

1 **BELLSOUTH TELECOMMUNICATIONS INC.**

2 **BEFORE THE**

3 **FLORIDA PUBLIC SERVICE COMMISSION**

4 **DOCKET NO. DOCKET NO. 30851-TP**

5 **SURREBUTTAL TESTIMONY OF**

6 **DR. RANDALL S. BILLINGSLEY, CFA**

7 **JANUARY 28, 2004**

8
9 **I. INTRODUCTION**

10
11 **Q. Please state your name, occupation, and business address.**

12
13 A. My name is Randall S. Billingsley. I am a finance professor at Virginia Polytechnic Institute and
14 State University. I also act as a financial consultant in the areas of cost of capital analysis, financial
15 security analysis, and valuation. My business address is: Department of Finance, Pamplin College
16 of Business, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061-0221.

17
18 This surrebuttal testimony presents my independent professional opinions and is not presented by
19 me as a representative of Virginia Polytechnic Institute and State University.

20
21 **Q. Have you previously submitted testimony in this proceeding on behalf of BellSouth**
22 **Telecommunications Corporation (BST)?**

23
24 A. Yes.

25
26 **II. PURPOSE OF SURREBUTTAL TESTIMONY AND SUMMARY OF**

1 **CONCLUSIONS**

2 **A. PURPOSE OF SURREBUTTAL TESTIMONY**

3
4 **Q. What is the purpose of your testimony in this proceeding?**

5
6 A. My purpose is to critically evaluate the testimonies of four witnesses filing rebuttal testimony in this
7 proceeding concerning the cost of capital. First, I evaluate Mr. Don J. Wood's rebuttal testimony
8 on behalf of AT&T Communications of the Southern States, L.L.C. (AT&T), which is dated
9 January 7, 2004. I show that his testimony provides no insight into the current capital costs faced
10 by competitive local exchange providers (CLECs) in general or any specific insight into the
11 appropriate discount rate to be used in the BellSouth Analysis of CLEC Entry (BACE) model.
12 Second, I examine the unfounded and unsupported cost of capital assumptions made in the
13 rebuttal testimony of Mr. David A. Nilson, filing on behalf of Supra Telecommunications and
14 Information Systems, Inc. (Supra) on January 7, 2004. Third, I evaluate Dr. Brian K. Staihr's
15 rebuttal testimony filed on behalf of Sprint Communications Limited Partnership and Sprint-
16 Florida, Inc. (Sprint) on January 7, 2004. I discuss his misunderstanding of my recent CLEC
17 capital cost analysis and his incorrect observations concerning CLEC capital costs. Fourth and
18 finally, I discuss Mr. Kent W. Dickerson's rebuttal testimony filed on behalf of Sprint/United
19 Management Company (Sprint/United) on January 7, 2004. I point out the inconsistency between
20 his cost of capital conclusions and those of Dr. Staihr and explain why his internal rate of return
21 analysis provides no useful information on the reasonableness of the BACE model. Below I
22 summarize my analysis of each of the above-noted witness' rebuttal testimonies.

1 **B. SUMMARY OF SURREBUTTAL OF MR. DON J. WOOD'S**
2 **REBUTTAL TESTIMONY ON BEHALF OF AT&T**
3 **COMMUNICATIONS OF THE SOUTHERN STATES, L.L.C.**
4

5 **Q. What issues does your surrebuttal focus on in Mr. Wood's rebuttal testimony concerning**
6 **the CLEC industry's capital costs?**

7
8 A. My surrebuttal shows that most of Mr. Wood's testimony provides nothing more than
9 unsupported speculations concerning CLEC capital costs and the rest presents inconsistent and
10 incorrect arguments that leave us with no evidence on current CLEC capital costs. Importantly,
11 Mr. Wood provides *absolutely no estimates* of CLEC capital costs. I identify numerous
12 examples of his unsupported personal opinions in my surrebuttal. Further, I focus on Mr. Wood's
13 inconsistent and incorrect argument that currently operating CLECs possess inefficient, sub-
14 optimal capital structures and yet at the same time somehow are economically efficient. This
15 contradictory argument dramatizes his misunderstanding of the information provided by currently
16 operating, market-traded CLECs concerning their capital costs. I also evaluate Mr. Wood's
17 misguided projection that past CLEC infrastructure investments and associated bankruptcies will
18 necessarily be repeated in the future. In summary, Mr. Wood's unsupported and incorrect
19 observations tell us nothing meaningful about the appropriate discount rate that should be used in
20 the BACE model.

