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December 13, 2000

ORIGINAL REPORTING

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BY HAND DELIVERY

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. 000761-TP

Dear Ms. Bayo:

Enclosed for filing in the above docket are the original and fifteen (15) copies of Sprint PCS' Rebuttal Testimony of Bridger M. Mitchell, Michael R. Hunsucker, Randy G. Farrar, and Anthony Sabatino.

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.

Yours truly,

Me Cou

Enclosures

cc:

All parties of record

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true copy of the foregoing has been furnished by U.S. Mail, hand delivery(*), or overnight delivery (**) this 13th day of December, 2000, to the following:

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c/o Nancy Sims
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1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		REBUTTAL TESTIMONY
3		OF
4		RANDY G. FARRAR
5		
6	I.	Introduction
7		
8	Q.	Please state your name, occupation, and business address.
9	Α.	My name is Randy G. Farrar. I am presently employed as
10		Senior Manager - Network Costs for the Sprint/United
11		Management Company. My business address is 6360 Sprint
12		Parkway, Overland Park, Kansas, 66251.
13		
14	Q.	Did you previously file Direct Testimony in this
15		proceeding?
16	Α.	Yes.
17		
18	Q.	What is the purpose of your rebuttal testimony?
19	Α.	My testimony rebuts the direct testimony of Randy Hamm,
20		and the panel testimony of Jamshed K. Madan, Michael D.
21		Dirmeier, and David C. Newton (hereinafter referred
22		collectively as the "Panel"). I will discuss four generic
23		topics. They are:
24		• Traffic Sensitive vs. Non-Traffic Sensitive Costs
25		Utilization / Fill Factors
		1 15953 DEC 148

FPSC-RECORDS/REPORTING

 Spectrum Licenses

Cell Site Towers and Antennae

3

4 II. Traffic Sensitive vs. Non-Traffic Sensitive Costs

5

One common theme throughout the testimonies of Mr. Hamm and the Panel, is that much of the Sprint PCS network in allegedly non-traffic sensitive for a wide variety of reasons. Please discuss the nature of traffic sensitive

- and non-traffic sensitive costs.
- 11 What appears to be a contentious and controversial issue Α. 12 in this proceeding is actually quite simple. 13 definition, if a cost varies with the volume of traffic 14 while holding the number of subscribers constant, it is 15 traffic sensitive. If a cost varies with the number of 16 subscribers while holding the volume of traffic constant, 17 it is non-traffic sensitive. Cutting away all the 18 superfluous discussion, it comes down to a very simple

20

19

21 Q. Please describe this "acid test."

"acid test."

22 A. If the volume of traffic increases while number of 23 subscribers stays unchanged, any increase in cost must be 24 traffic sensitive. If the number of subscribers increases 25 while the volume of traffic remains unchanged, any

1 increase in cost must be non-traffic sensitive. 2 Does the BellSouth position (that cell sites are non-3 Q. 4 traffic sensitive network components that are equivalent to non-traffic sensitive loop) stand up to this acid test? 5 6 Α. No, it does not. 7 8 Q. Why is loop non-traffic sensitive? 9 Α. Simply apply the "acid test." If the number of landline 10 subscribers increases 10%, but the volume of demand 11 remains the same, the LEC must provide additional loops. 12 The cost driver is the number of subscribers, not the 13 volume of traffic. Obviously, the cost of these loops is 14 non-traffic sensitive. 15 Conversely, if the number of landline subscribers remains 16 17 unchanged, but the volume of traffic increases 10%, the 18 LEC need not provide any additional loops. There is no 19 additional cost. 2.0 21 The FCC properly considers loop a non-traffic sensitive 22 investment. 23 24 Q. Why are cell sites traffic sensitive?

Simply apply the exact same "acid test." If the number of

25

Α.

1 wireless subscribers increases 10%, but the volume of 2 traffic remains the same, the wireless company need not 3 provide additional cell sites. There is no additional 4 cost. 5 6 Conversely, if the number of wireless subscribers remains unchanged, but the volume of traffic increases 10%, the wireless company must provide additional cell site 8 9 capacity. The increase in cost is traffic sensitive. 10 11 Therefore, cell sites are traffic sensitive. 12

Q. On page 10, lines 20 - 23 of Mr. Hamm's testimony, in an attempt to equate loops and cell sites, he states "... additional loops are needed ... as usage on existing loops reaches the level that customers demand an additional line." Please comment.

