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Recurring UNE Rates, Annual Charge
Factors, Avoided Cost Discount

Witness: Kenneth W. Buchan

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

KENNETH W. BUCHAN

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

CASE NO. TO-2006-0299

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Exhibit No. J
Case No(s) TO-2006-0299
Date 4-12-06 Rptr *F

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 LOUISIANA

PARISH OF OUACHITA

AFFIDAVIT OF KENNETH W. BUCHAN

I, Kenneth W. Buchan, of lawful age and being duly sworn, state:

1. My name is Kenneth W. Buchan. I am presently Manager for Regulatory Finance for CenturyTel Service Group, LLC.
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.


Kenneth W. Buchan

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


Notary Public

My Commission expires: Death



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1 **DIRECT TESTIMONY OF KENNETH W. BUCHAN**

2 **ON BEHALF OF CENTURYTEL OF MISSOURI, LLC AND SPECTRA**
3 **COMMUNICATIONS GROUP, LLC d/b/a CENTURYTEL**

4 **I**
5 **INTRODUCTION**

6 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

7 A. My name is Kenneth W. Buchan. My business address is P.O. Box 4065, Monroe, LA
8 71203.

9 **Q. ON WHOSE BEHALF ARE YOU SUBMITTING DIRECT TESTIMONY?**

10 A. I am submitting direct testimony on behalf of CenturyTel of Missouri, LLC and Spectra
11 Communications Group, LLC, collectively referred to herein as "CenturyTel."

12 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?**

13 A. I am employed by CenturyTel Service Group, LLC as Manager of Regulatory Finance.
14 CenturyTel Service Group, LLC, CenturyTel of Missouri, LLC, and Spectra
15 Communications Group, LLC are all wholly owned subsidiaries of CenturyTel, Inc.
16 CenturyTel Service Group, LLC provides regulatory, accounting, financial, engineering,
17 customer service, and other support functions to CenturyTel of Missouri LLC, Spectra
18 Communications Group LLC, and all other subsidiaries of CenturyTel, Inc.

19 **Q. WHAT ARE YOUR RESPONSIBILITIES AS MANAGER OF REGULATORY**
20 **FINANCE?**

21 A. I am responsible for reporting financial information to various Public Service
22 Commissions and determining the financial impacts of regulatory decisions on
23 CenturyTel's Incumbent Local Exchange Carriers ("ILECs"). I am also responsible for
24 managing the development of prices and cost support for regulated communications
25 services offered by CenturyTel ILECs.

1 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

2 A. I received a Bachelor of Business Administration with a major in accounting from
3 Northeast Louisiana University in May 1989. I received a Master of Business
4 Administration from Northeast Louisiana University in August 1990. I am a Certified
5 Public Accountant licensed to practice in the state of Louisiana.

6 **Q. WOULD YOU PLEASE SUMMARIZE YOUR BACKGROUND AND**
7 **EXPERIENCE IN THE TELECOMMUNICATIONS INDUSTRY?**

8 A. I began my career with CenturyTel Service Group, LLC (CSG) in May 1993 and have
9 held various positions within the company CenturyTel over the last twelve years. First, I
10 was in plant accounting having responsibility for recording entries and analyzing fixed
11 assets accounts. Then, from November 1994 to December 1998, I held the position of
12 staff internal auditor in CSG's internal audit department. In that position, I performed
13 operational and financial audits. In January 1999, I became a senior accountant in CSG's
14 accounting department. This was followed by a period serving as the supervisor of that
15 same department. In November 2000, I became supervisor in the accounting department
16 of Revenues/Expenses-Wireline. In that capacity, I was primarily responsible for
17 recording entries and monitoring certain revenues and expenses for the CenturyTel, Inc.'s
18 ILECs. Thereafter, I moved into my current position as Manager of Regulatory Finance.
19 I have held that position since July 2003. Also, I am currently serving as CenturyTel's
20 representative on NECA's Rate Development Task Force. This task force is comprised
21 of experts from various ILECs. It reviews rate development and makes recommendations
22 to NECA for its interstate tariff filings.

23 **Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY PROCEEDINGS?**

1 A. Yes, I have presented testimony before state commissions in Alabama, Arkansas, and
2 Oklahoma. In Alabama, I testified in an avoided cost discount hearing. In Arkansas, I
3 testified in support of a rate case stipulation, and I testified in Oklahoma concerning the
4 rates developed for an Arkansas company.

5 **II.**
PURPOSE OF TESTIMONY

6 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

7 A. The parties present the Commission with a number of critical disputed issues in this
8 arbitration proceeding relating to the appropriate recurring and non-recurring rates that
9 CenturyTel may charge Socket Telecom (Socket) for Unbundled Network Elements
10 ("UNEs") and other associated elements and services, as well as the appropriate avoided
11 cost discount to be applied when Socket orders services for resale. While Mr. Hankins
12 addresses the disputes concerning non-recurring rates, I focus on the parties' disputes
13 regarding the appropriate recurring rates and the appropriate avoided cost discount the
14 Commission should implement. My testimony explains why the methodology
15 CenturyTel utilized to develop recurring rates is appropriate in this context; demonstrates
16 that the resulting rates are reasonable, forward-looking and TELRIC-compliant; and
17 shows that the Commission should adopt CenturyTel's proposed avoided cost discount.

18 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

19 A. In the next section of my testimony, I frame the costing issues by discussing the FCC's
20 TELRIC methodology and explaining in general terms the appropriate mechanisms for
21 developing costs. In section IV of my testimony, I discuss CenturyTel's proposed
22 recurring loop rates, followed in section V by a discussion of the recurring loop rate cost
23 study details, explaining the specific methodology CenturyTel utilized and demonstrating

1 that the resulting recurring loop rates are appropriate. Included in section V is a
2 discussion of the annual charge factors (ACFs), which are important factors in deriving
3 recurring rates from the underlying investment costs of providing UNEs. I explain how
4 the ACFs are developed and establish their propriety for use in the recurring cost studies
5 at issue here. Finally, in Section VI, I explain the analysis used to determine wholesale
6 discount rates for resale of local services in Missouri, showing why they are the
7 appropriate discount rates for the Commission to adopt in this proceeding.

III. GENERAL COSTING METHODOLOGY

8 **Q. PLEASE DESCRIBE THE BASIC COSTING METHODOLOGY CENTURYTEL**
9 **APPLIES IN THIS PROCEEDING?**

10 **A.** The basic costing methodology is long-run incremental costing. The primary cost object
11 is a network element—the UNE loop (either DS1 or DS3), and the methodology is
12 referred to as Total Element Long Run Incremental Cost (TELRIC). The TELRIC
13 methodology for pricing UNEs was created by the FCC in its First Report and Order,
14 which was the original FCC order implementing the local competition provisions of the
15 Telecommunications Act of 1996.¹ The TELRIC of an element is the sum of three
16 components—operating expenses, depreciation expense, and cost of capital. Operating
17 expenses are the annual costs associated with operating a particular element.
18 Depreciation is the mechanism by which the network investment in an asset is recovered
19 over the life of the asset. Finally, the cost of capital reflects the amount investors would
20 demand to compensate for the risks of investing in the enterprise. The FCC has stated

¹ Federal Communications Commission, FCC 96-325, *First Report and Order, In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996* (CC Docket No. 96-98); *Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers* (CC Docket No. 96-185) (rel. Aug. 8, 1996) (“First Report and Order” or “Local Competition Order”).