21
22 **C. SUMMARY OF SURREBUTTAL OF MR. DAVID A. NILSON'S**
23 **REBUTTAL TESTIMONY ON BEHALF OF SUPRA**
24 **TELECOMMUNICATIONS AND INFORMATION SYSTEMS, INC.**
25

26 **Q. What issues does your surrebuttal focus on in Mr. Nilson's rebuttal testimony**

1 **concerning the CLEC industry's capital costs?**

2
3 A. I focus on Mr. Nilson's extreme, incorrect argument that CLECs are currently unable to obtain
4 capital "at any cost." I note that Mr. Nilson provides no evidence to support his argument and I
5 provide some examples of CLECs that have recently obtained capital in the financial markets. In
6 short, Mr. Nilson's unsupported and incorrect opinion is irrelevant to estimating CLEC capital
7 costs and provides nothing of use in determining the appropriate discount rate to be used in the
8 BACE model.

9
10 **D. SUMMARY OF SURREBUTTAL OF DR. BRIAN K. STAIHR'S**
11 **REBUTTAL TESTIMONY ON BEHALF OF SPRINT**
12 **COMMUNICATIONS LIMITED PARTNERSHIP AND SPRINT-**
13 **FLORIDA, INC.**

14
15 **Q. What issues does your surrebuttal focus on in Dr. Staihr's rebuttal testimony concerning**
16 **the CLEC industry's capital costs?**

17
18 A. I evaluate Dr. Staihr's misunderstanding of the averaging process I use to estimate the CLEC
19 industry's current capital costs. In so doing, I emphasize that the CLEC industry currently
20 operates in the wake of a period of financial distress. Thus, the current capital cost estimates
21 provided by a sample of publicly-traded CLECs are not representative of sustainable, efficient
22 equilibrium. These capital cost estimates consequently constitute an *upper-bound* or maximum in
23 estimating CLEC capital costs in my analysis. Similarly, the capital costs associated with the
24 Standard & Poor's Composite 500 Index (S&P 500) provide a benchmark of average market
25 risk, which reasonably functions as a *lower-bound* or minimum in estimating current CLEC costs.
26 Contrary to Dr. Staihr's misunderstanding, given the current state of the CLEC industry it is

1 perfectly reasonable and indeed necessary to provide a bounded estimate of CLEC capital costs
2 using an averaging process.

3 My surrebuttal also focuses on Dr. Staihr's incorrect attempts to modify my cost of capital
4 estimates for the CLEC industry *without performing any additional data analysis himself*.
5 Surprisingly, he picks and chooses among various inputs in my estimation approach while ignoring
6 the *relationship among* those inputs. For example, Dr. Staihr apparently likes my *upper-bound*
7 *cost* of equity estimate derived from a sample of market-traded CLECs, accepts the *average* of
8 the cost of debt estimates derived from the CLEC sample and the S&P 500, but dislikes the
9 sample's *upper-bound* capital structure and uses an *average* of that of the S&P 500 and the
10 CLEC sample. However, the cost of equity he uses is generated using market data that only
11 respects the capital structure he rejects for arbitrary reasons. Thus, Dr. Staihr's attempt to change
12 my analysis is inconsistent and incorrect. Further, I discuss his invalid comparisons of current
13 CLEC capital cost estimates with UNE estimates I made about four years ago. After making
14 incorrect adjustments to my cost of capital estimates, Dr. Staihr ultimately finds that the net
15 present value (NPV) generated by the BACE model remains positive. His analysis consequently
16 indicates that there is no evidence of impairment.