18 I was quite surprised to read this. I have never heard an 19 ILEC argue that the loop is traffic sensitive. The only 20 time I have heard this line of reasoning is by intervenors 21 who wish to force ILECs to allocate a portion of loop costs away from basic service and to the cost of intraLATA 22 23 toll, interLATA access, and features. I am not aware of 24 BellSouth defending such a position in TELRIC UNE, USF or 25 access proceedings. This is an example of BellSouth

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- 1 setting a different cost standard for Sprint PCS than they
- 2 do for themselves.

3

- On Page 12, line 19, the Panel states, "Investment for 2nd 4 Q.
- 5 and 3rd BTS radio carriers are made to meet growth in
- demand." Please comment.
- 7 Α. While there is little in their testimony I can agree with,
- 8 I do agree with this statement. The Panel recognizes that
- 9 additional equipment is needed at the cell site in order
- 10 to meet increases in traffic. This is clear evidence that
- 11 they recognize that the cell site is actually traffic
- 12 sensitive.

13

- 14 Is Panel Exhibit 2 consistent with their statement that Q.
- "Investment for 2nd and 3rd BTS radio carriers are made to 15
- 16 meet growth in demand."?
- No. Panel Exhibit 2 does not conform with the 17 Α.
- 18 testimony. Despite their recognition that the cell site
- 19 is actually traffic sensitive, and that only some cell
- sites are required for "coverage," the Panel Exhibit 2 20
- 21 considers 100% of cell sites as non-traffic sensitive and
- removes all cell sites from their final recommended 22
- 23 reciprocal compensation rate.

24

III. Utilization / Fill Factors 25

1 In a Question and Answer (Q&A) beginning on page 6, line Q. 2 9, the Panel claims that the Sprint PCS Cost Model does not meet the TELRIC definition of the FCC 96-98 Order. Do 3 4 you agree? 5 As pointed out on pages 4 - 6 of my Direct Testimony, 6 the Sprint PCS Cost Model is fully compliant with the 7 TELRIC definition in the FCC Order. 8 9 In this same Q&A, the Panel states that Sprint PCS' Q. 10 declining cost and excess capacity indicate that Sprint PCS' network is not operating at "an optimal level." 11 12 Please comment. 13 The TELRIC definition in FCC Order 96-98 does not require 14 utilization at an "optimal level." Specifically, 15 Paragraph 682 of the FCC Order states: 16 17 Per-unit costs shall be derived from total 18 costs using reasonably accurate "fill factors" 19 (estimates of the proportion of a facility that 20 will be "filled" with network usage); that is, 21 the per unit costs associated with a particular 22 element must be derived by dividing the total 23 associated with the element bу 24 reasonable projection of the actual total usage of the element. 25

The Sprint PCS Cost Model utilizes "reasonably accurate
'fill factors'" as required. This is the same approach
used in the TELRIC studies conducted by Sprint's local
exchange company in Florida.

5

- On page 7, lines 11 13, the Panel states, "The relevant costs that should be considered in a proper cost study
- 8 should be the costs divided by the total capacity of the
- 9 system reflecting reasonable utilization levels."
- 10 (Emphasis added). Does this reflect the FCC's definition
- of TELRIC.
- 12 A. No. As I already mentioned, the FCC requires the use of
- "reasonably accurate fill factors," not one that is based
- on total capacity.

15

- 16 Q. Does the TELRIC model used by BellSouth in its current
- TELRIC UNE proceeding in Florida (Docket No. 990649-TP)
- 18 reflect the "optimal level" and "total capacity" standard
- 19 presented by the Panel?
- 20 A. No, it does not.

