1.36)	83.1%	\$23.09	\$(0.55)	97.7%
9	West Palm Beach	\$6.42	\$(1.64)	79.6%	\$22.66	\$(0.97)	95.9%
9	West Palm Beach	\$12.28	\$4.22	152.4%	\$31.59	\$7.95	133.7%
10	Boca Raton	\$5.85	\$(2.21)	72.6%	\$20.67	\$(2.96)	87.5%
10	Boca Raton	\$6.65	\$(1.41)	82.5%	\$21.79	\$(1.85)	92.2%
10	Boca Raton	\$8.69	\$0.64	107. <del>9</del> %	\$24.54	\$0.91	103.8%
10	Boynton Beach	\$7.63	\$(0.43)	94.7%	\$24.53	\$0.90	103.8%
10	Jacksonville	\$31.39	\$23.33	389.6%	\$46.40	\$22.77	196.3%
10	Jacksonville	\$6.84	\$(1.21)	84.9%	\$22.40	\$(1.23)	94.8%
10	Jacksonville	\$8.84	\$0.78	109.7%	\$24.16	\$0.53	102.2%
10	Jacksonville	\$5.17	\$(2.89)	64.1%	\$21.18	\$(2.45)	89.6%
10	Jacksonville	\$7.08	\$(0.98)	87.9%	\$22.93	\$(0.70)	97. <b>0%</b>
10	Jacksonville	\$9.06	\$1.01	112.5%	\$26.13	\$2.50	110.6%
10	Jacksonville	\$2.56	\$(5.50)	31.7%	\$14.54	\$(9.09)	61.5%
10	Jacksonville	\$10.48	\$2.42	130.1%	\$26.89	\$3.26	113. <b>8%</b>
10	Jacksonville	\$9.17	\$1.12	113,9%	\$25.11	\$1.48	106.3%
10	Jacksonville	\$12.62	\$4.56	156.6%	\$28.34	\$4.71	119.9%
10	Jacksonville	\$6.84	\$(1.22)	84.9%	\$24.12	\$0,48	102. <b>0%</b>
10	Jacksonville	\$6.85	\$(1.21)	85.0%	\$21.88	\$(1.75)	92.6%
10	Jacksonville	\$5,40	\$(2.66)	67.0%	\$20,88	\$(2.75)	88.4%
10	Jacksonville	\$9.47	\$1.41	117.5%	\$24.50	\$0.87	103. <b>7%</b>