17
18 **E. SUMMARY OF SURREBUTTAL OF MR. KENT W. DICKERSON'S**
19 **REBUTTAL TESTIMONY ON BEHALF OF SPRINT/UNITED**
20 **MANAGEMENT COMPANY**

21
22 **Q. What issues does your surrebuttal focus on in Mr. Dickerson's rebuttal testimony**
23 **concerning the CLEC industry's capital costs?**

24
25 **A.** I concentrate on two aspects of Mr. Dickerson's testimony. First, I show that Mr. Dickerson's
26 use of a 10.14% pre-tax overall cost of capital in his analysis is inconsistent with the cost of

1 capital conclusions presented by another Sprint witness, Dr. Brian K. Staihr. Comparing these
2 analyses dramatizes the unreasonableness of their conclusions. Second, I explain why Mr.
3 Dickerson's internal rate of return analysis of the BACE model relies on an extremely fragile,
4 inappropriate financial assumption that renders his analysis useless in assessing or applying the
5 BACE model.

6
7 **III. ANALYSIS OF MR. DON J. WOOD'S REBUTTAL TESTIMONY ON**
8 **BEHALF OF AT&T**

9
10 **A. QUALIFICATIONS AS A COST OF CAPITAL EXPERT**

11
12 **Q. Are you familiar with Mr. Wood's testimony as a cost of capital expert in other**
13 **regulatory proceedings?**

14
15 **A.** No. While I have read and rebutted Mr. Wood's testimony in other regulatory proceedings, in my
16 experience he has always simply summarized the cost of capital recommendations made by the
17 cost of capital expert(s) working in the given case. I am not familiar with any independent work
18 done by Mr. Wood as a cost of capital expert. I am consequently surprised that he appears to
19 consider himself a cost of capital expert in the current proceeding and I know of no basis for
20 doing so.

21
22 **B. EVIDENCE CONTRADICTING MR. WOOD'S ASSUMPTION OF CLEC**
23 **INEFFICIENCY**

24
25 **Q. Do you agree with Mr. Wood's position that CLECs are currently operating efficiently?**
26

1 A. No, I believe that the evidence contradicts Mr. Wood's position. He incorrectly argues that:
2 ... the fact that a significant number of CLECs have gone bankrupt suggests that
3 competitive market constraints have winnowed the field, and those CLECs that
4 currently are operating do have efficient operations. In order to make reasonable
5 assumptions about efficient CLEC costs, it is logical to look at currently operating
6 CLECs (Rebuttal Testimony, p. 48, lines 12 – 16).

7
8 Mr. Wood argument reduces to unsupported speculation that CLECs that did not go bankrupt
9 are, by definition, necessarily operating efficiently. As shown in my direct testimony in this
10 proceeding, the average bond rating for a sample of market-traded CLECs is CCC+/CCC (see
11 Billingsley Exhibit No. RSB-6). This is a speculative-grade bond rating that is associated with
12 firms in financial distress. Consider the following definition of the CCC-level rating:

13 An obligation rated 'CCC' is currently vulnerable to nonpayment, and is dependent
14 upon favorable business, financial, and economic conditions for the obligor to meet its
15 financial commitment on the obligation. In the event of adverse business, financial, or
16 economic conditions, the obligor is not likely to have the capacity to meet its financial
17 commitment on the obligation (*Standard & Poor's Bond Guide*, October 2003, p.
18 4).

19 It is absolutely amazing that Mr. Wood argues that such firms should be used "... to make
20 reasonable assumptions about efficient CLEC costs." The evidence obviously contradicts this.
21 Further, Mr. Wood's reliance on unadjusted data drawn from inefficient CLECs is inconsistent
22 with the Federal Communication Commission's (FCC's) assertion that the cost of capital should
23 reflect a forward-looking, efficient network (see Triennial Review Order, In Re Review of the
24 Section 251, Unbundling Obligations of Incumbent Local Exchange Carriers, First Report and
25 Order on Remand and Further Notice of Proposed Rulemaking, FCC 03-36, released August,
26 21, 2003, pp. 419-420, §682).

