Exhibit No.:
Issue(s): Article VII A (UNE PRICING); Article XIII (Electronic OSS) and Article XV (PMs)
Witness: William E. Avera
Type of Exhibit: *Direct Testimony*
Sponsoring Party: *CenturyTel of Missouri, LLC and Spectra Communications Group, LLC d/b/a CenturyTel*
Case No.: *TO-2006-0299*
Date Testimony Prepared:
March 21, 2006

DIRECT TESTIMONY

OF

WILLIAM E. AVERA, PH.D., CFA

ON BEHALF OF CENTURYTEL OF MISSOURI, LLC AND SPRCTRA COMMUNICATIONS GROUP, LLC d/b/a CENTURYTEL

CASE NO. TO-2006-0299

OF THE STATE OF MISSOURI

PETITION OF SOCKET TELECOM, LLC FOR COMPULSORY ARBITRATION OF INTERCONNECTION AGREEMENTS WITH CENTURYTEL OF MISSOURI, LLC AND SPECTRA COMMUNICATIONS, LLC PURSUANT TO SECTION 252(b)(1) OF THE TELECOMMUNICATIONS ACT OF 1996	)))))))	**CASE NO. TO-2006-0299**

STATE OF TEXAS

COUNTY OF TRAVIS

AFFIDAVIT OF WILLIAM E. AVERA

I, William E. Avera, of lawful age and being duly sworn, state:

1. My name is William E. Avera. I am presently Principal of FINCAP, Inc.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

William E. Avera

Subscribed and sworn to before this 20th day of March, 2006.

Notary Public

My Commission expires: 12/31/2008

ADRIEN MCKENZIE
MY COMMISSION EXPIRES
December 31, 2008
BONDED BY
NOTARY ASSOC. OF TEXAS, INC.

016079.00010:957776.01

DIRECT TESTIMONY OF WILLIAM E. AVERA, PH.D., CFA

TABLE OF CONTENTS

DIRECT TESTIMONY OF WILLIAM E. AVERA, PH.D., CFA

ON BEHALF OF CENTURYTEL OF MISSOURI, LLC AND SPECTRA COMMUNICATIONS LLC

I. INTRODUCTION

Q1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A1. My name is William E. Avera. My business address is 3907 Red River, Austin, Texas.

Q2. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

A2. I am a principal in FINCAP, Inc., engaged in financial, economic, and policy consulting to business and government.

Q3. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A3. Socket Telecom, LLC. (Socket) has requested that the Public Service Commission of the State of Missouri (MPSC or the Commission) arbitrate unresolved issues regarding the pricing of certain services provided by CenturyTel of Missouri, LLC and its affiliate, Spectra Communications, LLC (Spectra) (collectively, CenturyTel), through interconnection over Unbundled Network Elements (UNEs). The purpose of my testimony is to demonstrate that CenturyTel's proposed UNE cost studies for recurring rates are consistent with regulatory policy, including the requirements of the Total Element Long-run Incremental Cost (TELRIC) methodology, as well as sound economics.

Q4. WHAT ARE YOUR QUALIFICATIONS?

A4. I received a B.A. degree with a major in economics from Emory University. After serving in the United States Navy, I entered the doctoral program in economics at the University of North Carolina at Chapel Hill. Upon receiving my Ph.D., I joined the faculty at the University of North Carolina and taught finance in the Graduate School of

Business. I subsequently accepted a position at the University of Texas at Austin where I taught courses in financial management and investment analysis. I then went to work for International Paper Company in New York City as Manager of Financial Education, a position in which I had responsibility for all corporate education programs in finance, accounting, and economics.

In 1977, I joined the staff of the Public Utility Commission of Texas (PUCT) as Director of the Economic Research Division. During my tenure at the PUCT, I managed a division responsible for financial analysis, cost allocation and rate design, economic and financial research, and data processing systems, and I testified in cases on a variety of financial and economic issues. Since leaving the PUCT in 1979, I have been engaged as a consultant. I have participated in a wide range of assignments involving utility-related matters on behalf of utilities, industrial customers, municipalities, and regulatory commissions. I have previously testified before the Federal Energy Regulatory Commission (FERC), as well as the Federal Communications Commission (FCC), the Surface Transportation Board (and its predecessor, the Interstate Commerce Commission), the Canadian Radio-Television and Telecommunications Commission, and regulatory agencies, courts, and legislative committees in over 36 states, including the MPSC. I am familiar with the issues relevant to this case through my participation in prior proceedings involving the pricing of Unbundled Network Elements (UNEs) before the MPSC and regulators in Arkansas, California, Connecticut, Illinois, Indiana, Michigan, Nevada, Ohio, Oklahoma, Texas, and Wisconsin.

I was appointed by the PUCT to the Synchronous Interconnection Committee to advise the Texas legislature on the costs and benefits of connecting Texas to the national

electric transmission grid. In addition, I served as an outside director of Georgia System Operations Corporation, the system operator for electric cooperatives in Georgia.

I have served as Lecturer in the Finance Department at the University of Texas at Austin and taught in the evening graduate program at St. Edward's University for twenty years. In addition, I have lectured on economic and regulatory topics in programs sponsored by universities and industry groups. I have taught in hundreds of educational programs for financial analysts in programs sponsored by the Association for Investment Management and Research, the Financial Analysts Review, and local financial analysts societies. These programs have been presented in Asia, Europe, and North America, including the Financial Analysts Seminar at Northwestern University. I hold the Chartered Financial Analyst (CFA®) designation and have served as Vice President for Membership of the Financial Management Association. I also have served on the Board of Directors of the North Carolina Society of Financial Analysts. I was elected Vice Chairman of the National Association of Regulatory Commissioners (NARUC) Subcommittee on Economics and appointed to NARUC's Technical Subcommittee on the National Energy Act. I also have served as an officer of various other professional organizations and societies. My background and qualifications are further detailed on Appendix A.

II. SUMMARY OF CONCLUSIONS

Q5. PLEASE SUMMARIZE YOUR FINDINGS REGARDING THE REASONABLENESS OF THE APPROACH CENTURYTEL HAS TAKEN TO DEVELOP RECURRING RATES FOR SOCKET IN THIS CASE.

A5. CenturyTel is fundamentally different from AT&T, Inc., formerly SBC Communications Inc. (AT&T/SBC), and Verizon Communications (Verizon) due to the rural nature of its

service territory. Rural incumbent local exchange carriers (ILECs) have different cost structures and do not attract the same level of reseller/competitive local exchange carrier (CLEC) activity as ILECs serving large urban centers such as AT&T/SBC and Verizon. I have reviewed the alternative UNE costs and services for recurring rates proposed by CenturyTel and found them reasonable considering the facts and circumstances of its Missouri service area.

III. CENTURYTEL'S UNIQUE CIRCUMSTANCES MUST BE RECOGNIZED

Q6. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A6. This section explains why sound regulatory policy requires that the rural nature of CenturyTel's service area be considered in establishing reasonable terms and conditions for UNE services offered to CLECs. In over 30 years of dealing with telephone companies as a regulator and consultant, I have worked with companies large and small, urban and rural. I have consulted with and testified regarding the costs of large companies like AT&T/SBC, Verizon, and BellSouth Telecommunications, Inc. (BellSouth) as well as small, rural ILECs across the nation. This experience has taught me that there are fundamental differences driven by size and customer density that are properly recognized through regulatory policy. Similarly, these differences have, and should be, recognized in implementing the competitive policy of the Telecommunications Act of 1996.

Q7. DOES THE NATURE OF CENTURYTEL'S SERVICE AREA DIFFER FROM THAT OF LARGER TELECOMMUNICATIONS COMPANIES?

A7. Yes. While Socket has proposed to use cost studies developed for the UNE operations of AT&T/SBC to price certain services provided by CenturyTel, there are fundamental

differences between the ILEC operations of these two carriers. These distinctions have important practical implications with respect to the costs and services at issue in this case.

Due to the nature of its service areas and operations, an ILEC serving rural areas generally incurs higher investment and expenses per subscriber than is typical for other telecommunications firms. As the National Exchange Carrier Association (NECA) noted:

> Customers in rural areas are spread over wide geographic areas, requiring long lengths of cable and installation of additional transmission equipment (e.g., repeaters) or digital loop carrier systems, to provide quality voice communications to these remote areas. The longer the distance from the customer to the switch, the higher the cost.[1]

The higher cost of serving rural communities was documented in *Rural Telecommunications*:

> On average, RUS borrowers serve about six customers per sheath mile of cable, compared with the Bell companies' average of 48 customers per sheath mile. Average cable and wire investment per subscriber for rural telcos is $1,591 versus $795 for Bell companies. Similarly, RUS borrowers have invested $569 in central office switching per line while Bell companies average $348 per line. In addition, the administration of a small rural telco takes a certain minimum amount of work, regardless of size. Many rural areas are not located near a major city or town, and the call volume is less than average. Topography also can present formidable challenges.[2]

---

[1] National Exchange Carrier Association, "Keeping America Connected, The Broadband Challenge", *Access Market Survey* (Dec. 1999).

