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August 4, 2004

VIA HAND DELIVERY

Honorable Jean Stone, Esq., Hearing Officer
c/o Sharla Dillon, Docket & Records Manager
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243-0505

RE: Petition of Cellco Partnership d/b/a Verizon Wireless For Arbitration Under the Telecommunications Act of 1996
TRA Consolidated Docket # 03-00585

Dear Hearing Officer Stone:

Enclosed please find one original and thirteen (13) copies of *Second Supplemental Testimony of W. Craig Conwell on behalf of Verizon Wireless, Cingular Wireless, AT&T Wireless, and T-Mobile USA*. Pursuant to the Protective Order in this docket, please note that I am filing both a redacted and confidential version of Mr. Conwell's testimony. Also enclosed is an additional copy of the same to be "file stamped" for our records.

Parties of record will receive copies of the enclosed. If you have any questions, please do not hesitate to contact me.

Sincerely,

Clay Phillips

J. Barclay Phillips

clw
Enclosures
cc: Parties of Record

LATE FILED

<u>CONFIDENTIAL</u>

Pages 6, 7, 8, 9, and Second Supplemental Attachment A herein contain "Confidential Information" pursuant to the Protective Order issued in this Docket No. 03-00585 and have been redacted accordingly.

BEFORE THE
TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE

IN RE:	)	
Petition of Cellco Partnership d/b/a Verizon Wireless	)	**Docket No. 03-00585**
for Arbitration under the Telecommunications Act	)	
	)	

SECOND SUPPLEMENTAL TESTIMONY OF W. CRAIG CONWELL
ON BEHALF OF
VERIZON WIRELESS, CINGULAR WIRELESS, AT&T WIRELESS
AND T-MOBILE USA

INTRODUCTION

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND EMPLOYER.

A. My name is W. Craig Conwell. My business address is 405 Hammett Road, Greer, South Carolina. I am an independent consultant.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS CASE?

A. Yes, I filed direct, rebuttal and first supplemental testimony on behalf of Verizon Wireless, Cingular Wireless, AT&T Wireless and T-Mobile USA.

Q. WHAT IS THE PURPOSE OF YOUR SECOND SUPPLEMENTAL TESTIMONY?

A. Following the filing of my first supplemental testimony, sixteen of the Rural Coalition companies provided copies of their 2002 and 2003 audited financial statements. Four other companies produced copies of their 2003 Annual Reports to the Tennessee Regulatory Authority (the "TRA"). I am filing supplemental testimony to describe my findings having reviewed this information.

Q. WAS THE FINANCIAL INFORMATION PROVIDED BY THE RURAL COALITION COMPLETE AND IN SUFFICIENT DETAIL TO PERMIT A THOROUGH ANALYSIS?

A. Audited financial statements or TRA Annual Reports were provided for all companies with proposed transport and termination rates in Attachment E to Mr Watkins direct testimony. However, the audited financial statements provided by sixteen of the companies did not contain operating expenses at the level of detail of the FCC's Uniform System of Accounts (USOA), as had been requested by the CMRS Providers. Instead, operating expenses generally were summarized at the level of *plant specific operations*, *plant non-specific operations*, *customer operations* and *corporate operations* expenses.

The USOA provides plant specific operations expenses by plant type - digital electronic switching, circuit equipment, etc. Plant non-specific operations expenses are subdivided among power, network administration, testing and others. Customer operations expenses and corporate operations expenses are similarly divided among several accounts, which provide details on various marketing and customer services expenses and general and administrative expenses. The audited financial statements also did not give depreciation expenses by plant account or provide beginning and end of year plant balances by account for 2003. I expected the financial information produced by the Rural Coalition to contain this level of detail.

Q. WHY ARE EXPENSE AND PLANT DETAILS IMPORTANT?

A. As I have testified previously, the FCC rules for establishing reciprocal compensation require rates to be set based on either forward-looking economic costs or a bill-and-keep arrangement. If cost-based rates are to be used, the incumbent LEC is required to produce a forward-looking cost study, which includes a wide variety of cost data. Some cost data are obtained from recent financial reports. These include operating expenses and plant balances at the USOA level of detail, which are used to develop expense and other cost factors.