1 that the cost of capital should be adjusted to reflect the risks faced by ILECs as
2 competition is introduced into the local exchange market.²

3 **Q. DO CENTURYTEL'S RECURRING RATE UNE LOOP COST STUDIES**
4 **COMPLY WITH THE FCC'S TELRIC METHODOLOGY?**

5 A. Yes, CenturyTel's cost studies for recurring DS1 and DS3 UNE loop rates comply with
6 the TELRIC methodology as required by the FCC. As Mr. Davis demonstrates in his
7 direct testimony, these cost studies incorporate forward-looking network designs,
8 forward-looking technologies, and forward-looking investment costs, which is consistent
9 with the TELRIC standard. Moreover, unlike Socket's proposal, CenturyTel's proposed
10 recurring loop rates are based on CenturyTel-specific inputs, assumptions, and factors.

11 **Q. HAS THE FCC PROVIDED ANY RELEVANT GUIDANCE ON NETWORK**
12 **ASSUMPTIONS TO MAKE IN DEVELOPING TELRIC RATES?**

13 A. Yes. In the FCC's Notice of Proposed Rulemaking announcing its intent to substantially
14 revise the TELRIC pricing standard, three FCC commissioners commented that TELRIC
15 should focus on real-world characteristics, rather than on the hypothetical characteristics
16 of some imaginary "most efficient" carrier: "We tentatively conclude that our TELRIC
17 rules should more closely account for the real-world attributes of the routing and
18 topography of an incumbent's network in the development of forward-looking costs."³ In
19 particular, the FCC observed:

20 Part of the difficulty that states and interested parties have encountered
21 springs from the excessively hypothetical nature of the TELRIC inquiry
22 . . . In the absence of more specific guidance, this can . . . make it difficult
23 to understand how actual UNE rates are derived. The lack of predictability

² *Id.*

³ TELRIC NPRM at ¶ 52.

1 in UNE rates is difficult to reconcile with our desire that UNE prices send
2 correct economic signals.⁴

3 The FCC also recognized that one of the “central internal tensions in the application of
4 the TELRIC methodology is that it purports to replicate the conditions of a competitive
5 market by assuming that the latest technology is deployed throughout the hypothetical
6 network, while at the same time assuming that this hypothetical network benefits from
7 the economies of scale associated with serving all of the lines in a study area.”⁵ In the
8 real world, on the other hand, “firms do not instantaneously replace all of their facilities
9 with every improvement in technology,” and “even the most efficient carrier’s network
10 will reflect a mix of new and older technology at any given time.”⁶

11 Three of the FCC Commissioners wrote separately to recognize the harmful
12 incentives caused when TELRIC prices do not reflect real-world costs and to express
13 their hope that more realistic prices would create the right investment incentives.⁷ Then
14 FCC Chairman Powell observed that “an approach grounded in the real-world attributes
15 of the incumbent’s network would address claims that our TELRIC rules currently distort
16 a competitor’s decision whether to invest in new facilities or to lease an incumbent’s
17 existing facilities.” Commissioner Abernathy stated, “the excessively hypothetical nature
18 of the Commission’s existing standard sends inappropriate investment signals and
19 produces irrational pricing in some instances.” Finally, then Commissioner Martin noted
20 that the NPRM, “in conjunction with our decision in the recent Triennial Review Order,
21 begins the process to provide the necessary adjustments to the TELRIC formula that will

⁴ TELRIC NPRM at ¶ 7.

⁵ TELRIC NPRM at ¶ 50.

⁶ *Id.*

1 more accurately reflect incumbent costs and help spur deployment in new facilities and
2 services.”

3 **Q. DO THESE COMMENTS IMPACT THE DEVELOPMENT OF RECURRING**
4 **UNE LOOP RATES IN THIS PROCEEDING?**

5 **A.** Yes, as the Commission evaluates the parties’ proposed recurring rates, it should keep the
6 FCC’s guidance in mind. Although the FCC has not yet modified the TELRIC
7 methodology, its comments, particularly with respect to the dangers inherent in setting
8 UNE rates below cost, are instructive. That is not to say, however, that CenturyTel’s cost
9 studies are dependent on the TELRIC NPRM for validity. They are not. Instead, those
10 cost studies comply with existing TELRIC methodology.

11 **IV.**
12 **RECURRING LOOP RATES**

13 **Q. WHAT ARE RECURRING RATES?**

14 **A.** As the name suggests, recurring rates are those rates charged to a Competitive Local
15 Exchange Carrier (“CLEC”) on a recurring basis to allow the ILEC to recover its
16 recurring costs associated with providing UNEs.

17 **Q. WHAT RECURRING RATE ELEMENTS ARE BEING ESTABLISHED IN THIS**
18 **PROCEEDING?**

19 **A.** As a result of the parties’ agreement to most of the recurring rates, the scope of the
20 parties’ dispute with respect to recurring rates is quite narrow. Indeed, the only recurring
21 rate elements at issue in this proceeding are the recurring rates for DS1 and DS3 UNE
22 loops.

23 **Q. WHY IS IT IMPORTANT THE COMMISSION SET ACCURATE RECURRING**
24 **RATES FOR DS1 AND DS3 UNE LOOPS?**

⁷ Each of the five FCC Commissioners issued statements that were appended to the TELRIC NPRM. The discussion below references and quotes from these statements.

1 A. Setting proper recurring rates for DS1 and DS3 UNE loops is critical. The Commission's
2 determination on this issue will likely dictate the form and scope of telecommunications
3 competition in Missouri's rural areas for years to come. If there is such a thing as the
4 "most important" UNE, the UNE loop is it. Given the importance of this element, the
5 Commission should exercise caution to ensure that the TELRIC-based cost for this
6 element is set accurately. As the FCC recognized in its TELRIC Notice of Proposed
7 Rulemaking ("TELRIC NPRM"),⁸ "[t]o the extent that the application of our TELRIC
8 pricing rules distorts our intended pricing signals by understating forward-looking costs,
9 it can thwart one of the central purposes of the Act: the promotion of facilities-based
10 competition."⁹ Synthetic competition created by artificially low UNE rates undermines
11 the Federal Telecommunications Act of 1996's ("FTA") goals and precludes long-term
12 CLEC, ILEC, and network viability.

13 **Q. IF THE COMMISSION SETS CENTURYTEL'S DS1 AND DS3 UNE LOOP**
14 **RATES BELOW ITS COSTS, WILL TRUE COMPETITION EMERGE IN**
15 **THESE MARKETS?**

16 A. Probably not. A form of synthetic competition established through a subsidy flow would
17 emerge, whereby CenturyTel would effectively subsidize CLEC entry into the rural
18 markets in which CenturyTel operates. It is extremely important that the Commission not
19 try to "engineer" an illusory brand of "competition" by setting UNE loop costs at an
20 uneconomically low level that guarantees CLEC profitability at CenturyTel's expense. If
21 the Commission sets UNE rates below cost, there will certainly be entry by CLECs. The
22 result, however, would not be a true competitive market of the sort contemplated by the

⁸ Federal Communications Commission, FCC 03-224, *Notice of Proposed Rulemaking*, In the Matter of Review of the Commission's Rules Regarding the Pricing of Unbundled Network Elements and the Resale of Service by Incumbent Local Exchange Carriers (WC Docket No. 03-173). Released: September 15, 2003.

