

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Petition of Verizon)
Northwest Inc. for Approval of Revised) **DOCKET NO. UT-040520**
Depreciation Rates)

DIRECT TESTIMONY OF
ANTHONY J. FLESCH

ON BEHALF OF
VERIZON NORTHWEST INC.

DECEMBER 6, 2004

I. INTRODUCTION

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Q. PLEASE STATE YOUR NAME, ADDRESS AND CURRENT POSITION.

A. My name is Anthony J. Flesch. My business address is 600 Hidden Ridge, Irving, Texas 75038. I am Sr. Staff Manager - Capital Recovery for Verizon Services Organization, Inc.

Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I received a Bachelor of Science Degree in Business Administration from Indiana Wesleyan University, Marion, Indiana. I have completed basic and advanced courses in depreciation life analysis and technology forecasting. I have also developed and instructed courses on depreciation life analysis and technology forecasting provided by the Society of Depreciation Professionals (“SDP”).

I am a Senior Member of the SDP and have served on the SDP Executive Board of Directors in several capacities; including President, Vice-President, Director, and Chair of the SDP Ethics and Standards Committee. I am currently serving as Chair of the Education and Training Administration Subcommittee, SDP Journal Editor and Chair of the Journal Review Committee, and have been a member of the SDP Current Issues Committee since its inception in 2001. I have also been an Instructor for SDP Depreciation Courses, instructing courses in Depreciation Life Cycle Analysis and Technology Forecasting. The goal of SDP is to recognize and promote professional

1 development and ethics within the field of depreciation and provide information of
2 interest to depreciation professionals.

3
4 I have also been on the advisory board of the Telecommunications Technology
5 Forecasting Group (“TTFG”) since 1994, and have been Chairman of that group since
6 2003. TTFG is an industry association which was formed in 1985 to support the
7 understanding and use of technology forecasting to predict and forecast the continued
8 evolution of the telecommunications network.

9
10 **Q. PLEASE BRIEFLY DESCRIBE YOUR WORK EXPERIENCE WITH VERIZON**
11 **AND YOUR RESPONSIBILITIES IN YOUR CURRENT POSITION.**

12 A. I have worked for Verizon for over twenty-seven years with sixteen of those years in the
13 Depreciation study area. I have held various positions of increasing responsibility in
14 Engineering and Construction, Network Operations, and Finance. I was named to my
15 current position in June of 2000 upon the merger of GTE and Bell Atlantic, which formed
16 Verizon Communications.

17
18 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE WASHINGTON**
19 **UTILITIES AND TRANSPORTATION COMMISSION?**

20 A. Yes, I submitted written testimony in Docket No. UT-023003 on behalf of Verizon
21 Northwest Inc.

1 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY OTHER REGULATORY**
2 **BODIES?**

3 A. Yes, I have presented written or oral testimony before the Alabama Public Service
4 Commission, Arkansas Public Service Commission, California Public Utilities
5 Commission, Florida Public Service Commission, Illinois Commerce Commission,
6 Minnesota Public Utilities Commission, Missouri Public Service Commission, Nebraska
7 Public Service Commission, Nevada Public Service Commission, and the North Carolina
8 Utilities Commission. I have also testified before the Circuit Court of Florida on
9 depreciation issues related to property tax.

10
11 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

12 A. The purpose of my testimony is to support the depreciation lives and future net salvages
13 used to calculate Verizon's Northwest Inc., Washington Operations ("Verizon NW" or
14 the "Company") proposed intrastate depreciation rates and to request the Commission to
15 adopt Verizon NW's revised depreciation lives and salvage values, and resultant
16 depreciation rates for intrastate depreciation purposes. I will also explain why these
17 proposed depreciation lives and future net salvage values are the appropriate inputs for
18 determining intrastate Washington depreciation rates.