[2] Rural Telecommunications, "Community-Bound: Rural Telcos Bring More than Service to Customers" (Jul/Aug. 2000).

Q8. HOW DOES CENTURYTEL'S SIZE AND CUSTOMER INVESTMENT COMPARE WITH AT&T/SBC AND VERIZON?

A8. As shown in Schedule WEA-1, CenturyTel is dwarfed by both of these carriers. For example, revenues for AT&T/SBC and Verizon during 2004 (the most recent fiscal year available) totaled approximately $40.8 billion and $71.3 billion, respectively, versus $2.4 billion for CenturyTel. Similarly, CenturyTel's total capital amounted to one-tenth that of AT&T/SBC, while Verizon employed almost sixteen times the capital of CenturyTel. Meanwhile AT&T/SBC and Verizon have on the order of thirty times the number of employees as CenturyTel.

Apart from these discrepancies in relative size and resources, CenturyTel requires far greater investment per access line to provide service due to the lower density and other characteristics of its service territory. As shown on Schedule WEA-1, the low density of CenturyTel's markets is manifested in dramatically lower figures for average lines per state (105,000 lines, versus 3.9 million and 4.8 million for AT&T/SBC and Verizon, respectively). This significant difference in the nature of CenturyTel's markets also translates into significantly higher net plant investment per line, which at $1,453 exceeds that of AT&T/SBC by 46% and is approximately 2.8 times that of Verizon.

Q9. IS CENTURYTEL'S MISSOURI SERVICE AREA PREDOMINANTLY RURAL?

A9. Yes. CenturyTel of Missouri's service area averages only 30 customers per square mile and 14 customers per route mile, while Spectra averages only 11 customers per square mile and 8 per route mile. The largest community served by CenturyTel is Columbia, with approximately 62,000 access lines. If the whole state had a customer density equal

to that of CenturyTel of Missouri, this would imply a total of approximately 2.1 million customers for the state,[3] while applying Spectra's density to the entire state would result in only 757,745 customers. By way of comparison, the Commission's 2005 Annual Report concludes that the total number of access lines in the State of Missouri is considerably higher, at just over 3.4 million.[4] Thus, CenturyTel's service area has a significantly lower density than the average of 49.80 customers per square mile for Missouri as a whole.

Q10. HAS THE MPSC RECOGNIZED THE RURAL NATURE OF CENTURYTEL'S SERVICE AREA?

A10. Yes. The 2002 order in Case No. TM-2002-232, approving the purchase of the purchase by CenturyTel of the Verizon/GTE system, recognized that CenturyTel is predominantly a rural carrier:

> CenturyTel is a subsidiary of CenturyTel, Inc., which provides telecommunications services to over three million customers in 21 states. CenturyTel, Inc., concentrates on the provision of communications services in rural exchanges. CenturyTel, Inc.'s affiliate, CenturyTel of Northwest Arkansas, provides telecommunications services in two Missouri exchanges. CenturyTel, Inc. is also an owner of Spectra Communications Group, LLC, which does business in Missouri as CenturyTel and which operates 107 rural Missouri exchanges previously purchased from Verizon.[5]

The order also recognized the eligibility of CenturyTel for Universal Service Fund support and the importance of Universal Service in regulatory policy:

---

[3] Based on a total area for Missouri of 68,886 square miles.

[4] Missouri Public Service Commission 2005 Annual Report at 35.

[5] *Order*, Case No. TM-2002-232 at 10.

> Universal Service is a principal component of federal telecommunications policy and seeks to ensure access to telecommunications services for all Americans. [6]

Indeed, roughly 48% of Zip Codes in Missouri have no CLEC presence (versus 22% nationwide),[7] and Missouri ranks in the top ten of states and territories receiving Universal Service Fund monies.[8]

Q11. WHAT IMPLICATIONS DO THESE DIFFERENCES IN CUSTOMER DENSITY AND REQUIRED INVESTMENT HAVE IN DETERMINING RATES FOR UNE SERVICES?

A11. These fundamental distinctions between CenturyTel and larger, more urban telecommunications firms indicate that cost studies developed based on data for AT&T/SBC or Verizon/GTE are unlikely to be representative of the costs that CenturyTel will incur to provide UNE services. CenturyTel's lower customer density and greater investment per access line implies higher costs to provide local exchange services; a reality that is ignored under Socket's proposal to use rates for certain UNE services determined by the MPSC in Docket No. TO-2005-0336.

While CenturyTel intends to fulfill its commitment to provide UNE services under existing rates previously approved for Verizon/GTE, rates for services not

---

[6] *Id.* at 23.

[7] *Local Telephone Competition: Status as of December 31, 2004*, Industry Analysis and Technology Division, FCC Wireline Competition Bureau (July 2005) at Table 16

[8] Squeo, Anne Marie, "Universal Battle: In Tiny Towns, New Call Options Shake Up an Old Phone System --- Rivals, Technology Threaten Program Bringing Service To Remote Parts of U.S.," The Wall Street Journal (Feb. 22, 2005) at A1.

encompassed within this framework should reflect the specific circumstances of CenturyTel, not the cost structure of larger, urban carriers.

Q12. HAVE REGULATORS RECOGNIZED THAT A "ONE SIZE FITS ALL" APPROACH SHOULD NOT BE ADOPTED WHEN COMPARING RURAL CARRIERS, SUCH AS CENTURYTEL, WITH THEIR LARGER, URBAN COUNTERPARTS?

A12. Yes. For example, former FCC Commissioner Gloria Tristani cautioned that it is critical for regulators to avoid painting rural telephone companies with the same broad brush as their larger counterparts and that policies developed for large telecommunications firms do not always fit the circumstances of rural carriers:

> There is a natural temptation for policymakers to just apply large carrier policies to small carriers as well. It saves time and resources, so why reinvent the wheel for rural companies? They're all incumbent LECs, right? How different can they be?
>
> Actually, it's clear to me that rural telephone companies are different from large carriers. ... It's not enough for us to tinker with our large LEC policies and apply them to rural LECs.[9]

Similarly, the Public Service Commission of South Carolina also found that it is appropriate to reflect differences between rural carriers and larger companies when establishing rates for local services:

> To apply the results of a sample based on much larger companies to a small regulated utility requires the assumption that the business risks and financial risks of the large companies are similar in type and magnitude to those of the small company. The accuracy of such an assumption is often arguable. It is certainty arguable in this case.[10]

---

[9] New Mexico State University Regulatory Conference, "Remarks of FCC Commissioner Gloria Tristani" (Mar. 8, 1999).

[10] *Pond Branch Telephone Company*, Docket No. 94-400 (Conclusion of Law No. 2).

Meanwhile, in its *First Report and Order,* the FCC noted that market conditions differ between "more densely-populated areas and sparsely populated rural areas." Consistent with CenturyTel's proposal here, the FCC concluded that "it may not be appropriate to impose identical requirements on carriers with different network technologies," while simultaneously recognizing that TELRIC was "intended to accommodate such differences."[11] As then-Commissioner Susan Ness summed up:

> [Incumbents] are entitled to fair prices for the services and elements they offer, and our pricing principles accordingly reject costing methods that ignore the LECs' current network architecture or deny recovery of reasonable joint and common costs. The special needs of smaller incumbents, especially rural telcos, must be addressed with extra care, and just as Congress intended, we safeguard them today.[12]

Q13. HAS THE FCC SUBSEQUENTLY REAFFIRMED THE IMPORTANCE OF ACCURATELY REFLECTING THE FORWARD-LOOKING COSTS OF PROVIDING UNES?

A13. Yes. The FCC noted in its *Triennial Review Order* in CC Docket No. 01-338, et al. that undervaluing the incumbent LEC network would result in improper price signals to potential competitors.[13] With respect to the cost of capital, for example, the FCC recognized that calculating rates based on the assumption of a forward-looking network under competition without compensating for the greater investment risks would undermine the regulatory policy objectives of TELRIC:

---

[11] *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98 and 95-185, First Report and Order, FCC 96-325 (1996) (*First Report and Order*) at ¶ 59.