⁹ TELRIC NPRM at ¶ 3.

1 FCC. Instead, the Commission would be establishing an artificial market. The FCC
2 specifically noted its concern that the application of its pricing rules by state commissions
3 has resulted in "estimates of forward-looking costs below the costs that would actually be
4 found even in an extremely competitive market."¹⁰ Underestimating the TELRIC cost
5 would "undermine the incentive for either competitive LECs or incumbent LECs to build
6 new facilities, even when it is efficient for them to do so."¹¹ The Commission should
7 accurately set UNE rates in a manner that avoids improperly fostering synthetic
8 competition at the expense of facilities-based competition.

9 **Q. OTHER THAN FOSTERING SYNTHETIC COMPETITION, ARE THERE**
10 **OTHER PROBLEMS ASSOCIATED WITH ERECTING BELOW COST RATES?**

11 **A.** Yes, setting UNE loop rates too low would likely have a number of varied detrimental
12 impacts:

- 13 1. *Impair Network* – CenturyTel, unlike Socket, is required to offer service to all
14 customers, regardless of profitability, in its service territory. Socket, on the other
15 hand, may offer service only to those customers that are the most profitable. Indeed,
16 to that point, Socket's website reveals that it may not be offering any voice service to
17 non-business residential end users. By requiring CenturyTel to serve the least
18 profitable customers, while allowing Socket to serve the most profitable customers
19 with no obligation to reinvest in the Missouri telephony infrastructure, below cost
20 UNE rates would jeopardize CenturyTel's ability to maintain its network.

¹⁰ TELRIC NPRM at ¶ 51.

¹¹ *Id.* See also, e.g., Thomas M. Jorde, J. Gregory Sidak, and David J. Teece, *Innovation, Investment and Unbundling*, 17 YALE J. REG. 1 (Winter 2000) ("Mandatory unbundling confers a second-mover advantage and substantially decreases a CLEC's incentives to make a sunk investment.").

2. *Discourage Investment* – If CenturyTel cannot recover its costs because recurring UNE loop rates are set too low, it has little or no incentive to invest in facilities. Likewise, faced with the opportunity to obtain network facilities below cost through exceedingly low UNE loop rates, CLECs like Socket would similarly lack any incentive to invest in facilities. Further, below cost UNE loop rates may also deter the development of intermodal competition. Below cost UNE loops, quite simply, will not foster facilities-based competition or innovation and investment in telecommunications facilities.

V. UNE LOOP COST STUDIES

A. CenturyTel's proposed recurring loop rates are consistent with TELRIC and should be adopted by the Commission.

Q. DID CENTURYTEL CONDUCT COST STUDIES DESIGNED TO DETERMINE THE APPROPRIATE RECURRING RATES FOR DS1 AND DS3 LOOPS?

A. Yes, CenturyTel conducted cost studies specifically focused on determining the TELRIC-compliant recurring rates for DS1 and DS3 UNE loops for each of the four rate schedule groups established in Missouri. In this section of my testimony, I provide the results of those cost studies and explain the specific methodology and inputs, demonstrating that the derived rates are consistent with TELRIC, ensure CenturyTel cost recovery and are appropriate in this proceeding. In presenting these cost studies, I also demonstrate how they are forward-looking and comply with existing TELRIC pricing methodology.

Q. ARE YOU PRESENTING SCHEDULES ALONG WITH THIS DIRECT TESTIMONY?

A. Yes. Along with my direct testimony, I am providing an electronic copy of CenturyTel's Proprietary recurring loop rate cost study on a CD labeled Missouri Loop Study.

1 Q. PLEASE IDENTIFY THE DS1 AND DS3 RECURRING RATES CENTURYTEL
2 PROPOSES IN THIS PROCEEDING.

3 A. Certainly. Based on the cost studies, CenturyTel advocates the following recurring rates
4 for DS1 and DS3 UNE loops:

5 **CenturyTel of Missouri, LLC**

	DS1	DS3
Zone 1	\$ 439	\$ 1,408
Zone 2	\$ 418	\$ 1,586
Zone 3	\$ 430	\$ 1,825
Zone 4	\$ 406	\$ 2,124

6
7 **Spectra Communications Group, Inc.**

	DS1	DS3
Zone 1	\$ 390	\$ 960
Zone 2	\$ 505	\$ 1,897
Zone 3	\$ 259	\$ 1,129
Zone 4	\$ 305	\$ 1,336

8
9 Q. DO YOU HAVE ANY INITIAL OBSERVATIONS BASED ON THESE
10 DEVELOPED RATES?

11 A. Yes. The recurring DS3 rates are generally higher in those exchanges with higher
12 volumes of access lines. However, zone 1 exchanges (lowest volume access lines) are
13 more expensive than zone 4 (highest volume access lines) when the rate is assessed on a
14 per access line basis. One of the reasons for higher DS3 rates in Zone 4 exchanges is the
15 longer loop lengths in those exchanges. Although this may initially appear to be counter
16 intuitive, the smaller exchange communities tend to be more centrally populated causing
17 the average loop length to be shorter.

1 Q. PLEASE GENERALLY EXPLAIN THE METHODOLOGY YOU UTILIZED IN
2 THE RECURRING COST STUDIES TO DEVELOP THESE RATES.

3 A. The first step is to identify the forward-looking design and technology for the UNE being
4 studied, here DS1 and DS3 loops. Once the design and technology are identified, the
5 next step is to determine the dollar amount of capital investment that would be required
6 for CenturyTel to build that network element. In addition, other significant inputs, such
7 as the expected utilization of the facility (*i.e.*, fill factor), must be identified to determine
8 investment costs. Then, once the investment costs are determined, the investment costs
9 are converted to annual recurring costs through the application of annual cost factors
10 ("ACFs"). These ACFs capture the cost of capital, depreciation, income taxes,
11 maintenance expenses, and other miscellaneous expenses associated with the investment
12 required to provision the network element being studied. After the investment is
13 converted to an annual cost, this annual cost is divided by twelve (12) to obtain the
14 monthly recurring cost of the element. The final step to arrive at the TELRIC rate is to
15 apply the shared and common cost factor to the monthly recurring cost.

16 Q. IN THE DEVELOPMENT OF RATES, DID YOU REVIEW DATA FOR ALL
17 EXCHANGES?

18 A. No. In the development of rates, 18 exchanges were selected based on the sampling
19 methodology explained by Mr. Davis. Those 18 exchanges were determined to be
20 representative of the networks in the respective rate schedule groups.