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**C. INCONSISTENT ARGUMENT THAT CLEC CAPITAL STRUCTURES
ARE NOT EFFICIENT**

Q. After arguing that CLECs are currently operating efficiently, does Mr. Wood also argue that current CLEC capital structures are not efficient, target capital structures?

A. Yes. Mr. Wood states:

This structure is clearly not the target capital structure of these companies, but has arisen in large part because of the precipitous drop in the companies' stock prices (Rebuttal Testimony, p. 55, line 24 – p. 56, line 2).

Mr. Wood is inconsistent. On one hand he argues that CLECs are efficient and a reasonable source of representative capital costs. Yet on the other hand he argues that their current capital structure is not equal to their target, optimal capital structure. His only explanation for this contradictory speculation concerning current CLEC capital structures is that they are the result of the "precipitous drop in the companies' stock prices." Mr. Wood's contradictory, inconsistent argument does not make sense. The truth that must be faced is that CLECs are not currently efficient in a comprehensive sense. It is consequently reasonable to use the averaging process that I do to produce a representative bounded estimate of representative CLEC capital costs. It is eminently appropriate to bound current CLEC costs on the downside with the S&P 500 and on the upside with capital costs produced by a CLEC sample, which is obviously in an inefficient condition.

**D. MR. WOOD'S SPECULATIONS CONCERNING CLEC FUTURE
INFRASTRUCTURE INVESTMENTS**

1 **Q. What speculation does Mr. Wood make concerning future CLEC infrastructure**
2 **investments based on history?**

3

4 A. The gist of Mr. Wood's speculation is that CLECs have no capacity to understand or to avoid
5 their past mistakes. He states that:

6 ... CLECs invested in network infrastructure (large fixed costs) based on an
7 anticipation of future revenues that would make their market entry economic. Their
8 assumptions regarding whether entry in this manner would be economic, now clearly
9 flawed, are very similar to the assumptions that BellSouth is now inviting CLECs to
10 make through the results of its business case analysis (and is asking the Commission to
11 conclude that the CLEC's should accept the invitation). ... CLECs face a decision of
12 whether or not to invest in network infrastructure (in this case a local circuit switch,
13 whose cost characteristics cause it to represent a large fixed cost). BellSouth argues
14 that they could rationally do so ... (Rebuttal Testimony, p. 53, lines 8-19).

15

16 Thus, Mr. Wood attributes the CLECs past woes to network infrastructure investments with
17 "large fixed costs" and predicts that CLECs will necessarily experience the same troubles again in
18 the future. However, I do not share Mr. Wood's uncomplimentary view of the CLECs' ability to
19 learn from past challenges. The future is not necessarily a simple extension of the past and learning
20 is possible.

21

22 **E. RELATIVE RISK OF CLECS AND ILECS**

23

24 **Q. Does Mr. Wood provide any evidence to support his position that CLECs face higher**
25 **risks than incumbent local exchange companies (ILEC's)?**

26

1 A. No. Mr. Wood offers no evidence on the relative riskiness of CLECs and ILECs. He only
2 expresses his unsupported opinion as follows:

3 There is a fundamental difference in the risk incurred by a former monopoly provider,
4 with existing network facilities and an existing base of customers, and the risk incurred
5 by a new entrant to enter the market by making a large fixed investment without the
6 customer base needed to recover the cost of that investment (Rebuttal Testimony, p.
7 51, lines 7-11).

8 He then speculates that "... a CLEC continues to face, for the reasons described above, much
9 higher risk than an ILEC" (Rebuttal Testimony, p. 52, lines 15-17).

10

11 While CLECs may well be riskier than ILECs, any possible difference should be *demonstrated*
12 using empirical evidence rather than *assumed*. Mr. Wood *speculates* about the relative risks of
13 ILECs and CLECs when evidence is needed, not his opinion.