For example, the cost of termination represents the monthly cost per minute of use for the traffic-sensitive portion of the incumbent LEC end office switches. The monthly cost includes capital costs (depreciation, the cost of capital and income taxes) and operating expenses, such as maintenance expense for the switch. Switch maintenance expense is a significant part of termination costs and is typically estimated by multiplying a *maintenance expense factor* times the traffic-sensitive investment in end office switching. The maintenance expense factor is developed from details contained in the financial reports as shown in the following illustration

Maintenance Expense Factor

Digital Electronic Switching

Line	USOA Account	Description	Amount	Calculation
		Operating expense		
1	6212	Digital electronic switching expense	$ 100,000	
2	6531	Power expense	$ 19,000	
3	6533	Testing expense	$ 150,000	
4	6535	Engineering expense	$ 110,000	
		Average plant investment		
5	2212	Digital electronic switching	$ 6,600,000	
6	2220	Operator systems	$ -	
7	2230	Central office transmission	$ 8,400,000	
8	2400	Cable & wire facilities	$ 15,800,000	
		Maintenance expense factor		
9		Digital electronic switching	1 5%	Ln 1 / Ln 5
10		Power	0 1%	Ln 2 / Lns (5, 6 & 7)
11		Testing	0 5%	Ln 3 / Lns (5 - 8)
12		Engineering	0 4%	Ln 4 / Lns (5 - 8)
13		Total	2.5%	
14		Current switch traffic sensitive investment / MOU	$ 0 0157	Forward-looking study calculation
15		Maintenance expense / MOU	$ 0 0004	Ln 13 X Ln 14

In this example, the maintenance portion of termination costs is computed by multiplying 2.5% times the current traffic-sensitive switch investment per minute of use.[1] Without operating expenses and plant investment at the USOA level of detail, it is not possible to develop maintenance expense factors for transport and termination and other factors used in the cost study.[2] The same factors, developed from the financial reports, also are used to test the reasonableness of an incumbent LEC's cost study. The audited financials did not provide the necessary level of detail.

[1] The current traffic-sensitive investment per minute of use is determined by calculating the current investment necessary to construct a new digital end office switch The switch is sized to serve current or forward-looking access line demand with an efficient level of spare capacity The portion of the switch investment associated with line terminating equipment (rather than traffic terminating equipment) is then removed since the equipment is non-traffic sensitive The remaining traffic-sensitive investment is divided by the annual minutes of use for the line quantity used to size the switch

Q. DO THE TRA ANNUAL REPORTS PROVIDE THE NECESSARY LEVEL OF DETAIL?

A. Yes, the Annual Reports give operating expenses and plant balances at the USOA level of detail for 2002 and 2003.[3]

Q. WHAT COMPANIES PROVIDED TRA ANNUAL REPORTS FOR 2003?

A. The four companies were Concord Telephone Exchange, Humphreys County Telephone Company, Tellico Telephone Company and Tennessee Telephone Company.

Q. WHAT WAS YOUR FIRST FINDING FROM ANALYZING THESE REPORTS?

A. In previous testimony, I indicated that the FCC rules do not permit transport and termination rates to be based on embedded costs, and I described general differences between embedded costs and forward-looking costs, which are required for cost-based reciprocal compensation. I also pointed out that the Coalition's proposed switched access rates are based on embedded costs, and therefore, are inappropriate for reciprocal compensation. In reviewing the TRA Annual Reports, I found examples of how the embedded costs of these four companies would not be appropriate for establishing reciprocal compensation.[4]

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[2] Operating expense or plant investment details also are used to develop property tax factors, shared and common cost factors, effective income tax rates, etc

[3] It should be noted that the cost data used in a forward-looking cost study is not limited to data from the financial reports To be forward-looking, a cost study must reflect plant investments and operating expenses expected in the future Therefore, current or prospective plant investment, utilization levels, etc are used Expense factors and other cost data developed from the financial reports are used when recent expense-to-investment relationships are expected to continue in the future, or they are adjusted to reflect productivity improvements, changes in resource costs, etc

[4] See Second Supplemental Attachment A

- *[REDACTED]*

- *[REDACTED]*[5][6]

- *[REDACTED]*

In my rebuttal testimony, I provided benchmarks for forward-looking switching and transport costs. The end office switching cost benchmark was developed in

[5] [Redacted]
[6] [Redacted]

Attachment WCC-4 and was based on a *current* estimate of digital switch investment per line of $323 *[REDACTED]*

These are specific examples of how termination rates based on the embedded costs of these companies would likely exceed their forward-looking costs.

Q. WERE YOU ABLE TO DRAW SIMILAR CONCLUSIONS REGARDING TRANSPORT COSTS?

A. No. The information necessary to determine the date of transport plant placement (interoffice circuit equipment and cable and wire facilities), current utilization levels and embedded investment per unit of capacity is not available in the Annual Reports.

Q. WHAT ELSE DID YOU FIND REGARDING THE EMBEDDED COSTS OF THE COMPANIES?

A. I found that embedded common costs appear to be high. The FCC rules permit a "reasonable allocation of forward-looking common costs" to be included in transport and termination rates.[7] In Docket No. 97-01262, the TRA addressed the issue of what is a "reasonable" level of shared and common costs and ordered BellSouth

[7] See 47 CFR 51 705 and 51 505

Telecommunications to use a 15% shared and common cost markup factor.[8] The factor is applied to the TELRIC of each unbundled network element to compute the forward-looking economic cost.