21 Q. HOW MANY EXCHANGE ARE THERE IN CENTURYTEL'S MISSOURI
22 PROPERTIES?

23 A. Spectra Communications Group, LLC and CenturyTel of Missouri, LLC have a
24 combined 203 exchanges. Eighteen of those exchanges were sampled, which represents

1 8.9% of total number of exchanges. On an access line basis, the sampled exchanges
2 represent approximately 30% of total Missouri access lines.

3 **Q. WHICH INPUTS HAVE THE GREATEST IMPACT ON RECURRING COSTS?**

4 A. Beyond the actual loop lengths, the inputs with the most significant impact on the
5 development of CenturyTel's recurring rates are the ACFs (including return on
6 investment and depreciation), fill factors, and investment costs.

7 **Q. HOW IS LOOP LENGTH INFORMATION OBTAINED FOR A UNE LOOP**
8 **COST STUDY?**

9 A. The loop length information for UNE cost studies is obtained by calculating the distance
10 between the serving wire center and the customer premises locations using latitude and
11 longitude coordinates. This data is used to place customers into one of five areas. Each
12 area represents a predefined distance from the serving wire center based on the network
13 design. This information is used in developing an average loop distance for each area.

14 **Q. IS THE LOOP LENGTH INFORMATION CENTURYTEL UTILIZED**
15 **APPROPRIATE FOR USE IN A FORWARD-LOOKING TELRIC STUDY?**

16 A. Yes. In calculating the loop lengths, CenturyTel assumed, consistent with the FCC's
17 guidance existing serving wire center locations and customer premises locations as they
18 are in the current network. These calculations were based on actual locations and reflect
19 the most accurate information available for determining loop lengths. Using actual
20 serving wire center locations and actual customer locations is consistent with the
21 requirements of a forward looking cost study. As Mr. Davis explains in his direct
22 testimony, CenturyTel based its cost study on forward-looking network assumptions.

23 **Q. HOW IS CABLE SIZING MODELED IN THE UNE LOOP COST STUDIES?**

24 A. Cable sizing for various routes is determined by the forward looking network design
25 established. Current contract rates for installed cable facilities are applied to the cable

1 sizes in the forward looking design to determine the costs of the loops. Mr. Davis
2 addresses the network design and the cable sizing more fully in his testimony.

3 **Q. WHAT IS THE PRIMARY METHOD OF DETERMINING INSTALLATION**
4 **COSTS?**

5 A. The installation costs for copper and fiber facilities are built into the cost per foot
6 established for various sizes of cable. CenturyTel derives this cost per foot by
7 considering material costs as well as those costs relating to engineering, furnishing, and
8 installing the material. This is based on recent contracted rates that CenturyTel has
9 entered into with various contractors.

10 **Q. WHY SHOULD CURRENT RATES FOR CABLE INSTALLATION BE USED IN**
11 **A FORWARD-LOOKING DESIGN?**

12 A. CenturyTel used current installed facility costs in the forward-looking cost study as that
13 represents a conservative verifiable proxy of future costs. It is possible and likely that
14 future costs will rise due to the upward pressure on, for example, unit labor costs. In an
15 effort to remain conservative and avoid undue speculation in possible price variation,
16 CenturyTel uses current contracted rates as the basis of future investment costs since
17 those actual costs serve as a reasonable predictor of future construction costs.

18 **Q. WHEN ANALYZING THE APPROPRIATE INPUTS FOR THE LOOP**
19 **RECURRING COSTS STUDY, DID CENTURYTEL PRIMARILY RELY ON**
20 **HARD DATA?**

21 A. Yes. CenturyTel's UNE loop cost study represents cost results that are predominantly
22 based on actual verifiable data. CenturyTel relied on Missouri-specific data to determine
23 investment costs associated with various gauges of cable size and the various
24 configurations of equipment. Basing costs on data that is specific to CenturyTel's
25 operations and network in its Missouri companies is preferable to using speculative
26 generic assumptions. That said, there is sometimes the need to make certain assumptions

1 when developing complex cost studies where data is unavailable or where the data does
2 not adequately reflect forward-looking costs. In those instances, CenturyTel relied on the
3 input of experienced network personnel to provide the technical input assumptions that
4 must be made to accurately develop its cost studies. This mix of hard data where
5 available and technical assumptions where required provides the appropriate foundation
6 for the development of forward-looking costs consistent with the TELRIC standard.

7 **B. CenturyTel utilizes appropriate fill factors to develop recurring loop rates.**

8 **Q. WHAT IS A FILL FACTOR?**

9 A. As Mr. Davis further explains, a fill factor, or utilization rate, is the percentage of
10 working circuits in a network facility that is being used to provide service out of the total
11 number of available circuits in that facility. A fill factor is calculated by dividing the
12 number of working pairs by the number of available pairs. For example, if there are one
13 hundred (100) available distribution cable pairs serving a small subdivision and thirty-
14 five (35) of those pairs are currently being used to provide service, then the fill factor is
15 35% (i.e., 35/100).

16 **Q. ARE FILL FACTORS IMPORTANT IN DEVELOPING RECURRING LOOP**
17 **RATES?**

18 A. Absolutely; fill factors are a critical driver of UNE loop rates. Fill factors are used to
19 convert the cost of a total facility to a cost per working unit. Facilities are installed
20 utilizing industry standards. Even if a facility design indicated a need for a 56-pair cable,
21 one would not generally be available and it would be cost prohibitive to special order.
22 Therefore, the company could install a 100-pair cable and convert the cost to an
23 equivalent cost per pair for the proposed 56. Fill factors are used in cost studies to adjust
24 the investment per working circuit upward to capture a portion of the investment in non-

1 working circuits. A network provider cannot operate at 100% capacity (i.e., cannot
2 always be providing service on every available circuit). Therefore, in order to recover its
3 forward-looking costs, the network provider must recover the investment on a per
4 working unit basis (i.e., the unused capacity through the capacity that will be used to
5 produce revenue). The calculation is performed by dividing the investment by the fill
6 factor, which is stated in percentage terms. In that manner, fill factors are inversely
7 proportional to rates; increasing the fill factor decreases the rate, and vice versa. The
8 following table demonstrates the impact of fill on investment.

9 **Table 1: Example of the Impact of Fill Factors on Investment**

<u>Investment</u>	<u>Fill Factor</u>	<u>Fill Adjusted Investment</u>
(A)	(B)	(A)/(B)
\$100	90%	\$111.11
\$100	40%	\$250.00

10 As can be seen from this table, the impact of fill on the investment can be large.
11 Therefore, it is important that utilization rates be set appropriately.

12 **Q. HOW DID CENTURYTEL IDENTIFY FORWARD-LOOKING FILL FACTORS?**

13 A. CenturyTel identified its forward-looking fill factors by using actual current data as the
14 basis for a forward looking plant utilization. Mr. Davis discusses fill factors at length in
15 his direct testimony and demonstrates the appropriateness of CenturyTel's fill factors that
16 are used in the forward looking network design.