14

15 **IV. ANALYSIS OF MR. DAVID A. NILSON'S REBUTTAL TESTIMONY ON**
16 **BEHALF OF SUPRA**

17

18 **Q. What is your assessment of Mr. Nilson's contention that investment capital is not**
19 **currently available to CLECs "at any cost?"**

20

21 A. Mr. Nilson provides nothing but his personal opinion and no evidence whatsoever that CLECs
22 cannot raise funds "at any cost." He speculates as follows:

23 BellSouth testimony of Dr. Randall S. Billingsley focuses on the cost of capitol without
24 ever addressing whether such capitol [*Mr. Nilson's spelling throughout quote*] is
25 available **at any cost**. Billingsley addresses the fact that CLECs are in financial
26 distress, but is silent whether capitol for expansion is available any longer. It is no

1 longer 1998 and 1999. Equipment vendors such as Lucent and Nortel went to the
2 edge of extinction based on their lending to CLECS who, lacking UNE-P, were
3 unable to build critical mass to stay afloat, much less repay the loans. Those loans are
4 non-existent today as any CLEC engineer knows. VC money similarly, and for the
5 same reasons no longer exists. (Rebuttal Testimony, p. 42, line 20 – p. 43, line 5).

6
7 Contrary to Mr. Nilson’s unqualified assertion, a casual search of the World Wide Web reveals a
8 number of instances over the last six months in which CLECs have obtained capital. For example,
9 US LEC Corporation privately placed \$10 million in equity capital late in 2003 (see
10 PRNewswire-FirstCall, November 10, 2003), Mpower Communications Corporation raised
11 \$17.47 million in equity in September of 2003 (see www.mpowercom.com, Mpower
12 Newsroom, September 26, 2003), and Pac-West Telecommunications, Inc. raised \$40 million in
13 debt and equity private placement (see PRNewswire, December 19, 2003). These few examples
14 contradict Mr. Nilson’s speculation that CLECs are barred from obtaining capital “at any cost.”

15
16 **V. ANALYSIS OF DR. BRIAN K. STAIHR’S REBUTTAL TESTIMONY ON**
17 **BEHALF OF SPRINT**

18
19 **A. MISUNDERSTANDING OF APPROPRIATE AVERAGING PROCESS**
20 **USED IN COST OF CAPITAL ESTIMATION**

21
22 **Q. What is your evaluation of Dr. Staihr’s criticism of averaging the returns on the S&P**
23 **500 with those of a sample of CLECs to provide a reasonable estimate of CLECs’**
24 **current capital costs?**

25
26 **A.** Dr. Staihr argues the S&P 500 and a sample of CLECs are not comparable groups but also

1 offers the following criterion for when averaging is appropriate:

2 Because investors' expected returns are functions of risk, the only justification for
3 averaging the two groups would be if the entrant reflected investment risk that was,
4 for some reason, somewhere between the S&P and CLECs in general (Rebuttal
5 Testimony, p. 39 lines 20-23).

6 While I agree that the S&P 500 and the sample of CLECs contain different firms, I do not accept
7 Dr. Staihr's argument that they should not be compared. The S&P 500 is a commonly-used
8 benchmark in evaluating investment returns. My analysis uses it in much the same spirit – as a
9 benchmark of average risk in the market. Further, I accept and my cost of capital analysis is
10 consistent with Dr. Staiher's stated criterion under which it is appropriate to average the returns
11 on the S&P 500 with the returns on the sample of CLECs. As quoted above, he asserts that such
12 averaging is appropriate "... if the entrant reflected investment risk that was, for some reason,
13 somewhere between the S&P and CLECs in general." I believe that the representative cost of
14 capital for the CLECs is consistent with risk between the average risk or lower-bound captured
15 by the current capital costs of the S&P 500 and the upper-bound expressed by the current capital
16 costs of a sample of publicly-traded CLECs.

17
18 As discussed above, it is important to stress that the CLEC industry currently operates in the
19 wake of a period of financial distress. Thus, the current capital cost estimates provided by a
20 sample of publicly-traded CLECs are not representative of sustainable and efficient long-term
21 equilibrium. These capital cost estimates consequently should be viewed as an *upper-bound* or
22 maximum in estimating CLEC capital costs in my analysis. Similarly, the capital costs associated
23 with the S&P 500 provide a benchmark of average market risk, which serves as a *lower-bound*
24 or minimum in estimating current CLEC costs. Importantly, the crux of Dr. Staihr's
25 misunderstanding is that he incorrectly views the capital costs of my sample of CLECs as a lower-
26 bound or minimum rather than the upper-bound or maximum that it must be under current market

1 conditions.