[12] *First Report and Order*, Separate Statement of Commissioner Susan Ness at D-2.

[13] *Report and Order and Order on Remand and Further Notice of Proposed Rulemaking*, FCC 03-36 (Aug. 21, 2003) (*Triennial Review Order* or *TRO*) at ¶ 682.

> Establishing UNE prices based on an unreasonably low cost of capital would discourage competitive LECs from investing in their own facilities and thus slow the development of facilities-based competition.[14]

Similarly, in Reply Comments filed before the FCC, the Public Service Commission of Wisconsin (PSCW) concluded that:

> The Wisconsin Commission shares the FCC concern that the application of the FCC's pricing rules should not distort the intended pricing signals by understating forward-looking costs. Such an effect could thwart one of the central purposes of the Act: the promotion of facilities-based competition.[15]

Utilizing UNE cost studies that understate the costs associated with CenturyTel's network, as Socket has proposed, would similarly thwart the FCC's policy objective of encouraging facilities-based competition. The UNE costs and competitive services offered by CenturyTel should reflect its unique structure.

Q14. DO CENTURYTEL'S CUSTOMERS BENEFIT FROM ITS UNIQUE FOCUS ON RURAL MARKETS?

A14. Yes. Most rural communities in America are served by small telephone companies that are either privately-held or owned cooperatively. Whereas these small ILECs have limited sources of capital, CenturyTel brings the size and sophistication lacking in the small companies.

CenturyTel is unique in that it is a New York Stock Exchange (NYSE) Company that serves predominantly rural communities. Moreover, in addition to stock traded on

---

[14] *Id.*

[15] *Reply Comments of the Public Service Commission of Wisconsin*, WC Docket No. 03-173.

the NYSE, CenturyTel has public debt issues rated by both major bond-rating agencies. Value Line offers this description:

> CenturyTel is the 8th largest local-telecom service provider in the U.S. with about 2.3 million access lines located primarily in rural areas and small to mid-sized cities in 22 states (mostly in Wisconsin, Missouri, Alabama, Arkansas, and Washington).[16]

CenturyTel also receives financial support through Universal Service Funding and has access to loans from the Rural Utilities Service. As summarized in the 2005 Form 10K:

> Certain of our telephone subsidiaries receive long-term financing from the Rural Utilities Service ("RUS"), a federal agency that has historically provided long-term financing to telephone companies at relatively attractive interest rates. Approximately 19% of our telephone plant is pledged to secure obligations of our telephone subsidiaries to the RUS.[17]

As a result, CenturyTel has combined its focus on the needs of rural customers with the breadth of resources necessary to provide state-of-the-art telecommunications services.

Q15. WHAT OTHER SALIENT FEATURES CHARACTERIZE CENTURYTEL'S RURAL MARKETS?

A15. As discussed earlier, the rural nature of CenturyTel's service area is also characterized by less CLEC activity relative to ILECs serving urban areas. For example, in its 2005 Form 10K, CenturyTel reports:

> In 1996, the United States Congress enacted the Telecommunications Act of 1996 (the "1996 Act"), which obligates LECs to permit competitors to interconnect to their facilities to the LEC's network and take various other steps that are designed to promote competition. Under the 1996 Act's rural telephone company exemption, approximately 50% of our telephone lines are exempt from certain of these interconnection requirements unless and until the appropriate state regulatory commission overrides the

[16] The Value Line Investment Survey (December 30, 2005) at 724.

[17] CenturyTel, Inc. Form 10K For the fiscal year ended December 31, 2005, (March 15, 2006) at 8.

exemption upon receipt from a competitor of a bona fide request meeting certain criteria.[18]

The numbers in Missouri confirm the low level of CLEC activity. At the end of February 2006, CenturyTel of Missouri and Spectra Communications together had a total of 440,508 access lines in Missouri, with resold lines to competitors totaling 1,617 and 388, respectively. On a combined basis, this implies that CLECs utilize less than one-half of 1% of the total access lines for CenturyTel of Missouri and Spectra Communications. In contrast, the MPSC Annual Report concluded that at June 30, 2004 "CLECs in Missouri had 430,538 access lines or 13%."[19]

Overall CLEC penetration in Missouri was virtually identical to the 13.1% market share reported by AT&T/SBC for its entire system.[20] Interestingly, AT&T/SBC reported that CLEC access lines had actually decreased during 2005, ending at 10.0%.[21] This decline is consistent with the drop in access lines experienced by CenturyTel in 2005 as competition from wireless, cable, satellite, and alternative providers has continued to erode wireline access by both ILECs and CLECs. When asked about its future need for access lines in this case, Socket objected to the requests.

---

[18] *Id.* at 39.

[19] MPSC 2005 Annual Report at 31.

[20] AT&T Form 10K For the Fiscal Year Ending December 31, 2005 (March 16, 2006), "Management Discussion and Analysis of Financial Condition and Results of Operation", at 9.

[21] *Id.*

IV. REASONABLENESS OF CENTURYTEL'S PROPOSALS

Q16. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A16. This section reports the results of my review of the reasonableness of the proposals made by CenturyTel in this case. My evaluation is based on the goals of regulatory policy and the specific facts and circumstances of CenturyTel.

Q17. HAS THE FCC ESTABLISHED GUIDELINES TO EVALUATE THE REASONABLENESS OF UNE COST STUDIES?

A17. Yes. In its arbitration of UNE rates for Verizon Virginia, Inc. in CC Docket No. 00-218, *et al.*, (*Virginia Arbitration Order*), the FCC's Wireline Competition Bureau (Bureau) noted that FCC precedent provides three broad principals guiding the evaluation of a UNE cost study against alternatives:

> First, any cost model we use should be consistent with TELRIC pricing principals (*i.e.*, it should be designed to calculate the cost of a network that uses the most efficient technology available, taking as a given the existing incumbent LEC wire centers). Second, the model should be transparent. That is, the logic and algorithms of the cost study should be revealed, understandable, capable of being adjusted by the parties and regulators, and not contain "black boxes." ... Third, any assumptions contained in the model should be verifiable. Any data used to estimate costs should either be from public sources, or capable of verification and audit without undue cost or delay.[22]

Q18. ARE CENTURYTEL'S UNE COST STUDIES CONSISTENT WITH THESE GUIDELINES?

A18. Yes. In contrast to Socket's proposal to use data for AT&T/SBC, CenturyTel's cost studies for recurring rates are consistent with TELRIC pricing principles because they capture the unique realities of the incumbent's rural markets – realities that would be

reflected in prices established under the competitive markets presumed by TELRIC. Further, CenturyTel's proposed cost studies are both transparent and verifiable, and CenturyTel stands ready to support the data sources and assumptions, or make adjustments to its calculations as required by the MPSC.

Q19. IS THE FIXED CHARGE RATE IS EMBODIED IN THE COST STUDIES USED BY CENTURYTEL REASONABLE?

A19. Yes. The cost studies proposed by CenturyTel incorporate an overall cost of capital of 11.25% and depreciation rates consistent with those ordered by the FCC.

Q20. WHAT WAS THE BASIS FOR THE 11.25% OVERALL COST OF CAPITAL INCORPORATED IN CENTURYTEL'S PROPOSED COST STUDIES?

A20. This ROR is the same as is currently allowed by the FCC for interstate purposes.

Q21. WHAT HAS BEEN YOUR EXPERIENCE WITH THE FCC'S APPLICATION OF A SINGLE RATE OF RETURN?

A21. I have been involved with the federal rate of return since my participation in CC Docket 89-624, in which the 11.25% return was originally established. In 1992, when the FCC reexamined its rate-of-return policy in CC Docket No. 92-133, I testified for the United States Telephone Association (USTA). And in 1999, I provided testimony on behalf of USTA in CC Docket No. 98-166, in which the FCC conducted a preliminary inquiry into the appropriateness of the 11.25% return. The FCC has continued to use the 11.25% and I believe it has been an effective regulatory policy that has spared regulators from getting

---

...Continued

[22] *Memorandum and Order*, DA 03-2738, CC Docket Nos. 00-218 & 00-251 (Aug. 29, 2003) (*Virginia Arbitration Order)* at ¶ 48.

mired down in a plethora of individualized rate of return determinations, which absorb considerable resources and generate much controversy.

Q22. HAS THE FCC CHOSEN TO MODIFY ITS 11.25% ROR?