19
20 **Q. PLEASE SUMMARIZE YOUR DIRECT TESTIMONY.**

21 A. This Commission should adopt the intrastate depreciation rates contained in my
22 testimony, which are based on the same depreciation lives that Verizon NW uses for
23 external financial reporting purposes. These lives take into account the expected near-

1 term decline in an asset's value from various causes — including, most importantly,
2 competition and technological change — producing a more accurate estimate of assets'
3 economic lives than an outdated, historical approach. The revised state depreciation rates
4 recommended in this testimony result in an increase in total state depreciation expense of
5 approximately \$64.6 million, as shown in detail on Exhibit No. ____ (AJF-3). The
6 resultant intrastate impact of this increase is approximately \$48.4 million.

7
8 **Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?**

9 A. In Section II, I discuss why the depreciation lives and net salvages recommended by
10 Verizon NW are the correct depreciation inputs to use to calculate intrastate depreciation
11 rates. In Section III, I explain the methodology Verizon NW used to determine its
12 proposed depreciation inputs. I also discuss the relevant factors in determining
13 depreciation lives, including the impact of competition and technology. In Section IV, I
14 provide benchmark comparisons showing the reasonableness of Verizon NW's
15 recommended lives as compared to those used by Verizon NW's competitors. In addition
16 to my Direct Testimony, which is labeled as Exhibit No. ____ (AJF-1T), I have also
17 included six additional exhibits. Exhibit No. ____ (AJF-2) contains a glossary of
18 Depreciation terms used in my testimony. Exhibit No. ____ (AJF-3) contains a
19 worksheet detailing the Company's proposed depreciation rates by account and the
20 change in depreciation expense associated with the proposed rates. Exhibit No. ____
21 (AJF-4) contains a comparison of the current WUTC approved depreciation parameters
22 and the Company proposed parameters. Exhibit No. ____ (AJF-5) contains a chart
23 benchmarking depreciation lives with other telecommunications providers, which is

1 discussed in Section IV of my direct testimony. Exhibit No. ____ (AJF-6) is a Life
2 comparison with near-by states that are on the same type of rate of return regulation as
3 Washington. Exhibit No. ____ (AJF-7) is the depreciation study that was previously
4 submitted to Staff on March 17, 2004.

5
6 **II. VERIZON NW'S DEPRECIATION LIVES AND SALVAGE VALUES ARE THE**
7 **APPROPRIATE INPUTS FOR CALCULATION OF ITS DEPRECIATION**
8 **RATES**
9

10 **Q. WHAT DEPRECIATION LIVES DOES VERIZON NW RECOMMEND TO**
11 **CALCULATE REVISED DEPRECIATION RATES?**

12 A. I recommend the same depreciation lives that Verizon NW uses for its external financial
13 reporting which is based on Generally Accepted Accounting Principles (GAAP). These
14 up-to-date lives, which have been reviewed by Verizon NW's external auditors and are
15 continually updated, are consistent with GAAP. As explained further below, these lives
16 take into account technological innovation, ordinary wear and tear, and regulatory
17 developments, among other relevant factors. Appended to my testimony as Exhibit No.
18 ____ (AJF-4), is a complete list of the proposed depreciation lives and future net salvage
19 values.

20
21 **Q. WHAT IS THE RESULTANT CHANGE IN DEPRECIATION EXPENSE**
22 **GENERATED BY USING VERIZON NW'S RECOMMENDED DEPRECIATION**
23 **INPUTS?**

24 A. Using Verizon NW's proposed inputs to calculate revised intrastate depreciation rates
25 results in an annual increase in total state depreciation expense of approximately \$64.6

1 million. The change in expense is detailed by account and is appended to my testimony
2 as Exhibit No. _____ (AJF-3). The resultant intrastate impact of this increase is
3 approximately \$48.4 million¹
4

5 **Q. COULD YOU BRIEFLY DESCRIBE THE PROCESS BY WHICH STATE**
6 **DEPRECIATION RATES HAVE BEEN TYPICALLY SET FOR VERIZON NW**
7 **IN WASHINGTON?**

8 A. Typically, Verizon NW submits a depreciation study which the Staff reviews and then
9 makes a recommendation. The Commission then weighs the evidence presented and
10 prescribes (orders) depreciation rates for intrastate regulatory accounting purposes.
11 Prescription or represcription are common depreciation terms for order / approval of
12 depreciation rates by the Commission.
13