2
3 **Q. Dr. Staihr cites an overall cost of capital estimate that you presented in a previous UNE**
4 **proceeding. What is the relevance of this estimate in the current proceeding?**

5
6 A. The prior estimate has no relevance to the current proceeding. Dr. Staihr merely notes that “[i]n
7 the recent UNE docket (Docket No. 990649-TP) Dr. Billingsley advocated a WACC [*weighted*
8 *average cost of capital – definition added to quote*] for an ILEC in the range of 14.66% to
9 15.34%” (Rebuttal Testimony of Dr. Brian K. Staihr, p. 42, lines 8-9). The cited testimony was
10 filed in 2000, which was about four years ago and is thus not “recent” by capital market
11 standards. In asserting that this prior overall cost of capital range is somehow relevant to assessing
12 my CLEC capital cost estimates in the current proceeding, Dr. Staihr ignores that the UNE
13 estimates are too dated to be relevant. Further, he implicitly assumes that the only factor that
14 influences capital cost is the general level of interest rates, which he believes imply a decrease in
15 capital costs over the intervening period. However, capital costs capture not only interest rate
16 changes but also changes in risk. Thus, there is no valid way to compare my dated UNE cost of
17 capital estimate with current CLEC estimates. Dr. Staihr’s attempt to compare them is incorrect,
18 uninformative, and misguided.

19
20
21 **B. INCONSISTENT, INCORRECT CAPITAL STRUCTURE ANALYSIS:**
22 **PICKING AND CHOOSING AMONG ESTIMATES ARBITRARILY**

23
24 **Q. While Dr. Staihr accepts your average capital structure and average cost of debt**
25 **estimates based on the S&P 500 and a sample of publicly-traded CLECs, he arbitrarily**
26 **uses only the upper-bound cost of equity estimate produced by the CLEC sample. What**

1 **is your evaluation of his approach and its stated rationale?**

2

3 A. Dr. Staihr’s approach is incorrect, arbitrary, and inconsistent. He incorrectly and arbitrarily picks
4 and chooses among various inputs in my cost of capital analysis approach while ignoring the
5 *relationship among* those inputs. His stated rationale for using only selected inputs is that he
6 believes the CLEC sample’s capital structure is unreliable, the cost of equity for *the same sample*
7 is useful, and the cost of debt derived from an average of the S&P 500 and the sample is reliable.
8 Yet the cost of equity estimate derived from the CLEC sample he accepts is generated using
9 market data that only respects the risks implied by the associated capital structure *he rejects*. If
10 he rejects the given capital structure, he should recognize that a more moderate capital structure
11 implies a *lower* cost of equity. Thus, Dr. Staihr’s attempt to change my analysis is incorrect,
12 arbitrary, and inconsistent. Further, his unsuccessful attempt contradicts the pervasive trade-off
13 between risk and return in modern finance.

14

15 **Q. What is your evaluation of Dr. Staihr’s explanation for rejecting the capital structure of**
16 **the sample of publicly-traded CLECs?**

17

18 A. The basis for his arbitrary decision is:

19 Because the CLEC-specific capital structure proposed by Dr. Billingsley is based on
20 data reflecting amount of CLEC debt and equity for existing firms that do not
21 represent a new entrant in today’s market. In particular, the relative amount of debt
22 proposed by Dr. Billingsley (roughly 87%) is obviously inappropriate, because many
23 of the very firms represented in Dr. Billingsley’s Exhibit RSB-3 had significantly lower
24 relative percentage of debt when they entered the market. An appropriate capital
25 structure, with relatively less debt, produces a more appropriate WACC ... (Rebuttal
26 Testimony, p. 41, line 19 – p. 41, line 2).