A22. No. Over the decade of the 1990s, increased risks associated with providing local exchange service in a deregulated, increasingly competitive marketplace largely offset contemporaneous declines in interest rates. As a result, the FCC several times declined to initiate a full-blown rate represcription proceeding, and 11.25% remains the prevailing prescribed rate of return. In its *First Report and Order*, issued to implement the Telecommunications Act of 1996, the Commission held that the 11.25% rate of return, adopted nearly six years earlier, remained a reasonable starting point for TELRIC calculations.[23] The agency explained that it considered the rate reasonable even though many changes had occurred since its prescription:

> We recognize that incumbent LECs are likely to face increased risks given the overall increases in competition in this industry, which generally might warrant an increased cost of capital, but note that, earlier this year, we instituted a preliminary inquiry as to whether the currently authorized federal 11.25 percent rate of return is too high given the current market-place cost of equity and debt. On the basis of the current record, we decline to engage in a time-consuming examination to determine a new rate of return, which may well require a detailed proceeding.[24]

More recently, in November 1999 the FCC selected a model to estimate forward-looking costs as part of an effort to establish competitively neutral federal universal

---

[23] *First Report and Order* at ¶ 702.

[24] *Id.* To be precise, a rate of return is a regulatory term for the overall return to a company on its assets, while a cost of capital is more of a financial concept referring to the weighted average cost of funds to the company.

service support mechanisms. Again, the agency concluded that there was no compelling argument for altering the federal rate of return for that purpose:

> We find that the commenters proposing an adjustment to the cost of capital have failed to make an adequate showing to justify rates that differ from the current 11.25 percent federal rate of return. We conclude, therefore, that the current rate is reasonable for determining the cost of providing services supported by the federal high-cost mechanism.[25]

The FCC specifically found that the current rate is reasonable for determining the cost of universal service until it adopts a different rate in a rate prescription order.[26] More recently, the FCC reaffirmed that the 11.25% benchmark serves as a de facto starting point for evaluating the rate of return for UNEs.[27]

Based on my experience, the FCC's use of the 11.25% has been an effective regulatory policy. It has avoided individualized determinations of the return on equity and other capital cost issues for more than a decade yet has been shown to be robust with respect to changing industry and capital market conditions.

Q23. DOES THE 11.25% BENCHMARK REFLECT SUBSEQUENT GUIDANCE REGARDING THE APPROPRIATE BASIS FOR A UNE COST OF CAPITAL UNDER TELRIC?

A23. No. The rate prescription establishing the 11.25% benchmark was issued before the *Triennial Review Order*, or *TRO*, which clarified that a TELRIC-based cost of capital must assume a future market in which there is full, facilities-based competition. Thus,

---

[25] FCC, Tenth Report and Order in Docket Nos. 96-45 and 97-160 at & 332, 64 Fed. Reg. 67,372, 67,373 (Dec. 1, 1999).

[26] Notice of Proposed Rulemaking, 64 Fed. Reg. 31,780, 31,802 (1999) (adopted, *id.* at & 329).

[27] For example, in the *Triennial Review Order*, the FCC summarized its earlier findings that the 11.25 percent "is a reasonable starting point" for determining a UNE cost of capital under TELRIC, before going on to discuss specific risks that should be reflected in the rate of return. *TRO* (at ¶ 677)

this earlier finding does not reflect the FCC's subsequent guidance or consider the implications of open, robust facilities-based competition for UNEs, as required under the TELRIC method. The rapid pace of technological change and the presumption of full competition, coupled with the continued constraints of regulation, imply a level of investment risks for a stand-alone UNE provider under TELRIC that exceed those considered in the FCC's prior decision, which was based on the assumption that UNEs were "essentially bottleneck-controlled facilities, and not yet subject to significant competition."[28]

Q24. HAS THE FCC PROVIDED GUIDANCE REGARDING THE DETERMINATION OF A TELRIC-BASED COST OF CAPITAL FOR UNES?

A24. Yes. As noted above, in the *TRO,* the FCC clarified its position that a TELRIC-based cost of capital should be forward-looking and reflect the risks of a competitive market. The FCC specifically rejected arguments that only actual competitive risks currently faced in providing UNEs should be considered, concluding that:

> The objective of TELRIC is to establish a price that replicates the price that would exist in a market in which there is facilities-based competition. In this type of competitive market, all facilities-based carriers would face the risk of losing customers to other facilities-based carriers, and that risk should be reflected in TELRIC prices.[29]

The FCC's position specifically requires that any cost of capital analysis for UNEs must depart from the LECs' legacy as regulated utilities and consider the risks of full competition in the forward-looking market:

---

[28] Final Decision, Public Service Commission of Wisconsin, Case No. 6720-TI-161 (March 22, 2002) at 29.

[29] *TRO* at ¶ 680.

> [T]he order clarifies that the risk-adjusted cost of capital used in calculating UNE prices should reflect risks associated with a competitive market. ... [S]tates should establish a cost of capital that reflects the competitive risks associated with participating in the type of market that TELRIC assumes.[30]

Thus, the FCC guidelines for a TELRIC-based rate of return mandate a departure from traditional regulatory practices in order to capture the competitive risks of facilities-based competition.

Q25. WHAT ARE THE IMPLICATIONS OF THESE GUIDELINES IN ESTABLISHING A TELRIC-BASED COST OF CAPITAL FOR CENTURYTEL?

A25. The FCC's admonition to fully reflect the heightened risks of ubiquitous facilities-based competition requires that the cost of capital for UNEs model the risks and required rates of return inherent in a fully competitive marketplace. The TELRIC methodology presumes full facilities-based competition – not a hybrid between a traditional regulated utility and an industrial firm.

Q26. WHAT ANALYSES DID YOU CONDUCT TO EVALUATE A REASONABLE COST OF EQUITY CAPITAL APPLICABLE TO CENTURYTEL'S UNES?

A26. In the *Virginia Arbitration Order*, the FCC's Wireline Competition Bureau applied the TELRIC pricing rules to determine a cost of UNE cost of capital.[31] Consistent with the approach adopted by the Bureau in the *Virginia Arbitration Order*, I applied the CAPM approach to estimate the cost of equity. The CAPM approach measures the market-expected return for a security as the sum of a risk-free rate and a risk premium based on

---

[30] *TRO* at ¶¶ 7, 681. *See also TELRIC NPRM* at ¶ 83.

[31] *Memorandum and Order*, DA 03-2738, CC Docket Nos. 00-218 & 00-251 (Aug. 29, 2003) (*Virginia Arbitration Order).*

the portion of a security's risk that cannot be eliminated by holding a well-diversified portfolio. The CAPM assumes that investors are fully diversified, so the relevant risk of an individual asset (*e.g.*, common stock) is its volatility relative to the market as a whole. Risk is measured using the beta coefficient, which reflects the tendency of a stock's price to follow changes in the market. A stock that tends to respond less to market movements has a beta less than 1.00, while stocks that tend to move more than the market have betas greater than 1.00. The CAPM is mathematically expressed as:

$$R_j = R_f + \beta_j(R_m - R_f)$$

Where: R_j = required rate of return for stock *j*;
R_f = risk-free rate;
R_m = expected return on the market portfolio; and,
β_j = beta, or systematic risk, for stock *j*.

I applied the CAPM to a group of six publicly traded telecommunications firms (including CenturyTel) followed by The Value Line Investment Survey (Value Line) that provide local exchange telephone service and currently pay common dividends.

Q27. WHAT CAPM COST OF EQUITY IS PRODUCED BASED ON THE APPROACH ADOPTED BY THE FCC'S WIRELINE COMPETITION BUREAU?

A27. In the *Virginia Arbitration Order*, the Bureau applied the CAPM using data published by Ibbotson Associates, which is perhaps the most exhaustive and widely referenced annual study of historical realized rates of return. In their application of the CAPM, the Bureau referenced two market risk premiums ($R_m - R_f$), calculated based on alternative measures

for the risk-free rate: (1) historical returns for 30-day Treasury bills and (2) historical realized rates of return for 20-year Treasury bonds.[32]

Application of the CAPM based on short- and long-horizon historical realized rates of return is presented in Schedule WEA-2. As detailed on page 1 of Schedule WEA-2, Ibbotson Associates reported that, over the period 1926 through 2004, the arithmetic mean realized rate of return on the S&P 500 exceeded that on 3-month Treasury bills by 8.6%. Multiplying this historical market risk premium by the average Value Line beta of 1.00 for the six telecommunications firms in the proxy group also produced an equity risk premium of 8.6%.[33] As shown on page 1 of Schedule WEA-2, adding this equity risk premium to the February 2006 average yield on 20-year Treasury bonds of 4.7 percent resulted in an implied cost of equity of 13.1%.