- Q. What approach is used by BellSouth in its current TELRIC
 UNE proceeding in Florida (Docket No. 990649-TP).
- 24 A. BellSouth uses the same approach advocated by Sprint. The
- Direct Testimony of D. Daonne Caldwell, page 44, lines 8 -

1		12, states:
2		
3		BellSouth's fill factors were based upon the
4		FCC's directive that "[p]er unit costs shall be
5		derived from total costs using reasonable
6		accurate 'fill factors.'"(¶682) In many
7		cases, BellSouth Network provided the
8		anticipated utilization of the equipment based
9		on projected demand
10		
11		This paragraph describes exactly the approach utilized by
12		the Sprint PCS Cost Model.
13		
14	Q.	Is there other evidence that BellSouth utilizes this same
	Q.	Is there other evidence that BellSouth utilizes this same approach in their TELRIC studies?
15	Q. A.	
15 16		approach in their TELRIC studies?
15 16 17		approach in their TELRIC studies? Yes. In their BellSouth Cost Calculator documentation in
15 16 17 18		approach in their TELRIC studies? Yes. In their BellSouth Cost Calculator documentation in Docket 990649-TP makes several references to "actual"
15 16 17 18		approach in their TELRIC studies? Yes. In their BellSouth Cost Calculator documentation in Docket 990649-TP makes several references to "actual utilization", and "actual total usage." Specifically,
15 16 17 18 19		approach in their TELRIC studies? Yes. In their BellSouth Cost Calculator documentation in Docket 990649-TP makes several references to "actual utilization", and "actual total usage." Specifically,
15 16 17 18 19 20		approach in their TELRIC studies? Yes. In their BellSouth Cost Calculator documentation in Docket 990649-TP makes several references to "actual utilization", and "actual total usage." Specifically, Section 3, page 2, states:
15 16 17 18 19 20 21		approach in their TELRIC studies? Yes. In their BellSouth Cost Calculator documentation in Docket 990649-TP makes several references to "actual utilization", and "actual total usage." Specifically, Section 3, page 2, states: Telecommunications equipment and plant
14 15 16 17 18 19 20 21 22 23		approach in their TELRIC studies? Yes. In their BellSouth Cost Calculator documentation in Docket 990649-TP makes several references to "actual utilization", and "actual total usage." Specifically, Section 3, page 2, states: Telecommunications equipment and plant placements are typically "lumpy". Thus,

Z		
3		Section 3, page 3, states:
4		
5		Step 4: Adjust the material prices for
6		utilization to account for spare capacity using
7		a reasonable projection of actual total usage.
8		(Emphasis added)
9		
10		Finally, Section 4, page 7, states:
11		
12		This tool accepts both wire center and state
13		average data from the SCIS Model Office
14		
15		The Telcordia SCIS model produces both average and
16		marginal cost. By selecting the "average" option,
17		BellSouth is using actual utilization and actual demand
18		data.
19		
20	Q.	In a Q&A beginning on page 7, line 17, and in a series of
21		Q&As beginning on page 12, the Panel describes how Sprint
22		PCS must place cell sites in areas with little traffic
23		("coverage"), which results in low utilization. They then
24		present this as evidence that the Sprint PCS Cost Model
25		does not reflect a "lowest cost configuration." In

plant. (Emphasis added)

- another Q&A beginning on page 13, line 1, they refer to
 such a cell site as a "'fixed' cost facility." Please
 comment.

 A. This situation is no different than that experienced by
 all incumbent LECs, including BellSouth. All larger
 ILECS, including BellSouth and Sprint, serve both rural
- 7 and urban areas. Regulatory rules require ILECs to
- 8 provide "coverage" in all areas, even areas with little
- 9 traffic and low population density.

10

Rural areas have lower demand, lower densities, and lower

utilization levels. This is the main reason that rural

telephone companies have higher costs than urban

companies; hence, the reason for Universal Service Fund

support mechanisms.

16

- Q. Does BellSouth exclude rural, less dense areas

 ("coverage") from its cost studies in its current TELRIC
- UNE proceeding in Florida (Docket No. 990649-TP)?
- A. Apparently not. A review of BellSouth testimonies in that
 proceeding does not reveal any evidence of BellSouth
 excluding areas with lower utilization from their cost
- 23 studies, or that they consider such areas to be
- inefficient or not a "lowest cost network configuration."