1 Thus, Dr. Staihr’s rationale for rejecting the “CLEC-specific capital structure” is apparently based
2 on his speculation that the sample of market-traded CLECs “... had significantly lower relative
3 percentages of debt when they entered the market.”
4

5 While Dr. Staihr does not document his speculation, it does not matter because the argument is
6 invalid nonetheless. If the CLECs had different capital structures in the past then they presumably
7 had different costs of equity and debt as well. Dr. Staihr is again inconsistently mixing cost of
8 capital and capital structure estimates in a way that incorrectly inflates the estimate of CLECs’
9 overall cost of capital for use in the BACE model. Unlike Dr. Staihr’s method, my estimation
10 approach averages the cost of debt, cost of equity, *and* capital structure estimates derived from
11 the S&P 500 and a sample of publicly-traded CLECs in a way that consistently matches capital
12 costs and their associated capital structures.
13

14 **Q. Is Dr. Staihr’s position on CLEC capital structure consistent with the cost of capital**
15 **assumption made by another Sprint witness, Mr. Ken W. Dickerson?**
16

17 A. No, their positions are inconsistent and contradictory. I will summarize each witness’ positions,
18 identify implicit assumptions, and then evaluate the consistency and reasonableness of their cost of
19 capital conclusions.
20

21 As noted above, Dr. Staihr argues that “... the relative amount of debt proposed by Dr.
22 Billingsley (roughly 87%) is obviously inappropriate, because many of the very firms represented
23 in Dr. Billingsley’s Exhibit RSB-3 had significantly lower relative percentage of debt when they
24 entered the market” (Rebuttal Testimony, p. 41, lines 21-24). Thus, a capital structure that is
25 weighed heavily toward debt is considered “inappropriate.”
26

1 Mr. Kent W. Dickerson, also filing on behalf of Sprint, uses an after-tax discount rate of 10.14%
2 in his analysis of collocation and power costs (Rebuttal Testimony of Kent W. Dickerson, Exhibit
3 KWD-4 and Exhibit KWD-5). Using an assumed federal tax rate of 35%, a state tax rate of
4 5.5%, and the 9.92% pre-tax cost of debt and 20.84% cost of equity rates assumed by Dr.
5 Staihr, the implied capital structure can be determined. The data imply a capital structure of
6 71.5% debt and 28.5% equity. This differs from my average capital structure of 58.5% debt and
7 41.5% equity that Dr. Staihr adopts in some of his analysis. The 71.5% debt component seems
8 rather close to what Dr. Staihr would consider too debt- intensive given his adoption of a 58.5%
9 component as acceptable. This draws into question the consistency of Dr. Staihr and Mr.
10 Dickerson's cost of capital conclusions.

11

12 **Q. What ultimate effect does Dr. Staihr's incorrect revisions of your cost of capital**
13 **estimates have on the NPV produced by the BACE model?**

14

15 A. Ultimately Dr. Staihr finds that the NPV in the BACE model remains positive, which indicates that
16 there is no evidence of impairment (see Rebuttal Testimony, p. 42, line 22 – p. 43, line 2).

17

18 **VI. ANALYSIS OF MR. KENT W. DICKERSON'S REBUTTAL TESTIMONY ON**
19 **BEHALF OF SPRINT/UNITED MANAGEMENT COMPANY**

20

21 **Q. Does Mr. Dickerson take a position concerning capital costs used in the BACE model**
22 **and, if so, what is your assessment of his position?**

23

24 A. Yes. As discussed above, Mr. Dickerson uses a pre-tax overall cost of capital than of 10.14% in
25 analyzing collocation and power costs. However, there is no explanation in his testimony of how
26 this cost of capital is determined. Mr. Dickerson's cost of capital is inconsistent with Dr. Staihr's

1 cost of capital conclusions. Given the lack of any evidence to support Mr. Dickerson's cost of
2 capital and the inconsistency between the two Sprint witnesses, my assessment is that Mr.
3 Dickerson provides no substantive cost of capital estimates or analysis.