17 **Q. WHAT FILL FACTORS ARE USED IN THE COST STUDY FOR CABLE**
18 **FACILITIES?**

19 A. CenturyTel's recurring loop rate cost study incorporates the following fill factors:

		Zones 1-3	Zones 4-5
2	Copper	40%	58%
3	Fiber	33%	33%

Q. RE THOSE FILL FACTORS CORRECT?

A. Upon further review, CenturyTel discovered that its fill factor for copper facilities was calculated in error. The corrected fill is as follows:

		Zones 1-3	Zones 4-5
9	Copper	35%	41%

Q. WHAT EFFECT WOULD THIS HAVE ON THE DS1 UNE LOOP RECURRING RATES?

A. Since the corrected fill factors are lower than those used in the cost study, re-calculating recurring costs of loop facilities with the corrected fill factors would increase the rates for DS1 UNE loops above the recurring rates set forth above.

Q. ARE YOU PROPOSING TO CHANGE THE RATES AT THIS POINT?

A. No. Although the data would reasonably reflect a forward-looking estimate of higher recurring rates than CenturyTel is currently proposing, CenturyTel is not at this time advocating a change to the recurring rates for DS1 loops as a result of its fill factor calculation error.

Q. HAS THE FCC ADDRESSED THE USE OF FILL FACTORS IN THE DEVELOPMENT OF TELRIC-BASED COSTS?

A. Yes. The FCC addressed fill factors or facility utilization in its First Report and Order, in which it noted that

Per-unit costs shall be derived from total costs using reasonably accurate "Fill Factors" (estimates of the proportion of a facility that will be "filled" with network usage); that is, the per-unit costs associated with a particular element must be derived by dividing the total cost associated with the

1 element by a reasonable projection of the actual total usage of the
2 element.¹²

3 The UNE loop costs developed for this proceeding use current fill factors as a projection
4 of the total actual usage of the loop, consistent with the FCC's directives for the
5 development of TELRIC costs.

6 **Q. IS USE OF CENTURYTEL'S EXISTING FILL FACTORS REASONABLE FOR**
7 **FORWARD-LOOKING TELRIC COST STUDIES?**

8 A. Yes. In his direct testimony, Mr. Davis explains why CenturyTel's existing fill factors
9 represent a reasonable—indeed, conservative—estimate of forward-looking fill factors.
10 Using those existing fill factors is methodologically sound and is appropriate under the
11 FCC's TELRIC methodology.

12 **C. CenturyTel's UNE loop recurring cost study incorporates reasonable,**
13 **forward-looking Annual Charge Factors (ACFs) consistent with TELRIC**
14 **methodology.**

15 **Q. WHAT ARE ANNUAL CHARGE FACTORS?**

16 A. ACFs are the means by which a company derives the annual forward-looking costs
17 associated with the forward-looking investments it incurs to provision services. Three
18 factors primarily drive ACFs: capital cost factors, operating expense factors, and
19 investment recovery factors. An ACF is a ratio of capital costs and operating expenses
20 per dollar of plant investment. Although the result is a straightforward ratio, ACF
21 development is based on a thorough analysis of the underlying drivers of capital costs and
22 operating expenses, including plant lives, investment return required, effective income
23 tax rates, and the relationship between operating costs and plant investment.

¹² Local Competition Order, at ¶ 682.

1 Annual cost factors identify the capital costs and operating expenses associated
2 with CenturyTel's proposed forward-looking investments. Two major components of
3 ACFs that affect UNE prices are depreciation and cost of capital.

4 *Depreciation:* Depreciation generally measures an asset's declining value
5 due to "wear and tear," technological obsolescence, or competitive
6 substitution. Depreciation expense is derived by taking an asset's original
7 value (less salvage) and dividing by that asset's useful service life.
8 Assuming an asset value of \$10,000 and an economic life of 10 years
9 (with no salvage value), a provider must recoup \$1,000 per year over 10
10 years to cover the cost of the asset. If, instead of the useful life of 10
11 years, depreciation life was set at 15 years, the provider would recoup only
12 \$667 per year ($\$10,000 / 15$ years). But if competitive substitution
13 dictated that the asset be replaced after 10 years, the firm would cover
14 only \$6,670 of the original \$10,000 investment with no chance to recoup
15 the remainder.

16 *Cost of Capital:* A forward-looking cost of capital measures the return
17 required by investors (cost of equity) and creditors (cost of debt) to
18 provide CenturyTel with necessary capital to support its network. The
19 cost of equity and debt are weighted by a forward-looking equity-to-debt
20 mix (i.e., capital structure) and summed to derive the overall weighted cost
21 of capital. TELRIC theory demands that the cost of capital measure the
22 risk efficient providers face in a fully-competitive market. An
23 unreasonably low measure of risk for would result in unduly low UNE
24 rates, thus discouraging CLECs from investing in their own facilities.

25 **Q. PLEASE EXPLAIN THE METHODOLOGY CENTURYTEL UTILIZED TO**
26 **DEVELOP ITS ANNUAL CHARGE FACTORS.**

27 **A.** CenturyTel's annual charge factors were developed by combining a return on investment
28 factor with factors designed to recover investments, expenses, and taxes. An annual
29 charge factor was determined for each asset type involved in provisioning DS1 and DS3
30 service (circuit equipment, buried cable metallic, and buried cable non-metallic). The
31 return on investment was set at 11.25% which is the FCC's authorized return on
32 investment for all ILECs. The depreciation rates used in the calculation are within the
33 range of depreciation rates that the FCC has prescribed as reasonable. The expense
34 factors were developed by taking the expense and dividing by the appropriate plant

1 balance. Income tax factors were also developed so that the return on investment would
2 be 11.25% after tax.

3 **Q. DID YOU CALCULATE ANNUAL CHARGE FACTORS FOR BOTH SPECTRA**
4 **COMMUNICATIONS GROUP, LLC AND CENTURYTEL OF MISSOURI, LLC?**

5 **A.** Yes. The two companies are separate legal entities. They have different expense levels
6 and investment balances. Therefore, it is quite appropriate for the two entities to have
7 different ACFs.

8 **Q WHY ARE CENTURYTEL'S ACFS APPROPRIATE TO USE IN FORWARD-**
9 **LOOKING TELRIC STUDIES?**

10 **A.** Capital cost factors (return on investment, depreciation, income taxes) are derived from
11 forward-looking, market-based inputs reflecting the capital costs CenturyTel expects to
12 incur in the future. Related to operating expense factors, what CenturyTel currently
13 experiences in provisioning services properly indicates what the expense-to-investment
14 relationships are expected to be on an ongoing basis. The development of the factors
15 relies to some extent on the current costs in the financial records of the Company
16 identified in the Part 32 Accounts. ACF development specifically matches the financial
17 data to particular categories of investment. Therefore, CenturyTel's ACFs must be
18 applied to investments in its TELRIC studies to determine forward-looking costs.

19 **1. Depreciation**

20 **Q. WHAT IS DEPRECIATION?**

21 **A.** Depreciation expense reflects the annual decline in economic value of a capital asset over
22 time¹³ and is a core element of any TELRIC-based UNE rate.¹⁴ As a TELRIC rate
23 component, depreciation expense allows ILEC investment in capital assets to be

¹³ *TELRIC NPRM*, at ¶ 12.

¹⁴ *Local Competition Order*, at ¶ 703 (emphasis added); 47 C.F.R. § 51.505(b)(3).