14 **Q. WHEN WAS THE LAST DEPRECIATION REPRESRIPTION IN**
15 **WASHINGTON FOR VERIZON NW?**

16 A. Verizon NW's last depreciation represcription was approved by the Washington Utilities
17 and Transportation Commission ("WUTC") in Docket UT-992009 for revised
18 depreciation rates effective January 1, 2000, which resulted in a total state increase in
19 depreciation expense of approximately \$21.5M. The resultant intrastate impact of this
20 increase was approximately \$16.1M.

¹ The intrastate impact was calculated by applying the intrastate factor of 74.9% to the total state increase in depreciation expense: \$64.6M * 74.9% = \$48.4M

1 **Q. HOW DO THE LIVES AND FUTURE NET SALVAGE VALUES THAT**
2 **VERIZON NW RECOMMENDS COMPARE WITH DEPRECIATION LIVES**
3 **AND FUTURE NET SALVAGE VALUES APPROVED BY THE COMMISSION**
4 **IN 2000?**

5 A. The depreciation lives that Verizon NW recommends have been revised to reflect the
6 developments since the last depreciation, and today's business environment. A chart
7 comparing Verizon NW's recommended depreciation lives and future net salvage values
8 is appended to my testimony as Exhibit No. _____ (AJF-4). The differences reflect the
9 fact that, pursuant to GAAP, Verizon NW's financial reporting lives are annually
10 evaluated and updated, and represent the best estimate of the assets' lives available at this
11 time.

12
13 **Q. COULD YOU PLEASE PROVIDE A BRIEF OVERVIEW OF THE**
14 **METHODOLOGY VERIZON NW USED TO CALCULATE THE PROPOSED**
15 **DEPRECIATION RATES?**

16 A. Verizon NW used the same depreciation methodology in this proceeding as used in the
17 previous 2000 depreciation study approved by the WUTC. Depreciation rates are
18 calculated using the straight-line remaining life method, which is the same method that
19 has historically been used by the WUTC and the FCC. The average remaining life is
20 derived by applying a retirement curve along with ELG² (Equal Life Group) to a
21 projection life and Verizon NW did not request any change to the currently ordered

² ELG was approved by the WUTC in 1995 on a going forward basis.

1 retirement curve or ELG year. The only changes recommended are to the depreciation
2 life and future net salvage values of some accounts. The derivation of the remaining life
3 is shown for each account in the depreciation study, which is attached as Exhibit No.
4 _____ (AJF-7).

5
6 The depreciation rate is then calculated using the traditional remaining life formula:
7 $(100\% - \text{Reserve Ratio } \% - \text{Future Net Salvage } \%) / \text{Average Remaining Life}$.

8
9 A Glossary of Terms is included as Exhibit No. _____ (AJF-2).

10
11 **Q. WHY DO VERIZON NW'S DEPRECIATION RATES NEED REVISION?**

12 A. Verizon NW's depreciation rates need to be revised to bring Washington's intrastate
13 accumulated depreciation reserve up to adequate levels. Verizon NW's depreciation rates
14 need revision to take into account developments since the last rescription, today's
15 business environment, and technological advancements. Verizon NW's depreciation
16 reserve is not adequate, and not reasonable when compared to other states.

17
18 **Q. DO THE CURRENT DEPRECIATION PRACTICES OF THE WASHINGTON**
19 **COMMISION PREVENT VERIZON NW FROM THE FULL RECOVERY OF**
20 **ITS INVESTMENT IN WASHINGTON STATE?**

21 A. Yes, they do as I will explain herein. Verizon NW's accumulated depreciation reserve is
22 not adequate. As shown in the depreciation study, the depreciation reserve lags both the
23 Verizon NW Washington GAAP depreciation reserve, by \$471 million; and the Verizon

1 NW Washington FCC depreciation reserve by \$242 million.³ Verizon NW witness
2 Danner discusses public policy concerns and core principles of ratemaking that require
3 Verizon be permitted a reasonable opportunity to recover its investments. Unless the
4 Commission changes its depreciation practices and approves the depreciation rates I
5 recommend herein and in my study, Verizon NW will be denied the opportunity for full
6 recovery of its capital investment in Washington.