4
5 **Q. What does Mr. Dickerson conclude concerning the internal rate of return of the cash**
6 **flows produced by the BACE model and of what relevance is this calculation to the**
7 **current proceeding?**

8
9 A. Mr. Dickerson describes his analysis as follows:

10 ... the net present value of each yearly net cash flow was calculated using the
11 discount rate which generated an overall net present value of zero for the 10-year
12 planning period. This discount rate of 37.4% is, by definition, the internal rate of return
13 (IRR) on this project. In other words, this is the rate of return that a competitor
14 entering Bellsouth's territory in Florida ... should be expected to earn while providing
15 competitive telephone service, if the assumptions in the BACE model are correct
16 (Rebuttal Testimony, p. 25, line 25 – p. 26, line 3).

17 Assuming Mr. Dickerson calculated it correctly, an IRR of 37.4% sounds impressive at first blush.
18 However, the fragile reinvestment assumption residing behind the analysis reveals that the IRR
19 conveys nothing of value about the reasonableness of the BACE model. The NPV technique
20 assumes that all of the cash flows generated by an investment can be *reinvested at the cost of*
21 *capital*. This is a *conservative*, realistic assumption given that the chosen cost of capital reflects
22 the riskiness of the investment under consideration. In dramatic contrast, the IRR technique makes
23 the heroic implicit assumption that all of the cash flows generated by an investment can be
24 *reinvested at the IRR*, which will be in excess of the appropriate risk-adjusted cost of capital for
25 acceptable investments.

26

1 Mr. Dickerson would have us mistakenly believe that the BACE model predicts that “a
2 competitor entering Bellsouth’s territory in Florida” can expect to earn a rate of return of 37.4%,
3 which allegedly reveals that the BACE model is flawed. This is nonsense and the BACE model
4 says no such thing. The BACE model is designed to calculate the NPV of a competitor entering
5 BellSouth’s territory in Florida and earning a risk-adjusted overall, pre-tax rate of return on its
6 investment of 13.09% - *not* 37.4%. Accordingly, the BACE model realistically assumes that a
7 competitor will reinvest its cash flow return over the 10-year horizon at a rate of 13.09%. The
8 only thing we can reasonably conclude about Mr. Dickerson’s calculated IRR is that it is above
9 the cost of capital and indicates that there is no impairment of CLEC entry in Florida. The positive
10 NPV generated by the BACE model provides the same result.

11

12 VII. SUMMARY OF COST OF CAPITAL ANALYSIS FOR BACE MODEL

13

14 **Q. Please summarize your recommendation concerning the appropriate pre-tax overall cost**
15 **of capital that should be used to calculate the NPV in the BACE model.**

16

17 A. As presented in my previously filed direct testimony in this proceeding, my cost of capital
18 estimation approach adapts to the data problems resulting from the current troubled environment
19 facing the CLEC industry. I essentially provide “ceiling” and “floor” estimates of the industry’s
20 capital costs. Thus, I use two surrogates to measure the representative CLEC’s capital costs. I
21 use the S&P 500 as a lower-bound or minimum estimate of the representative CLEC’s cost of
22 capital and I also use a sample of publicly-traded CLECs that provides an upper-bound or
23 maximum estimate of the representative CLEC’s cost of capital. I then provide a reasonable
24 estimate of the industry’s overall capital costs by averaging the results of my two approaches.

25

26 My analysis indicates that a forward-looking cost of equity estimate for the representative CLEC

1 is an average of 17.55%. I also find evidence that the cost of debt of the representative CLEC is
2 an average of 9.92%. The average market value-based capital structure of firms is 58.50% debt
3 and 41.50% equity. Combining this average capital structure with the above average costs of debt
4 and equity produces an average pre-tax overall cost of capital for the representative CLEC of
5 13.09%. This bounded averaging approach provides the most reasonable estimate of efficient
6 CLEC capital costs in the current environment.

7

8 In summary, I recommend that the Commission use a *before-tax* overall cost of capital of
9 13.09% to discount the cash flows produced by the BACE CLEC business case model.

10

11 **Q. Does this conclude your surrebuttal testimony**

12

13 A. Yes, it does.

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15