Application of the CAPM to the six telecommunications companies in the benchmark group based on historical returns for long-term government bonds is presented on page 2 of Schedule WEA-2. As shown there, this application of the CAPM implies a cost of equity of 11.9%. Consistent with the method adopted in the *Verizon Arbitration Order*, these alternative estimates were averaged to produce an indicated cost of equity of 12.5%.

---

[32] Because common equity is a perpetuity, any application of the CAPM to estimate the return that investors require must be predicated on their expectations for the firm's long-term risks and prospects. As a result, Ibbotson Associates and financial practitioners generally recognize that the cost of equity is a long-term cost of capital and that the appropriate instrument to use in applying the CAPM is a long-term bond.

[33] This is consistent with the beta of 1.0 applied by the Bureau in the *Verizon Arbitration Order*, based on "the average beta for companies that face competition."[33]

Q28. HOW ELSE CAN THE CAPM BE APPLIED TO ESTIMATE THE COST OF EQUITY?

A28. As noted earlier, the FCC has made clear that a TELRIC-based cost of capital should be forward-looking and reflect the risks of a competitive market. Accordingly, rather than look to a risk premium based solely on historical data, I also applied the CAPM based on a forward-looking estimate for investors' required rate of return from common stocks. As shown in Schedule WEA-3, the expected market rate of return for this forward-looking CAPM model was estimated by conducting a DCF analysis on the 362 dividend paying firms in the S&P 500, with each firm's dividend yield and growth rate being weighted by its proportionate share of total market value.[34]

The dividend yield for each firm was obtained from Value Line, with the growth rate being equal to the average of the earnings growth projections for each firm published by I/B/E/S and Value Line. Based on the weighted average of the projections for the 362 individual firms, current estimates imply an average growth rate over the next five years of 11.8%. Combining this average growth rate with a dividend yield of 2.0% results in a current cost of equity estimate for the market as a whole of approximately 13.8%. Subtracting a 4.7% risk-free rate based on the average yield on 20-year Treasury bonds for February 2006 produced a market equity risk premium of 9.1%. Multiplying this risk premium by the average Value Line beta of 1.00 for the proxy group of telecommunications firms, and then adding the resulting 7.4% risk premium to the average long-term Treasury bond yield, also resulted in a current cost of equity of 13.8%.

Q29. HAVE THE COURTS CONFIRMED THAT IT IS FORWARD-LOOKING RISKS, AND NOT THE STATE OF COMPETITION TODAY, THAT ARE THE APPROPRIATE BENCHMARK FOR A TELRIC COST OF CAPITAL?

A29. Yes. In an appeal of a Georgia Public Service Commission (GPSC) decision concerning UNE rates for BellSouth, the U.S. District Court noted that:

> [A] state commission must set a cost of capital based on the risks that BellSouth would face in a competitive market with facilities-based competition, *not* the risks that BellSouth actually faces today.[35]

After affirming that TELRIC requires that the cost of capital be based on the risks of a forward-looking market with multiple facilities-based competitors, "not the risk that BellSouth actually faces to date or currently," the Court remanded the GPSC's order because "the agency instead employed an improper actual-risk standard."[36]

Q30. WHAT COST OF DEBT DID YOU USE IN EVALUATING AN OVERALL RATE OF RETURN FOR CENTURYTEL'S UNES?

A30. In developing a TELRIC-based cost of capital, the relevant cost of debt is the forward-looking cost to raise new debt funds in the marketplace. Consistent with the triple-B bond rating currently assigned to CenturyTel, the cost of debt can be predicated on current yields on triple-B industrial bonds. Based on average triple-B industrial bond

---

...Continued

[34] This is analogous to the approach relied on by the Illinois Commerce Commission Staff in Docket No. 96-0486 (*Testimony of Jay Nicdao-Cuyygan*).

[35] *BellSouth Telecommunications, Inc. v. The Georgia Public Service Commission, et al.*, Civil Action 1:03-CV-3222-CC, U.S. District Court for the Northern District of Georgia (Atlanta Division) (Apr. 6, 2004) at P. 16 (emphasis in original).

[36] *Id.* at P.22.

yields reported by Moody's Investors Service (Moody's), this implies a debt cost rate of 6.43%.[37]

Q31. IS THERE EVIDENCE THAT SUGGESTS INVESTORS EXPECT INTEREST RATES WILL INCREASE OVER THE FORWARD-LOOKING HORIZON PRESUMED BY TELRIC?

A31. Yes. With a strengthening economy and volatile energy prices, Fed policymakers and investors have focused on the prospects for higher inflation and interest rates. For example, the most recent forecast of GlobalInsight, a widely referenced forecasting service, calls for triple-B corporate bond yields to reach 7.164% in 2006, averaging 7.69% over the next five years.[38]

Q32. HOW DID YOU EVALUATE AN APPROPRIATE CAPITAL STRUCTURE CONSISTENT WITH THE TELRIC METHODOLOGY?

A32. Because prospective capital costs must incorporate a capital structure that reflects the competitive risks embodied in the forward-looking, fully-competitive market presumed by TELRIC, the overall cost of capital must be predicated on the values of debt and equity established in the capital markets. The FCC has noted that historical costs are not the appropriate basis for a forward-looking cost of capital:

> By definition, forward-looking costs, in contrast to historical costs recorded in regulatory books of account, do not replicate actual past outlays.[39]

---

[37] Moody's Investors Service, *Credit Perspectives* (Mar. 6, 2006) at 63.

[38] GlobalInsight, "The U.S. Economy: The 25-Year Focus" (Third-Quarter 2005) at Table 34.

[39] Reply Brief For Petitioners United States and the Fed. Communications Comm'n at 6, *Verizon Communications, Inc. v. FCC*, 535 U.S. 467,122 S. Ct. 1646. (2002). The FCC also noted at 14 that the courts have also recognized the preeminence of current market values in establishing forward-looking costs and prices in *MCI Communications Corp. v. AT&T*, 708 F.2d 1081, 1116-1117 (7th Cir.), *cert. denied*, 464 U.S. 891 (1983) ("[I]t is current and anticipated cost, rather than historical cost, that is relevant to business decisions to enter markets.").

Indeed, the FCC has consistently affirmed its position that the TELRIC-based cost of capital should reflect the risks of the competitive market.[40] If the prescribed rate of return is based on weights different from market values, it will not measure the forward-looking costs required to raise capital in the markets.

Moreover, the TELRIC methodology is based on an assumption of a new, forward-looking network. As a result, a capital structure that relies on historical investment in telecommunications facilities is not representative of the capitalization associated with long-run incremental costs.[41] Equity can only be obtained at current market values and unless the forward-looking cost of capital is based on a market value capital structure, it will fail to provide a competitive, market-determined rate of return sufficient to attract capital.

Q33. HAS THE FCC'S WIRELINE COMPETITION BUREAU RECOGNIZED THAT MARKET VALUE CAPITAL STRUCTURES ARE TO BE USED IN DETERMINING THE COST OF CAPITAL FOR UNES?

A33. Yes. In the *Virginia Arbitration Order* the Bureau specifically rejected the use of book values in determining a TELRIC-based cost of capital, concluding that:

> In calculating TELRIC prices, the theoretically correct capital structure is based on market values of debt and equity, not book values.[42]

---

[40] See *e.g.*, *Report and Order and Order on Remand and Further Notice of Proposed Rulemaking*, FCC 03-36 (Aug. 21, 2003) (*TRO*) at ¶ 680. By affirming that the UNE cost of capital should be determined based on competitive markets, the FCC in effect rejected the regulated rate of return/rate base paradigm, where book value capital structure weights are typically applied.

[41] The U.S. Supreme Court specifically rejected an embedded cost methodology or reliance on historical costs in applying the TELRIC methodology. *Verizon v. FCC*, 535 U.S. 467, 511-12 (2002).

[42] *Virginia Arbitration Order* at ¶ 102.

The Bureau recognized that the TELRIC rules are based on forward-looking costs and that "the book value of [the] existing network is irrelevant for these purposes."[43] As explained in the *Verizon Arbitration Order*, using a cost of capital based on a book value capital structure would prevent investors from earning their required rate of return because rational investors look to the market value of network assets. Thus, while the use of market values represents a departure from traditional ratemaking, the FCC concluded, "that is entirely appropriate."[44]

Q34. HAVE THE COURTS CONFIRMED THAT MARKET VALUES – NOT BOOK VALUES – ARE THE ONLY APPROPRIATE BASIS FOR A TELRIC-COMPLIANT CAPITAL STRUCTURE?