In analyzing the Annual Reports for the four companies, I made an estimate of the shared and common cost markup factor based on their embedded costs. I included expenses in the following expense accounts as shared and common: Network Support, General Support, Network Administration, Plant Operations Administration, Executive & Planning and General & Administrative. I then divided these expenses by Total Operating Expenses, less the common expenses, to compute an embedded markup factor[9] The calculations are shown in the table below.

Estimates of Shared and Common Cost Markup Factors

[CHART REDACTED]

[8] "Interim Order on Phase I of Proceeding to Establish Prices for Interconnection and Unbundled Network Elements," Docket No 97-01262, January 25, 1999, pp 10 – 11 The order defines shared and common costs as, "Shared costs can be directly attributed to two or more UNEs, while common costs are general costs that cannot be attributed to any UNE "

[9] Shared and common costs also include capital costs (depreciation, the cost of capital and income taxes) on the Network Support and General Support assets. These costs are not included in the markup factors estimated for the four companies Had they been included, the markup factors would be even higher

The table shows that the embedded markup factors ranged from *[REDACTED]* compared to my estimate for BellSouth of 23%. Again, this indicates that using the embedded costs of these four Rural Coalition companies would result in inflated transport and termination rates.

Q. BASED ON THE ANNUAL REPORTS, WERE YOU ABLE TO REFINE OR CONFIRM ANY OF THE COSTING ASSUMPTIONS MADE IN PREPARING THE TRANSPORT AND TERMINATION COST BENCHMARKS?

A. Yes, I was able to confirm the reasonableness of several key costing assumptions underlying the termination or switching cost benchmark of $0.0051 per minute of use. As I mentioned earlier, the current switching investment per line in the benchmark model is $323 per line. *[REDACTED]* the $323 investment per line appears to be reasonable.

I assumed a ten year service life and two percent net salvage value for digital switching, resulting in a 9.8% depreciation rate *[REDACTED]* I assumed a 4.0% digital switching maintenance expense factor. *[REDACTED]* I assumed a 30% debt ratio and 7.0% cost of debt, which produces a 2.1% cost of debt factor (30% X 7.0%). *[REDACTED]* Thus, in each case, my costing assumptions resulted in a slightly higher estimate of TELRIC. Finally, I used a 15% shared and common cost markup factor, which is the same as ordered by the TRA. Consequently, I am confident $0.0051 is a reasonable cost benchmark for Rural Coalition company forward-looking economic costs.

Q. WERE YOU ABLE TO REFINE THE TRANSPORT COST BENCHMARK?

A. No. I still recommend $0.0015 per minute of use for the transport cost benchmark based on the upper end of the range of unbundled common transport rates across the states. A value of $0.0022 per minute of use remains as the best available estimate for tandem switching in those cases where a Coalition company provides this function.

Q. COULD YOU PLEASE SUMMARIZE YOUR TESTIMONY?

A The cost information contained in the TRA Annual Reports produced by four of the eighteen companies proposing reciprocal compensation rates in this case clearly show the fallacy of using embedded costs as the basis for rates. There is substantial risk, if not certainty, that the resulting rates will exceed forward-looking economic costs, and the FCC has specifically stated in 47 CFR 51.505(e), "An incumbent LEC must prove to the state commission that the rates for each element it offers do not exceed the forward-looking economic cost per unit of providing the element ..." The cost data of these companies show high embedded switching investment, low switch utilization and high shared and common costs. These same costs flow into NECA's interstate switched access rate development.

I am again recommending that the TRA adopt a bill-and-keep arrangement for reciprocal compensation, until the Rural Coalition companies produce transport and termination rates based on forward-looking cost studies I also recommend that financial reports be provided for all companies at the USOA level of detail so that the studies can be evaluated for reasonableness.

Before concluding, I also would like to point out that the four Rural Coalition companies providing TRA Annual Reports have filed contracts with three different CLECs in Tennessee. Each contract provides for bill-and-keep as the primary compensation mechanism. If telecommunications traffic goes "out of balance" (i.e., one party terminates more than sixty percent of total traffic), then the parties are to bill each other at a compensation rate of $0.00577 per minute of use. This rate is below the cost benchmark that I have presented.

Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL TESTIMONY?

A. Yes, it does.

Second Supplemental Attachment 1 – Analysis of TRA Annual Reports

[CHART REDACTED]

CERTIFICATE OF SERVICE

I hereby certify that on August 4, 2004, a true and correct copy of the foregoing has been served on the parties of record, via the method indicated:

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