1 recovered through UNE rates over the expected life of those assets.¹⁵ The two
2 components of depreciation expense are (1) the economic *life* of an asset (*i.e.*, "asset life"
3 or "useful life"), and (2) the *rate* at which the asset is depreciated over its useful life.¹⁶
4 Asset lives generally refer to the length of time over which the asset has economic value;
5 the time over which it is productive and not obsolete.

6 **Q. PLEASE SUMMARIZE CENTURYTEL'S PROPOSAL REGARDING**
7 **DEPRECIATION LIVES.**

8 A. CenturyTel has used depreciation lives derived from FCC-prescribed lives, tending to the
9 upper or lower end of the FCC-based spectrum.

10 **Q. WHAT DO YOU MEAN BY FCC-PRESCRIBED LIVES?**

11 A. These are asset lives and rates the FCC has deemed reasonable for use by ILECs. An
12 ILEC can use an asset life that is different from the prescribed range if the ILEC can
13 justify why a departure from the range is reasonable. Prevailing industry circumstances
14 suggest CenturyTel could make such a showing that asset lives should be shorter than the
15 FCC-prescribed range. However, CenturyTel is adopting a reasonable costing approach
16 that utilizes asset lives within the FCC's prescribed acceptable range.

17 **Q. IS CENTURYTEL USING ASSET LIVES TO WHICH THE FCC HAS**
18 **ALREADY SIGNALLED AGREEMENT?**

19 A. Yes.

20 **Q. WHAT ARE THE REQUIREMENTS FOR UNE DEPRECIATION LIVES**
21 **UNDER THE FCC'S RULES?**

22 A. I believe that the FCC's rules require that economic depreciation lives be used in UNE
23 cost models. More specifically, "The depreciation rates used in calculating forward-

¹⁵ TELRIC NPRM, at ¶ 12; *Verizon Virginia Award* ¶ 12.

¹⁶ TELRIC NPRM, at ¶ 93; *Triennial Review Order* at ¶ 686.

1 looking economic costs of elements shall be economic depreciation rates." FCC Rule
2 51.505(b)(3). And embedded costs may not be considered (FCC Rule 51.505(d)(1)),
3 precluding the use of depreciation lives for embedded equipment. The FCC also
4 explained in paragraph 686 of its First Report and Order that "properly designed
5 depreciation schedules should account for expected declines in the value of capital
6 goods." Importantly, the FCC also noted in paragraph 702 that "Business risks due to
7 competition can justify a different risk-adjusted depreciation rate." The FCC confirmed
8 this guidance in the Triennial Review Order ("TRO"), emphasizing that the rate of
9 depreciation must "reflect the actual decline in value that would be anticipated in the
10 competitive market."¹⁷

11 **Q. ARE THE LIVES PROPOSED BY CENTURYTEL APPROPRIATE FOR**
12 **DEVELOPING UNE COSTS?**

13 **A.** Yes. The asset lives used in the ACF calculation are within the FCC prescribed range of
14 lives, which arguably is a conservative approximation of their economic life given the
15 rapid change in service delivery mechanisms in recent years. Therefore, it is quite
16 appropriate to use those lives in the development of UNE rates.

17 **Q ARE CENTURYTEL'S PROPOSED DEPRECIATION LIVES CONSERVATIVE?**

18 **A.** Yes. Simple economics dictates that the changing telecommunications marketplace since
19 the FCC prescribed its asset lives in the 1990s supports far shorter asset lives than those
20 CenturyTel is proposing here. Both advancements in technology and increased
21 competition dictate that shorter asset lives may be appropriate in a forward-looking
22 analysis of the telecommunications industry. Recent technological advances and
23 forward-looking expectations result in shorter asset lives because equipment becomes

¹⁷ TRO, at ¶689.

1 obsolete faster, and the market becomes inundated with new advancements. Importantly,
2 improvements in technology will render current equipment obsolete much faster, and
3 increased competition will render some of CenturyTel's equipment worthless because
4 there will be no demand for it. Both pressures shorten asset lives. Therefore, by using
5 proposed FCC-prescribed lives, CenturyTel has taken a very conservative approach to
6 depreciation.

7 2. Return on Investment

8 Q. **WHAT RETURN ON INVESTMENT DID CENTURYTEL UTILIZE IN ITS**
9 **ACFS?**

10 A. In calculating the ACFs underlying CenturyTel's proposed recurring loop rates,
11 CenturyTel used 11.25% as the return on investment.

12 Q. **IS 11.25% AN APPROPRIATE RETURN ON INVESTMENT TO USE IN**
13 **TELRIC-COMPLIANT COST MODELS?**

14 A. Absolutely. As Dr. Avera notes in his direct testimony, the FCC has authorized ILECs to
15 use 11.25% as a return on investment and that determination has repeatedly withstood
16 critical scrutiny and re-evaluation. Moreover, separate and apart from the FCC's express
17 authorization of that rate of return, Dr. Avera's independent analyses confirm the
18 reasonableness of this rate. Indeed, the great weight of market evidence suggests that
19 CenturyTel's proposed rate of return is conservative. Since the cost of capital (*i.e.*, rate
20 of return) incorporated in TELRIC studies must consider the risk inherent in the market,
21 increased competition, both wireline and intermodal, and other market and industry
22 factors collectively support a rate of return exceeding that proposed by CenturyTel here.
23 Therefore, CenturyTel's proposed 11.25% rate of return is reasonable, conservative, and
24 appropriate for use in this proceeding.

VI
AVOIDED COST DISCOUNT

Q. WHAT IS THE AVOIDED COST DISCOUNT?

A. Also referred to as the wholesale discount rate, it is essentially the percentage of retail costs for a given service that would be avoided by offering that service solely on a wholesale basis. In other words, whereas CenturyTel may incur certain costs associated with offering a service to its end user customers (e.g., marketing, product development, etc.), some of those costs would necessarily be avoided if the service is provided to a CLEC for that CLEC's resale. Under the assumption that 100% of the service offered is wholesale, rather than retail, certain costs associated with retail customers will not be incurred by CenturyTel.

Q. HAS CENTURYTEL PREPARED A COST STUDY TO DETERMINE THE APPROPRIATE WHOLESALE DISCOUNT RATE THAT SHOULD BE APPLIED IN THIS PROCEEDING?

A. Yes, CenturyTel conducted an analysis for CenturyTel of Missouri, LLC and Spectra Communications Group, LLC to determine the appropriate wholesale discount rate for each respective company.

Q. WHAT IS THE PURPOSE OF THE WHOLESALE DISCOUNT STUDY?

A. Since CenturyTel is obligated under Section 251(c)(4) to "offer for resale at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers," CenturyTel conducted the study in an effort to identify those costs that will be avoided based on the assumptions outlined above and to develop a discount factor to be applied to retail local rates.