A34. Yes. An order in an appeal of a UNE cost of capital established by the MPSC rejected even partial reliance on book values and affirmed that a market value capital structure is the appropriate basis for a cost of capital under TELRIC.[45] As the Order observed, book value data is not to be considered within the context of determining rates for UNE services:

> The Court finds no persuasive support for the contention that FCC regulations permit state commissions to use an incumbent LEC's book values even as a "starting point" for cost of capital determinations. Such an interpretation is foreclosed by the plain language of the regulations, which state simply that embedded costs "shall not be considered ..."[46]

As the Court concluded:

---

[43] *Id.*

[44] *Id.*

[45] U.S. District Court for the Western District of Missouri (Central Division), Case No. 03-04148-CV-C-NKL (June 17, 2004)

[46] *Id.* at 7.

The MPSC's approach is at odds with the TELRIC methodology, which requires the consideration of market risk instead of the risk reported in an incumbent LEC's books.[47]

Q35. WHAT CAPITAL STRUCTURE IS INDICATED FOR CENTURYTEL'S UNES USING MARKET VALUE WEIGHTS?

A35. Forward-looking market value capital structure ratios for the members of the telecommunication proxy group are displayed on Schedule WEA-4. As shown there, Value Line's most recent projections implied an average market value capital structure for the firms in the reference group of LECs contained approximately 78% equity and 22% debt.

Q36. WHAT OVERALL, TELRIC-BASED COST OF CAPITAL IS INDICATED BY THE RESULTS OF YOUR ANALYSES?

A36. As Shown on Schedule WEA-5, combining a market value capital structure of 22% long-term debt 78% equity and a component cost of debt of 6.43% with the 12.50% equity cost rate indicated by the historical CAPM approach adopted in the *Verizon Arbitration Order* results in an overall rate of return of 11.16%. Alternatively, employing the 13.8% cost of equity from my forward-looking application of the CAPM implies a reasonable TELRIC-based cost of capital for CenturyTel's UNEs on the order of 12.18%.

Q37. ARE THERE OTHER FACTORS PROPERLY CONSIDERED IN EVALUATING CENTURYTEL'S REQUESTED ROR?

A37. Yes. As discussed earlier, CenturyTel's service areas are relatively rural and more sparsely populated than those of larger telecommunications carriers. Because of the economic and social importance of the telecommunications industry, it is imperative that

[47] *Id.* at 8.

all consumers have access to continuous service with comparable capabilities. Given the expanding role of telecommunications in today's economy, an advanced infrastructure meeting the capabilities of those offered in urban areas is a prerequisite to sustaining the viability and growth of rural communities. This requires that rural telephone companies maintain the financial flexibility and wherewithal to deploy capital even during periods of adversity. While CenturyTel's business model is focused on providing the benefits of an advanced telecommunications system to consumers in smaller communities, its efforts could be compromised if it is unable to earn an adequate ROR. Moreover, from a regulatory perspective, individualized rate of return determinations are expensive undertakings both for telephone companies and regulatory agencies. The use of an industry-wide return, such as the 11.25% is an effective way to focus available resources on the many critical issues facing regulators and managers of the vital telecommunications infrastructure.

Q38. WHAT IS YOUR CONCLUSION REGARDING THE 11.25% OVERALL RATE OF RETURN USED BY CENTURYTEL IN ITS UNE COST STUDIES IN THIS PROCEEDING?

A38. Based on the results of my evaluation, I concluded that the 11.25% overall rate of return used by CenturyTel is consistent with the current cost of capital required by investors in today's capital markets and sound regulatory and economic policy.

V. CONCLUSIONS

Q39. BASED ON YOUR EVALUATION, WHAT DID YOU CONCLUDE WITH RESPECT TO CENTURYTEL'S PROPOSED APPROACH FOR PRICING UNE SERVICES TO SOCKET?

A39. Because of the rural nature of its service territory, CenturyTel is fundamentally different from urban ILECs, such as AT&T/SBC and Verizon. Rural ILECs, including

CenturyTel, have fundamentally different cost structures and market circumstances – characteristics that the FCC has acknowledged must be considered in applying its TELRIC pricing rules. The UNE cost studies proposed by CenturyTel recognize the realities of its markets and meet the guidelines specified by the FCC. Further, my review of the alternative UNE costs and services for recurring rates proposed by CenturyTel indicates that they are reasonable under the facts and circumstances of its Missouri service area, especially after considering the uncertain future demand for UNE services.

Q40. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?

A40. Yes, it does.

COMPARATIVE STATISTICS

Schedule WEA-1
Page 1 of 1

	($ Mil) Revenues	($ Mil) Total Capital	Employees	No. States	('000s) Access Lines	('000s) Average No. Lines / State	Net Plant / Access Line
AT&T/SBC	$ 40,787.0	$ 61,801.0	197,100	13	50,200	3,862	$ 997
Verizon	$ 71,283.0	$ 98,287.0	210,000	29	140,300	4,838	$ 528
CenturyTel	$ 2,407.4	$ 6,179.3	6,800	22	2,300	105	$ 1,453

Source: Data for year-end 2004 from The Value Line Investment Survey (Dec. 30, 2005) and company Form 10-K Reports.

CAPM METHOD

Short-Horizon Historical Risk Premium

Market Risk Premium		
Short-Horizon Equity Risk Premium (a)		8.6%
Proxy Group Beta (b)		
AT&T	1.05	
ALLTEL Corp.	0.95	
BellSouth Corp.	0.95	
CenturyTel Inc.	1.05	
Telephone & Data Systems	1.05	
Verizon Communications	0.95	
		1.00
Proxy Group Risk Premium (c)		8.6%
Plus: Risk-free Rate (d)		
Treasury Bill Yield		4.5%
Implied Cost of Equity (e)		**13.1%**

(a) Difference between arithmetic mean returns for Large Company Stocks and U.S. Treasury Bills from Ibbotson Associates, *Stocks, Bonds, Bills, and Inflation, 2005 Yearbook*, at Table 2-1.

(b) The Value Line Investment Survey (Dec. 30, 2005).

(c) (a) x (b).

(d) Average of the daily yields on 3-month Treasury Bills for February 2006 reported by the U.S. Department of the Treasury at www.treas.gov.

(e) (c) + (d).

CAPM METHOD

Long-Horizon Historical Risk Premium

Market Risk Premium		
Long-Horizon Equity Risk Premium (a)		7.2%
Proxy Group Beta (b)		
AT&T	1.05	
ALLTEL Corp.	0.95	
BellSouth Corp.	0.95	
CenturyTel Inc.	1.05	
Telephone & Data Systems	1.05	
Verizon Communications	0.95	
		1.00
Proxy Group Risk Premium (c)		7.2%
Plus: Risk-free Rate (d)		
Long-term Treasury Bond Yield		4.7%
Implied Cost of Equity (e)		**11.9%**

(a) Ibbotson Associates, *Stocks, Bonds, Bills, and Inflation, Valuation Edition, 2005 Yearbook*, at Appendix C.

(b) The Value Line Investment Survey (Dec. 30, 2005).

(c) (a) x (b).

(d) Average of the daily yields on 20-year government bonds for February 2006 reported by the U.S. Department of the Treasury at www.treas.gov.

(e) (c) + (d).

CAPM METHOD

Schedule WEA-3
Page 1 of 1

Forward-Looking Risk Premium

Market Rate of Return		
Dividend Yield (a)	2.0%	
Growth Rate (b)	11.8%	
Market Return (c)		13.8%
Less: Risk-Free Rate (d)		
20-Year Treasury Bond Yield		4.7%
Market Risk Premium (e)		9.1%
Proxy Group Beta (f)		
AT&T	1.05	
ALLTEL Corp.	0.95	
BellSouth Corp.	0.95	
CenturyTel Inc.	1.05	
Telephone & Data Systems	1.05	
Verizon Communications	0.95	
		1.00
Proxy Group Risk Premium (g)		9.1%
Plus: Risk-free Rate (d)		
Long-term Treasury Bond Yield		4.7%
Implied Cost of Equity (h)		**13.8%**

(a) Weighted average dividend yield for the dividend paying firms in the S&P 500 from www.valueline.com (Retreived Jan. 19, 2006).