- 1 Q. Please summarize the Panel's position on utilization and
- 2 fill factors.
- 3 A. The Panel has set a TELRIC standard for Sprint PCS that
- does not reflect the TELRIC standard used by their client,
- 5 BellSouth. It is not reasonable for BellSouth to hold
- 6 Sprint PCS to a different TELRIC standard than they do for
- 7 themselves.

8

9 IV. Spectrum Licenses

10

- 11 Q. In a Question and Answer (Q&A) beginning on page 9, line 5
- of their joint testimony, the Panel criticizes Sprint PCS'
- 13 treatment of spectrum licenses as a depreciable asset,
- 14 stating that "It [spectrum] doesn't go away, get used up
- or otherwise diminish."? Please comment.
- 16 A. First, their statement of fact is simply wrong. As
- described in the rebuttal testimony of Anthony Sabatino,
- 18 spectrum most certainly "gets used up." Additional
- 19 spectrum license auctions by the federal government, as
- 20 well as the recent spectrum license swap negotiated
- 21 between Sprint PCS and AT&T Wireless (PROPER NAME?)
- 22 demonstrate the capacity limitations faced by Sprint PCS
- 23 and the entire PCS industry.

24

25 Second, they have missed what the true issue is. It is

- not the cost of spectrum that Sprint PCS seeks to recover,
- 2 but the cost of the spectrum licenses. The distinction is
- 3 not just one of semantics. The spectrum license is a real
- 4 cost imposed on Sprint PCS by the government auctions.
- 5 The cost of the spectrum license is the relevant issue.

б

Q. Do traditional analog cellular companies have a similar cost?

- 9 A. No, traditional analog cellular companies did not have to
- 10 pay for the spectrum they occupy. The fact that PCS
- 11 providers must pay a license fee for the spectrum they
- 12 occupy puts the PCS industry at a competitive
- 13 disadvantage.

14

15 Q. How does the Sprint PCS Cost Model treat the cost of spectrum licenses?

- 17 A. The Sprint PCS Cost Model's treatment of spectrum as an
- intangible asset is in accordance with GAAP (Generally
- 19 Accepted Accounting Principles). Sprint PCS'
- 20 independently audited accounting records consider spectrum
- an investment, in accordance with Accounting Pronouncement
- Bulletin APB 17. As with any other intangible asset,
- amortization of that asset and a return on that investment
- 24 are entirely appropriate. The Sprint PCS Cost Model does
- not apply any maintenance expense to this investment.

1	Q.	Is	there	an	analogous	expense	in	the	ILEC	industry	v?
---	----	----	-------	----	-----------	---------	----	-----	------	----------	----

- 2 A. Yes. ILEC must pay right-to-use software fees to central
- 3 office equipment vendors. These fees are capitalized and
- 4 amortized over the life of the central office switch.

5

- 6 Q. Why did Sprint PCS choose a forty-year life for spectrum
- 7 licenses?
- 8 A. This is, in fact, a conservative estimate. The actual
- 9 licenses are for a ten-year period only. They have an
- 10 expectation of renewal, but at what cost is unknown at
- 11 this time. These licenses are not without risk. As
- pointed out by the Panel on page 17, lines 21 24,
- spectrum licenses are subject to forfeiture if federal
- 14 requirements are not met. APB 17 states that the
- amortization period should be equal to the useful life,
- not to exceed forty years.

17

18 V. Cell Site Towers and Antennae

- 20 Q. In a Q&A beginning on page 9, line 19, The Panel argues
- 21 that Sprint PCS' towers and antennae are equivalent to
- telephone poles. Is this a correct analogy?
- 23 A. No, it is not. The reason telephone poles are non-traffic
- sensitive is because the loop they support is non-traffic
- 25 sensitive.