1 **Q. PLEASE GENERALLY DESCRIBE THE METHODOLOGY CENTURYTEL**
2 **UTILIZED TO DETERMINE THE WHOLESALE DISCOUNT RATE?**

3 A. Consistent with CenturyTel's understanding of the method utilized by GTE and
4 previously approved by this Commission, CenturyTel utilized FCC default avoidable cost
5 ratios and business office studies to determine avoidable costs. In other words, the
6 CenturyTel study:

- 7 • Determined the revenue and expenses to be utilized in this analysis
- 8 • Categorized the expenses into direct and indirect as prescribed by the FCC
- 9 • Applied a factor to each expense category, thereby calculating the costs that are
10 avoided in a wholesale environment
- 11 • Totaled all the costs determined to be avoided
- 12 • Divided the total avoided costs by the revenues to be discounted yielding the
13 avoided cost discount

14 **Q. WHAT DATA WERE USED TO CONDUCT THE STUDY?**

15 A. The study was based on actual revenues and expenses resulting from CenturyTel
16 operations for twelve months ended December 31, 2004, as filed in the Missouri Public
17 Service Commission's Annual Reports. These data are factored to determine what costs
18 will be avoided and what revenues discounted

19 **Q. EXPLAIN THE CALCULATION OF CENTURYTEL'S AVOIDED COSTS**
20 **DISCOUNT RATE.**

21 A. In general terms, the discount rate is determined by dividing the total avoidable costs by
22 local exchange revenues (Schedule KWB-1). CenturyTel utilized actual results relating
23 to costs and local exchange revenues from 2004, and applied the FCC's default avoidable
24 cost rate to derive totals.

1 **Q. HOW ARE LOCAL EXCHANGE REVENUES DETERMINED?**

2 A. Local exchange revenues are determined by adding local uncollectibles revenues to net
3 operating revenues and subtracting network access, miscellaneous, and long distance
4 revenues. The resulting revenue base represents local services subject to wholesale
5 discount.

6 **Q. WHICH EXPENSES WERE INCLUDED AND WHICH WERE CONSIDERED**
7 **TO HAVE AVOIDABLE ASPECTS?**

8 A. Total operating expenses (accts. 6112 through 6790) were considered in the avoidable
9 cost study. Marketing, customer services, general support, corporate operations
10 expenses, and uncollectible revenues were determined to have avoidable activities.

11 **Q. HOW DID CENTURYTEL DETERMINE WHICH EXPENSES HAD**
12 **AVOIDABLE ACTIVITIES?**

13 A. To identify those expenses with avoidable activities, CenturyTel referred to 47 C.F.R.
14 § 51.609(c), which provides a listing of the direct and indirect expense accounts that are
15 to be considered as having avoidable activities.

16 **Q. EXPLAIN WHY NETWORK SUPPORT, MAINTENANCE, ACCESS, AND**
17 **DEPRECIATION EXPENSES ARE NOT INCLUDED AS AVOIDABLE COSTS.**

18 A. The answer is necessarily based on the manner in which CenturyTel determined expenses
19 with avoidable activities. Under 47 C.F.R. § 51.609(c), plant specific and plant non-
20 specific expense accounts are not to be considered as having avoidable activities.
21 Activities associated with these costs are required regardless of whether the service is
22 offered on a retail or a wholesale basis and is therefore not avoidable. Network Support
23 expenses include costs for vehicles and equipment necessary for business functions and
24 operations regardless of the market environment. Maintenance and depreciation expense

1 includes costs associated with purchasing and maintaining plant specific operations and
2 are, thus, unavoidable.

3 **Q. EXPLAIN YOUR CALCULATIONS WITH RESPECT TO AVOIDABLE**
4 **MARKETING AND CUSTOMER SERVICE EXPENSES.**

5 A. CenturyTel utilized default avoidable cost ratios of 25% for product management and
6 90% for sales and product advertising expenses based on Alabama PSC Docket 25677. It
7 is my understanding that GTE also utilized a ratio of 90% for sales and product
8 advertising expenses in Missouri Case No. TO-97-63. Further, without a retail customer
9 base, CenturyTel would avoid 100% of the expense for directory campaigns.

10 For customer service expenses (account 6623), CenturyTel performed a study to
11 determine the percentage of the expense that would be avoidable if the market were
12 100% wholesale. As a result of that specific study, CenturyTel determined that for
13 CenturyTel of Missouri, LLC 51.6% of customer service expenses are avoidable and
14 54.3% of Spectra's Communications Group, LLC's customer service expenses are
15 avoidable.

16 **Q. PLEASE EXPLAIN, IN DETAIL, HOW THE COSTS WERE DETERMINED TO**
17 **BE AVOIDABLE FOR CUSTOMER SERVICE EXPENSES.**

18 A. First, CenturyTel identified the avoidable service order activities from a study of the time
19 required to process service orders in two representative business offices. As shown on
20 Schedule KWB-2, the total number of orders processed for one month was calculated by
21 service order type: Install, Change, Disconnect, Suspend and Restore. The number of
22 orders processed by order type was then multiplied by the minutes per order to arrive at
23 total order time by order type. In this manner, CenturyTel determined its Avoided Time
24 Ratios.

1 Q. WHAT ARE AVOIDED TIME RATIOS?

2 A. The Avoided Time Ratios reflect CenturyTel's estimate of the time that would be
3 avoided offering the services on a strictly wholesale, rather than retail, basis. The
4 avoided time ratios were determined by knowledgeable, experienced business office
5 managers and supervisors, utilizing the following assumptions:

6 **Install and Change Orders** (50% avoided) - Although replacing many
7 end users with a single wholesaler reduces the number of credit histories
8 and billing addresses, other costs actually increase under a resale
9 environment. Time is saved due to reduction in keystrokes and less time
10 spent with customers (a few wholesalers instead of many retail
11 customers). This time reduction would be somewhat offset, however, by
12 additional time required to fill out a firm order confirmation with the order
13 number, due date, etc., and fax it to the reseller. For those customers with
14 multiple lines, additional paperwork is required. In addition, processing of
15 other order types (directory, physical address changes, feature changes)
16 would require the same amount of work under a wholesale environment.

17 **Disconnects and Outside Moves** (25% avoided) - Time saved by
18 reduced customer contacts that is largely offset by additional orders
19 required for a function which is automated for retail customers.

20 **Suspend and Restore Orders** (No avoidable cost - plus additional time) -
21 This activity is currently handled by batch processing (no manual orders
22 are created). Under a wholesale environment, manual orders are created
23 when the reseller requests that a customer be suspended for non-payment,
24 which substantially increases the amount of time the customer service
25 representative spends in processing. Therefore, it is estimated the
26 processing time for this function would double under a wholesale
27 environment.

28 Q. AFTER DETERMINING THE AVOIDED TIME RATIOS DESCRIBED ABOVE,
29 THE CUSTOMER SERVICE ORDER ACTIVITIES AND THE TOTAL TIME
30 THAT IT TAKES TO PROCESS EACH CUSTOMER SERVICE FUNCTION,
31 WHAT STEPS WERE TAKEN TO IDENTIFY WHAT CUSTOMER SERVICE
32 COSTS ARE AVOIDABLE?

33 A. The order time for the customer service activity was multiplied by the estimated
34 avoidable time ratio for each service order function to determine the total avoidable time
35 for each order type. The total avoidable time for all order functions was then divided by

1 the total order time for all order types to derive an estimated 40% avoidable for the
2 service order portion of customer service.