(b) Weighted average of IBES and Value Line growth rates for the dividend paying firms in the S&P 500 based on data from Standard & Poor's Earnings Guide (Dec. 2005) and www.valueline.com (Retreived Jan. 19, 2006).

(c) (a) + (b).

(d) Average of the daily yields on 20-year government bonds for February 2006 reported by the U.S. Department of the Treasury at www.treas.gov.

(e) (c) - (d).

(f) The Value Line Investment Survey (Dec. 30, 2005).

(g) (e) x (f).

(h) (d) + (g).

LEC PROXY GROUP

Schedule WEA-4
Page 1 of 1

Market Value Capital Structure

	Projected 2008-10	
	(a)	(b)
Company	Debt	Common Equity
SBC Communications	21%	79%
ALLTEL Corp.	12%	88%
BellSouth Corp.	13%	87%
CenturyTel Inc.	34%	66%
Telephone & Data Systems	28%	72%
Verizon Communications	23%	77%
Average	22%	78%

(a) Debt outstanding computed by multiplying long-term debt ratio by total book capital, both as reported by The Value Line Investment Survey (Dec. 30, 2005).

(b) Market value of common equity computed by multiplying projected price for 2008-10, by number of common shares outstanding reported by The Value Line Investment Survey (Dec. 30, 2005).

OVERALL RATE OF RETURN

Schedule WEA-5
Page 1 of 1

I. Historical CAPM

Component	Percent	Component Cost	Weighted Cost
Debt	22.0%	6.43%	1.41%
Equity	78.0%	12.50%	9.75%
	100.0%		**11.16%**

II. Forward-looking CAPM

Component	Percent	Component Cost	Weighted Cost
Debt	22.0%	6.43%	1.41%
Equity	78.0%	13.80%	10.76%
	100.0%		**12.18%**

APPENDIX A

Qualifications of William E. Avera

WILLIAM E. AVERA

FINCAP, INC.
Financial Concepts and Applications
Economic and Financial Counsel

3907 Red River
Austin, Texas 78751
(512) 458–4644
FAX (512) 458–4768
fincap@texas.net

Summary of Qualifications

Ph.D. in economics and finance; Chartered Financial Analyst (CFA ®) designation; extensive expert witness testimony before courts, alternative dispute resolution panels, regulatory agencies and legislative committees; lectured in executive education programs around the world on ethics, investment analysis, and regulation; undergraduate and graduate teaching in business and economics; appointed to leadership positions in government, industry, academia, and the military.

Employment

Principal, FINCAP, Inc. (Sep. 1979 to present)	Financial, economic and policy consulting to business and government. Perform business and public policy research, cost/benefit analyses and financial modeling, valuation of businesses (over 100 entities valued), estimation of damages, statistical and industry studies. Provide strategy advice and educational services in public and private sectors, and serve as expert witness before regulatory agencies, legislative committees, arbitration panels, and courts.
Director, Economic Research Division, Public Utility Commission of Texas (Dec. 1977 to Aug. 1979)	Responsible for research and testimony preparation on rate of return, rate structure, and econometric analysis dealing with energy, telecommunications, water and sewer utilities. Testified in major rate cases and appeared before legislative committees and served as Chief Economist for agency. Administered state and federal grant funds. Communicated frequently with political leaders and representatives from consumer groups, media, and investment community.
Manager, Financial Education, International Paper Company New York City (Feb. 1977 to Nov. 1977)	Directed corporate education programs in accounting, finance, and economics. Developed course materials, recruited and trained instructors, liaison within the company and with academic institutions. Prepared operating budget and designed financial controls for corporate professional development program.

Lecturer in Finance,
The University of Texas at Austin
(Sep. 1979 to May 1981)
Assistant Professor of Finance,
(Sep. 1975 to May 1977)

Taught graduate and undergraduate courses in financial management and investment theory. Conducted research in business and public policy. Named Outstanding Graduate Business Professor and received various administrative appointments.

Assistant Professor of Business,
University of North Carolina at Chapel Hill
(Sep. 1972 to Jul. 1975)

Taught in BBA, MBA, and Ph.D. programs. Created project course in finance, Financial Management for Women, and participated in developing Small Business Management sequence. Organized the North Carolina Institute for Investment Research, a group of financial institutions that supported academic research. Faculty advisor to the Media Board, which funds student publications and broadcast stations.

Education

Ph.D., Economics and Finance,
University of North Carolina at Chapel Hill
(Jan. 1969 to Aug. 1972)

Elective courses included financial management, public finance, monetary theory, and econometrics. Awarded the Stonier Fellowship by the American Bankers' Association and University Teaching Fellowship. Taught statistics, macroeconomics, and microeconomics.

Dissertation: *The Geometric Mean Strategy as a Theory of Multiperiod Portfolio Choice*

B.A., Economics,
Emory University, Atlanta, Georgia
(Sep. 1961 to Jun. 1965)

Active in extracurricular activities, president of the Barkley Forum (debate team), Emory Religious Association, and Delta Tau Delta chapter. Individual awards and team championships at national collegiate debate tournaments.

Professional Associations

Received Chartered Financial Analyst (CFA) designation in 1977; Vice President for Membership, Financial Management Association; President, Austin Chapter of Planning Executives Institute; Board of Directors, North Carolina Society of Financial Analysts; Candidate Curriculum Committee, Association for Investment Management and Research; Executive Committee of Southern Finance Association; Vice Chair, Staff Subcommittee on Economics and National Association of Regulatory Utility Commissioners (NARUC); Appointed to NARUC Technical Subcommittee on the National Energy Act.

Teaching in Executive Education Programs

University-Sponsored Programs: Central Michigan University, Duke University, Louisiana State University, National Defense University, National University of Singapore, Texas A&M University, University of Kansas, University of North Carolina, University of Texas.

Business and Government-Sponsored Programs: Advanced Seminar on Earnings Regulation, American Public Welfare Association, Association for Investment Management and Research, Congressional Fellows Program, Cost of Capital Workshop, Electricity Consumers Resource Council, Financial Analysts Association of Indonesia, Financial Analysts Review, Financial Analysts Seminar at Northwestern University, Governor's Executive Development Program of Texas, Louisiana Association of Business and Industry, National Association of Purchasing Management, National Association of Tire Dealers, Planning Executives Institute, School of Banking of the South, State of Wisconsin Investment Board, Stock Exchange of Thailand, Texas Association of State Sponsored Computer Centers, Texas Bankers' Association, Texas Bar Association, Texas Savings and Loan League, Texas Society of CPAs, Tokyo Association of Foreign Banks, Union Bank of Switzerland, U.S. Department of State, U.S. Navy, U.S. Veterans Administration, in addition to Texas state agencies and major corporations.

Presented papers for Mills B. Lane Lecture Series at the University of Georgia and Heubner Lectures at the University of Pennsylvania. Taught graduate courses in finance and economics in evening program at St. Edward's University in Austin from January 1979 through 1998.

Expert Witness Testimony

Testified in over 200 cases before regulatory agencies addressing cost of capital, rate design, and other economic and financial issues.

Federal Agencies: Federal Communications Commission, Federal Energy Regulatory Commission, Surface Transportation Board, Interstate Commerce Commission, and the Canadian Radio-Television and Telecommunications Commission.

State Regulatory Agencies: Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Hawaii, Idaho, Illinois, Indiana, Kansas, Maryland, Michigan, Missouri, Nevada, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Texas, Utah, Virginia, Washington, West Virginia, and Wisconsin.

Testified in over 30 cases before federal and state courts, arbitration panels, and alternative dispute tribunals (over 60 depositions given) regarding damages, valuation, antitrust liability, fiduciary duties, and other economic and financial issues.

Board Positions and Other Professional Activities

Audit Committee and Outside Director, Georgia System Operations Corporation (electric system operator for member-owned electric cooperatives in Georgia); Chairman, Board of Print Depot, Inc. and FINCAP, Inc.; Co-chair, Synchronous Interconnection Committee, appointed by Governor George Bush and Public Utility Commission of Texas; Operator of AAA Ranch, a certified organic producer of agricultural products; Appointed to Organic Livestock Advisory Committee by Texas Agricultural Commissioner Susan Combs; Appointed by Texas Railroad Commissioners to study group for *The UP/SP Merger: An Assessment of the Impacts on the State of Texas;* Appointed by

Hawaii Public Utilities Commission to team reviewing affiliate relationships of Hawaiian Electric Industries; Chairman, Energy Task Force, Greater Austin-San Antonio Corridor Council; Consultant to Public Utility Commission of Texas on cogeneration policy and other matters; Consultant to Public Service Commission of New Mexico on cogeneration policy; Evaluator of Energy Research Grant Proposals for Texas Higher Education Coordinating Board.