		HCPM 2.6 (June 2, 1999)					BCPM 3.1			
			Deviation	Percent		Deviation	Percent			
		Loop	from W.	Deviation	Loop	from W.	Deviation			
Rate Zone	Exchange Name	Cost	Avg.	from W. Avg.	Cost	Avg.	from W. Avg.			
			×		_L.	J				
11	East Orange	\$21.94	\$13.88	272 3%	\$41.22	\$17.59	174 4%			
11	Orlando	\$8.75	\$0.69	108.6%	\$24.92	\$1.28	105 4%			
11	Orlando	\$6.90	\$(1.15)	85 7%	\$21.82	\$(1.81)	07 394			
11	Orlando	\$5.14	\$(2.01)	62.0%	\$20.02	\$(2.64)	52.J/0 0/ 70/			
14	Orlando	40.14 67.00	φ(z.ອາ) ¢(0.00)	03.970	\$20.0Z	G(0.01) G(0.20)	04.770			
11	Orlando	Φ1.00 67.74	⊅(U.∠∠) ¢(0.25)	97.270	⊉∠3.∠4 ¢02.06	3(U.38) 6(0.07)	90.3%			
	Orlando	Φ/./1 07.40	\$(U.30) \$(0.00)	90,7%	\$23.30 \$00.07	\$(0.27) \$(0.00)	98.9%			
11	Oriando	\$7.10 014.40	\$(0.90)	88.9%	\$22.07	\$(U.90)	95.9%			
11	Oviedo	\$11.42	\$3,36	141.7%	\$29.26	\$5.62	123.8%			
12	Deenleid Beach	\$0.38	\$(1.68)	/9.1%	\$21.59	\$(2.04)	91.4%			
12	Ft. Lauderdale	\$5.33	\$(2.72)	66.2%	\$20.08	\$(3.55)	85.0%			
12	Ft. Lauderdale	\$4.96	\$(3.09)	61.6%	\$19.64	\$(3.99)	83.1%			
12	Ft. Lauderdale	\$8.45	\$0.39	104.9%	\$19.47	\$(4.16)	82.4%			
12	Ft. Lauderdale	\$5.41	\$(2.65)	67.1%	\$15.88	\$(7.75)	67.2%			
12	Ft. Lauderdale	\$6.52	\$(1.53)	81.0%	\$20,74	\$(2.89)	87.8%			
12	Ft, Lauderdale	\$7.74	\$(0.32)	96.1%	\$23.60	\$(0.03)	99.9%			
12	Ft, Lauderdale	\$4.93	\$(3.13)	61.2%	\$18.12	\$(5.51)	76.7%			
12	Ft. Lauderdale	\$7.47	\$(0.59)	92.7%	\$20.86	\$(2.78)	88.2%			
12	Ft. Lauderdale	\$10.48	\$2.42	130.1%	\$22.33	\$(1.30)	94.5%			
12	Hollywood	\$4.69	\$(3.36)	58.3%	\$18.53	\$(5.11)	78.4%			
12	Hollywood	\$5.96	\$(2.10)	73.9%	\$21.24	\$(2.39)	89.9%			
12	Hollywood	\$9.45	\$1.39	117.3%	\$23.80	\$0.16	100.7%			
12	Hollywood	\$6.93	\$(1.13)	86.0%	\$23.18	\$(0.45)	98.1%			
12	Homestead	\$13.96	\$5.90	173 2%	\$28.02	\$4.39	118.6%			
12	Homestead	\$13.02	\$4.96	161.6%	\$33.67	\$10.04	142.5%			
12	Homestead	\$10.0Z	<b>\$</b> 4.00	101.076	\$28.62	\$4 99	171 1%			
12	Miami	\$4 92	\$/3 14\	61.0%	\$10.43	\$(4.20)	82.2%			
12	Miami	\$4.02	Ψ(U.17) Φ(3.13)	61 294	\$20.57	\$(3.06)	97 104			
12	Miami		\$(3,13) \$(2,00)	01.270	#20.07 #10.77	\$(3.00) \$(3.00)	07.170			
12		90.10 64.05	⊅(2.90) €(2.91)	04.0%		\$(3.09) \$(4.50)	03.370			
12	Miami	\$4.85	<b>(3.21)</b>	60.1%	\$19.04	\$(4.59) \$(1.00)	80.0%			
12	Miami	\$4.45	\$(3.61)	55.2%	\$18.80	\$(4.83)	/9.6%			
12	Miami	\$4.76	\$(3.30)	59.1%	\$16.75	\$(6.88)	70.9%			
12	Miami	\$7.86	\$(0.20)	97.5%	\$23.33	\$(0.30)	98.7%			
12	Miami	\$4.65	\$(3.41)	57.7%	\$18.55	\$(5.08)	78.5%			
12	Miami	\$2.91	\$(5.15)	36.1%	\$16,63	\$(7.00)	70 4%			
12	Miami	\$7.38	\$(0.68)	91.6%	\$20.81	\$(2.82)	88.1%			
12	Miami	\$5.31	\$(2.74)	66,0%	\$18.86	\$(4.77)	79 8%			
12	Miami	\$5.22	\$(2.84)	64.8%	\$18.63	\$(5.00)	78.8%			
12	Miami	\$4.20	\$(3.86)	52.1%	\$17.60	\$(6.03)	74.5%			
12	Miami	\$4.83	\$(3.23)	59.9%	\$18.82	\$(4.81)	79.7%			
12	Miami	\$5.87	\$(2.19)	72.8%	\$22.72	\$(0.91)	96.1%			
12	Miami	\$6,60	\$(1.46)	81.9%	\$23.01	\$(0.62)	97.4%			
12	Miami	\$5.80	\$(2.26)	71,9%	\$21,23	\$(2.40)	89.9%			
12	Miami	\$4.93	\$(3,13)	61.2%	\$19.34	\$(4.29)	81.8%			
12	Miami	\$6.44	\$(1.62)	79.9%	\$22.61	\$(1.02)	95.7%			
12	Miami	\$5.55	\$(2.51)	68.9%	\$21.64	\$(2.00)	91.6%			
12	Miami	\$7.59	\$(0.47)	94 2%	\$22.57	\$(1.07)	95 5%			
12	Miami	\$9.47	\$1.42	117.6%	\$22.68	\$(0.95)	96.0%			
12	Miami	\$5.48	\$/2.581	68.0%	\$20.66	\$(2.00)	R7 44			
12	North Dade	\$5.60 \$5.60	\$(2.00)	70.5%	\$20.00	\$(2.27)	g5 704			
12	North Dade	\$7.60	\$(2.07) \$(0.46)	0.070	\$20.20 \$22.02	\$(0.00) \$0.10	100.04			
12	North Dade	401,00 45 50	ψ(U,4U) ¢/3 ⊑ 4\	94.270 69 EM	Ψ20.00 ¢04.04	40.18 \$(3.63)	00.070			
12	North Dade	<b>\$0.0∠</b>	<b>₽(∠.04)</b> \$(0.07)	00.0%	⊕∠1.U1	φ(Z.0Z) Φ(Γ.20)	00.370			
12	North Dade	<b>\$4.99</b>	a(3.07)	01.9%	<b>\$10.24</b>	ə(ə. 39)	11.2%			