3 **Q. WHAT ARE THE NEXT STEPS IN THE CUSTOMER SERVICE AVOIDABLE**
4 **COST CALCULATION?**

5 **A.** I outline these steps in Schedule KWB-3. Expenses for end user customer services are
6 segregated into five functions: end user service order, end user payment and collection,
7 end user inquiry, revenue accounting, and CABS. The 40% avoidable factor from the
8 service order study is applied against the expenses associated with the local service order
9 function to identify the avoidable portion.

10 **Q. PLEASE EXPLAIN THE ASSUMPTIONS UNDERLYING THE AVOIDABLE**
11 **RATIOS OTHER THAN END USER SERVICE ORDER USED IN SCHEDULE**
12 **KWB-3.**

13 **A.** The avoidable ratios result from a specific analysis of the various functions and tasks
14 involved, with critical scrutiny being paid to which of those functions and tasks are
15 avoidable in a wholesale-only environment. Knowledgeable, experienced customer
16 service personnel estimated the avoidable portion of each of the remaining customer
17 service functions. Again, assuming that CenturyTel is operating in an environment that is
18 100% wholesale, end user payment and collection is considered 100% avoidable since
19 CenturyTel will only be dealing with the reseller. Likewise, 70% of end user inquiry
20 expenses will be avoidable since CTL will be answering only reseller questions. Only
21 20% of revenue accounting expenses, however, will be avoidable since the same detail
22 will be generated for the reseller as is presently done for individual customers. The
23 primary cost savings for the revenue accounting function will come from lower postage.
24 Fewer bills will be mailed to the reseller than would be necessary to individual retail
25 customers.

1 **Q. AFTER THE AVOIDABLE RATIOS ARE DETERMINED FOR THE OTHER**
2 **END USER CUSTOMER SERVICE FUNCTIONS DESCRIBED ABOVE, HOW**
3 **ARE THE AVOIDABLE COSTS FOR THESE FUNCTIONS DETERMINED?**

4 **A.** These ratios were then applied to the end user customer service expenses resulting in total
5 customer service avoidable costs. Dividing these avoidable expenses by total end user
6 customer service expense results in the overall customer services avoidable cost ratio of
7 54%.

8 **Q. EXPLAIN THE CALCULATION OF AVOIDABLE COSTS ASSOCIATED WITH**
9 **GENERAL SUPPORT AND CORPORATE OPERATIONS.**

10 **A.** Schedule KWB-1, Lines 66 through 86, show the calculation of avoidable costs for the
11 indirect expenses categorized as general support and corporate operations expenses.
12 Indirect or overhead costs support all of the activities, including the activities that are
13 avoided when services are sold at wholesale. These indirect expenses can reasonably be
14 expected to decrease as a result of a lower level of overall operations resulting from a
15 reduction in retail activity. To calculate the avoided ratio to be applied to the indirect
16 expenses, the total avoidable expense calculated for marketing and customer services is
17 divided by the total operating expense. This calculation yields the ratio to be applied to
18 all indirect expenses.

19 **Q. WHAT IS THE OVERALL WHOLESALE DISCOUNT COST FACTOR WHICH**
20 **RESULTS FROM CENTURYTEL'S AVOIDABLE COST STUDY?**

21 **A.** The wholesale discount cost factor for Spectra Communications Group, LLC is 17.5%,
22 and it is 14.2% for CenturyTel of Missouri, LLC.

23 **Q. DOES THIS STUDY PRODUCE A WHOLESALE DISCOUNT FACTOR THAT**
24 **COMPLIES WITH FCC GUIDANCE AND METHODOLOGY?**

25 **A.** Yes. In performing this cost study, CenturyTel used the FCC default avoided cost factors
26 and a customer service analysis based on losing 100% of the retail market to resellers (the

1 FCC criteria). In fact, only about one-half of one percent of CenturyTel's Missouri lines
2 are currently being resold and therefore the avoidable costs far exceed the actual savings
3 given the current mix of retail and wholesale customers. Indeed, CenturyTel's proposed
4 wholesale discount factor of 17.5% for Spectra Communications Group, LLC and 14.2%
5 for CenturyTel of Missouri, LLC likely overstates the actual savings from resale and the
6 true discount is negligible, rendering CenturyTel's proposal eminently reasonable.

7 **ARTICLE VI, ISSUE 34: What resale rates should be included in the**
8 **Interconnection Agreement (ICA)?**

9 **Q. WHAT IS THE PARTIES DISPUTE ON THIS ISSUE THAT YOU ARE**
10 **ADDRESSING HERE?**

11 A. Socket apparently demands that the wholesale discount factor also apply to resale non-
12 recurring charges. As Mr. Martinez further demonstrates in his direct testimony, that
13 assertion is wrong. Under Section 251(c)(4), ILECs have a duty to offer retail services at
14 a discount rate. That obligation, however, does not speak to the issue in dispute. None of
15 the costs associated with these non-recurring rates would be avoided or are avoidable in a
16 wholesale environment.

17 **Q. SHOULD THE AVOIDED COST DISCOUNT BE APPLIED TO DIRECTORY**
18 **ASSISTANCE AND OPERATOR SERVICES?**

19 A. No. CenturyTel is not a facility-based provider of these services. These services are
20 contracted from a third party provider, and will be offered to Socket based on the volume
21 discounts obtained by CenturyTel. Since CenturyTel necessarily obtains these services
22 from a third party, there are, quite simply, no avoidable costs in the resale environment.

23 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

24 A. Consistent with the FTA and applicable FCC guidance, including TELRIC pricing
25 methodology, CenturyTel developed recurring loop costs that appropriately reflect the

1 TELRIC recurring costs of DS1 and DS3 loops, and that included appropriate annual
2 charge factors ensuring that CenturyTel recovers its costs. Similarly, starting with FCC
3 default discount rates and using actual 2004 data, CenturyTel prepared a wholesale
4 discount study resulting in a wholesale discount factor of 17.5% for Spectra
5 Communications Group, LLC and 14.2% for CenturyTel of Missouri, LLC. These
6 discounts should not be applied to non-recurring services that are not offered to
7 subscribers who are telecommunications carriers. In addition, the discounts should not be
8 applied to services for which CenturyTel contracts with a third party.

9 CenturyTel's cost studies are consistent with long-run incremental costing
10 methodologies, and the results represent the forward-looking TELRIC cost of an efficient
11 telecommunications carrier. The cost studies incorporate forward-looking network
12 designs, investment prices, fill factors, cost of capital, and depreciation lives. Further,
13 CenturyTel's UNE loop cost studies are grounded in actual data reflective of the network
14 required to serve the demand of rural Missouri consumers. This mix of forward-looking
15 inputs and actual network characteristics provides a reliable and accurate basis for
16 calculating TELRIC costs consistent with FCC directives. Further, adopting
17 CenturyTel's proposed costs will send the proper economic pricing signals to the market
18 and encourage efficient decisions with respect to rural network infrastructure deployment
19 in Missouri by both CenturyTel and the CLECs.

20 **Q. DOES THAT COMPLETE YOUR TESTIMONY?**

21 **A.** Yes, it does.

22

Schedule KWB-1 – KWB-3

**is deemed proprietary in
its entirety**