Community Activities

Board Member, Sustainable Food Center; Chair, Board of Deacons, Finance Committee, and Elder, Central Presbyterian Church of Austin; Founding Member, Orange-Chatham County (N.C.) Legal Aid Screening Committee.

Military

Captain, U.S. Naval Reserve (retired after 28 years service); Commanding Officer, Naval Special Warfare Engineering Support Unit; Officer-in-charge of SWIFT patrol boat in Vietnam; Enlisted service as weather analyst (advanced to second class petty officer).

Bibliography

Monographs

Ethics and the Investment Professional (video, workbook, and instructor's guide) and *Ethics Challenge Today* (video), Association for Investment Management and Research (1995)

"Definition of Industry Ethics and Development of a Code" and "Applying Ethics in the Real World," in *Good Ethics: The Essential Element of a Firm's Success*, Association for Investment Management and Research (1994)

"On the Use of Security Analysts' Growth Projections in the DCF Model," with Bruce H. Fairchild in *Earnings Regulation Under Inflation*, J. R. Foster and S. R. Holmberg, eds. Institute for Study of Regulation (1982)

An Examination of the Concept of Using Relative Customer Class Risk to Set Target Rates of Return in Electric Cost-of-Service Studies, with Bruce H. Fairchild, Electricity Consumers Resource Council (ELCON) (1981); portions reprinted in *Public Utilities Fortnightly* (Nov. 11, 1982)

"Usefulness of Current Values to Investors and Creditors," *Research Study on Current-Value Accounting Measurements and Utility*, George M. Scott, ed., Touche Ross Foundation (1978)

"The Geometric Mean Strategy and Common Stock Investment Management," with Henry A. Latané in *Life Insurance Investment Policies*, David Cummins, ed. (1977)

Investment Companies: Analysis of Current Operations and Future Prospects, with J. Finley Lee and Glenn L. Wood, American College of Life Underwriters (1975)

Articles

"Should Analysts Own the Stocks they Cover?" *The Financial Journalist*, (March 2002)

"Liquidity, Exchange Listing, and Common Stock Performance," with John C. Groth and Kerry Cooper, *Journal of Economics and Business* (Spring 1985); reprinted by National Association of Security Dealers

"The Energy Crisis and the Homeowner: The Grief Process," *Texas Business Review* (Jan.–Feb. 1980); reprinted in *The Energy Picture: Problems and Prospects*, J. E. Pluta, ed., Bureau of Business Research (1980)

"Use of IFPS at the Public Utility Commission of Texas," *Proceedings of the IFPS Users Group Annual Meeting* (1979)

"Production Capacity Allocation: Conversion, CWIP, and One-Armed Economics," *Proceedings of the NARUC Biennial Regulatory Information Conference* (1978)

"Some Thoughts on the Rate of Return to Public Utility Companies," with Bruce H. Fairchild in *Proceedings of the NARUC Biennial Regulatory Information Conference* (1978)

"A New Capital Budgeting Measure: The Integration of Time, Liquidity, and Uncertainty," with David Cordell in *Proceedings of the Southwestern Finance Association* (1977)

"Usefulness of Current Values to Investors and Creditors," in *Inflation Accounting/Indexing and Stock Behavior* (1977)

"Consumer Expectations and the Economy," *Texas Business Review* (Nov. 1976)

"Portfolio Performance Evaluation and Long-run Capital Growth," with Henry A. Latané in *Proceedings of the Eastern Finance Association* (1973)

Book reviews in *Journal of Finance* and *Financial Review*. Abstracts for *CFA Digest*. Articles in *Carolina Financial Times*.

Selected Papers and Presentations

"The Who, What, When, How, and Why of Ethics", San Antonio Financial Analysts Society (Jan. 16, 2002). Similar presentation given to the Austin Society of Financial Analysts (Jan. 17, 2002)

"Ethics for Financial Analysts," Sponsored by Canadian Council of Financial Analysts: delivered in Calgary, Edmonton, Regina, and Winnipeg, June 1997. Similar presentations given to Austin Society of Financial Analysts (Mar. 1994), San Antonio Society of Financial Analysts (Nov. 1985), and St. Louis Society of Financial Analysts (Feb. 1986)

"Cost of Capital for Multi-Divisional Corporations," Financial Management Association, New Orleans, Louisiana (Oct. 1996)

"Ethics and the Treasury Function," Government Treasurers Organization of Texas, Corpus Christi, Texas (Jun. 1996)

"A Cooperative Future," Iowa Association of Electric Cooperatives, Des Moines (December 1995). Similar presentations given to National G & T Conference, Irving, Texas (June 1995), Kentucky Association of Electric Cooperatives Annual Meeting, Louisville (Nov. 1994), Virginia, Maryland, and Delaware Association of Electric Cooperatives Annual Meeting, Richmond (July 1994), and Carolina Electric Cooperatives Annual Meeting, Raleigh (Mar. 1994)

"Information Superhighway Warnings: Speed Bumps on Wall Street and Detours from the Economy," Texas Society of Certified Public Accountants Natural Gas, Telecommunications and Electric Industries Conference, Austin (Apr. 1995)

"Economic/Wall Street Outlook," Carolinas Council of the Institute of Management Accountants, Myrtle Beach, South Carolina (May 1994). Similar presentation given to Bell Operating Company Accounting Witness Conference, Santa Fe, New Mexico (Apr. 1993)

"Regulatory Developments in Telecommunications," Regional Holding Company Financial and Accounting Conference, San Antonio (Sep. 1993)

"Estimating the Cost of Capital During the 1990s: Issues and Directions," The National Society of Rate of Return Analysts, Washington, D.C. (May 1992)

"Making Utility Regulation Work at the Public Utility Commission of Texas," Center for Legal and Regulatory Studies, University of Texas, Austin (June 1991)

"Can Regulation Compete for the Hearts and Minds of Industrial Customers," Emerging Issues of Competition in the Electric Utility Industry Conference, Austin (May 1988)

"The Role of Utilities in Fostering New Energy Technologies," Emerging Energy Technologies in Texas Conference, Austin (Mar. 1988)

"The Regulators' Perspective," Bellcore Economic Analysis Conference, San Antonio (Nov. 1987)

"Public Utility Commissions and the Nuclear Plant Contractor," Construction Litigation Superconference, Laguna Beach, California (Dec. 1986)

"Development of Cogeneration Policies in Texas," University of Georgia Fifth Annual Public Utilities Conference, Atlanta (Sep. 1985)

"Wheeling for Power Sales," Energy Bureau Cogeneration Conference, Houston (Nov. 1985).

"Asymmetric Discounting of Information and Relative Liquidity: Some Empirical Evidence for Common Stocks" (with John Groth and Kerry Cooper), Southern Finance Association, New Orleans (Nov. 1982)

"Used and Useful Planning Models," Planning Executive Institute, 27th Corporate Planning Conference, Los Angeles (Nov. 1979)

"Staff Input to Commission Rate of Return Decisions," The National Society of Rate of Return Analysts, New York (Oct. 1979)

"Electric Rate Design in Texas," Southwestern Economics Association, Fort Worth (Mar. 1979)

"Discounted Cash Life: A New Measure of the Time Dimension in Capital Budgeting," with David Cordell, Southern Finance Association, New Orleans (Nov. 1978)

"The Relative Value of Statistics of Ex Post Common Stock Distributions to Explain Variance," with Charles G. Martin, Southern Finance Association, Atlanta (Nov. 1977)

"An ANOVA Representation of Common Stock Returns as a Framework for the Allocation of Portfolio Management Effort," with Charles G. Martin, Financial Management Association, Montreal (Oct. 1976)

"A Growth-Optimal Portfolio Selection Model with Finite Horizon," with Henry A. Latané, American Finance Association, San Francisco (Dec. 1974)

"An Optimal Approach to the Finance Decision," with Henry A. Latané, Southern Finance Association, Atlanta (Nov. 1974)

"A Pragmatic Approach to the Capital Structure Decision Based on Long-Run Growth," with Henry A. Latané, Financial Management Association, San Diego (Oct. 1974)

"Multi-period Wealth Distributions and Portfolio Theory," Southern Finance Association, Houston (Nov. 1973)

"Growth Rates, Expected Returns, and Variance in Portfolio Selection and Performance Evaluation," with Henry A. Latané, Econometric Society, Oslo, Norway (Aug. 1973)