1 What is a proper analogy for Sprint PCS' towers and Q. 2 antennae? 3 Sprint PCS towers and antennae are analogous to land and Α. building associated with switching equipment. 4 5 6 How are the land and buildings associated with central Q. 7 office switching considered in ILEC cost studies for the TELRIC of UNE switching? 8 Generally, land and buildings are included in the TELRIC 9 of UNE switching. 10 11 Why are land and buildings generally included in TELRIC 12 Q. 13 switching studies? 1.4 Α. Because land and buildings associated with switching are 15 traffic sensitive in the long-run. 16 17 Land and buildings are not traffic sensitive in the short run. An increase in the utilization of the switch over 18 several months or perhaps several years does not cause an 19 20 increase in the land and building associated with it. 21 That is why LRIC (Long-Run Incremental Cost) or TSLRIC 22 (Total Service Long-Run Incremental Cost) studies 23 generally consider land and buildings a shared incremental

24

cost.

However, in the long-run, as additional switching capacity must be added, additional land and buildings must also be added, especially if the additional switches are located in a new end office. Paragraph 682 of the FCC Order states that a properly conducted TELRIC methodology will attribute shared costs to specific elements to the greatest possible extent. Therefore, ILECs generally include land and buildings associated with switching investment as a part of their TELRIC UNE cost studies.

11 Q. Are cell sites, like central office, traffic sensitive?

Α. Yes, as discussed in the Direct and Rebuttal Testimonies of Anthony Sabatino, cell sites are traffic sensitive because, like central offices, cell sites are engineered to meet busy-hour traffic demand, and are shared by all users. Loops, on the other hand, are engineered to meet the number of subscribers, and are dedicated to individual end users.

Therefore, just as land and buildings supporting switching investment are traffic sensitive in the long-run, tower and antennae supporting cell site investment are traffic sensitive in the long-run.

25 VI. Conclusion and Summary

1 Q. Please summarize your rebuttal testimony.

- 2 A. As I have pointed out throughout by rebuttal testimony,
- 3 the testimonies of Mr. Hamm and the Panel hold Sprint PCS
- 4 to a different TELRIC standard than that of BellSouth.
- 5 The following standards must be abided if Sprint PCS is to
- 6 be given equal consideration with BellSouth.
- The same definition of non-traffic sensitive costs
- 8 must apply to both Sprint PCS and BellSouth
- Sprint PCS should not be forced to use theoretical
- 10 optimal utilization factors and theoretical total
- 11' capacity when BellSouth uses actual demand
- Sprint PCS should not be denied recovery of traffic
- sensitive towers and antennae when ILECs are allowed
- 14 to recover traffic sensitive land and buildings
- Sprint PCS should not be denied recovery of spectrum
- 16 license fees when ILECs are allowed to recover
- 17 central office software right-to-use fees.

18

- 19 The FCC definition of TELRIC does not change for different
- 20 carriers. Sprint PCS is entitled to the same TELRIC
- 21 standard that this Commission has approved for BellSouth.

22

23 Q. What is your second objection?

- 24 A. The fact that their analysis produces a result that is
- even lower than the reciprocal compensation rate of

1	BellSouth is an indication of an inherent flaw in their
2	reasoning. It conflicts with the opinion of the FCC.
3	Paragraph 1017 of the FCC Order states:
4	
5	Moreover, the record contains no estimates of
6	the cost of CMRS termination. That cost is
7	generally considered to be greater than the
8	cost of LEC termination; 2725 but only one oral,
9	ex parte estimate of CMRS cost has been
10	offered: 2.25 to 4.0 cents per minute. 2726
11	
12	2725 See, e.g., AT&T comments in CC Docket No. 95-
13	185 at Attachment (Declaration of Bruce M. Owen),
14	p. 5-6.
15	
16	2726 Steven R. Brenner and Bridger M. Mitchell,
17	CTIA ex parte briefing, CC Docket No. 95-185, Mar.
18	21, 1996.
19	
20	The Panel's flawed analysis on page 23, lines 16 - 20 of
21	their testimony, as discussed in the rebuttal testimony of
22	Bridger M. Mitchell, is further evidence that that their
23	proposed reciprocal compensation rate for Sprint PCS is
24	seriously flawed.

Т.	Q. Does	CIIIS CO	ncrude	your	reputtar	restructivity:	
2	A. Yes,	it does					
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