_		HCPM 2.6 (June 2, 1999)			BCPM 3.1		
Exchange Name	Loop Cost	Deviation from W. Avg.	Percent Deviation from W. Avg.	Loop Cost	Deviation from W. Avg.	Percent Deviation from W. Avg.	
Beach	\$7.61	\$(0.45)	94.5%	\$22.11	\$(1.52)	93.5%	
Beach	\$6.58	\$(1.48)	81.6%	\$22.10	\$(1.53)	93.5%	
Beach	\$7.01	\$(1.05)	87.0%	\$21.78	\$(1.85)	92.2%	
Beach	\$7.54	\$(0.51)	93.6%	\$21.54	\$(2.09)	91.2%	
	\$10.33	\$2.27	128.2%	\$26.75	\$3.12	113.2%	
Min Max Difference	\$2.56 \$119.22 \$116.67	\$(5.50) \$111.17	31.7% 1479.7%	\$14.54 \$71.93 \$57.39	\$(9.09) \$48.30	61.5% 304.4%	
Average*		\$5.77	150,0%		\$6.51	117,5%	
	Min Max Difference Average*	Min \$2.56 Max \$119.22 Difference \$116.67 Average*	Min         \$2.56         \$(5.50)           Max         \$119.22         \$111.17           Difference         \$116.67         \$5.77	Min         \$2.56         \$(5.50)         31.7%           Max         \$119.22         \$111.17         1479.7%           Difference         \$116.67         \$5.77         150.0%	Min         \$2.56         \$(5.50)         31.7%         \$14.54           Max         \$119.22         \$111.17         1479.7%         \$71.93           Difference         \$116.67         \$57.39         \$5.77         150.0%	Min         \$2.56         \$(5.50)         31.7%         \$14.54         \$(9.09)           Max         \$119.22         \$111.17         1479.7%         \$71.93         \$48.30           Difference         \$116.67         \$57.39         \$6.51	

Bell South's proposed Rate Grouping Weighted Cost \$8.06

\$23.63

\*Average Deviation is based on the absolute difference from loop cost and weighted average.