7
8 **Q. HOW DOES VERIZON NW'S WASHINGTON INTRASTATE ACCUMULATED**
9 **DEPRECIATION RESERVE RATIO COMPARE TO NEIGHBORING STATES,**
10 **THE FCC, AND GAAP?**

11 A. Verizon NW's accumulated depreciation reserve ratio ("reserve ratio") is woefully
12 inadequate compared to the reserve ratio in neighboring states. The reserve ratio is the
13 percent of accumulated depreciation to original cost. In fact, Washington's intrastate
14 reserve ratio is the lowest of any of Verizon's states. As shown in column J of Exhibit
15 No. ____ (AJF-3), Washington's intrastate reserve ratio is 43.3% for the accounts
16 prescribed by the WUTC. As a comparison, the Oregon and Idaho commissions have
17 prescribed depreciation rates allowing the reserve ratio to grow to 56.5% and 59.0%,
18 respectively. The Washington intrastate reserve ratio also severely lags both the FCC and
19 the financial reporting (GAAP) reserve ratios for Washington which are 53.1% and
20 62.3%, respectively. A chart illustrating the state reserve ratio with other rate of return

³ Depreciation Study, Exhibit No. ____ (AJF-7), Introduction Section

1 regulated states is also included in the Introduction Section of the depreciation study
2 Exhibit No. _____ (AJF-7).

3
4 **Q. WHAT IS THE IMPACT OF THESE RESERVE COMPARISONS?**

5 A. These comparisons clearly demonstrate that Verizon NW's accumulated depreciation
6 reserve severely lags not only adequate reserve levels based on GAAP, but also what
7 neighboring Commissions and the FCC have allowed. To bring the reserve ratio in-line
8 with neighboring states, and the Verizon NW Washington GAAP reserve, the WUTC
9 should approve the depreciation rates shown in Column K on Exhibit No. _____ (AJF-3).

10
11 **III. VERIZON NW PROPERLY WEIGHED ALL RELEVANT FACTORS IN**
12 **DETERMINING ITS ECONOMIC LIVES**
13

14 **Q. WHAT GENERAL ASSUMPTIONS DID VERIZON NW CONSIDER IN**
15 **DEVELOPING ITS PROPOSED DEPRECIATION LIVES?**

16 A. To determine its proposed depreciation lives, Verizon NW considered current network
17 modernization strategies; the likely future impact of technology; regulatory
18 commitments; state demographics; and traditional wear and tear. While all of these
19 factors interrelate in determining Verizon NW's proposed depreciation lives, the most
20 important are the functional factors — in particular, technological innovation — that
21 reduces the depreciable value of an asset even though the asset remains “physically”
22 intact.

1 **Q. HOW DOES TECHNOLOGICAL INNOVATION DECREASE THE**
2 **“ECONOMIC LIFE” OF AN ASSET?**

3 A. Simply stated, the economic life of an asset is the period of time over which an asset can
4 be used to provide economic value. Advances in technology can make assets obsolete
5 even though the “physical asset” continues to function. This phenomenon is well-known
6 to anyone who has bought a computer (or other state-of-the-art equipment) within the
7 past several years.

8
9 Consumers have a choice of alternative technologies to provide telecommunications
10 services that completely bypass the existing wireline network of the ILEC. These
11 technologies include wireless (cellular technology and wireless local loops), and cable
12 television lines. Prior to the passage of the 1996 Act, depreciation analysis consisted
13 primarily of mortality analysis with only slight adjustments for technological change.
14 Now, the rapid pace of advancement in technological innovations must be recognized in
15 establishing the economic value of Verizon NW’s assets.

16
17 **Q. PLEASE EXPLAIN THE VARIOUS FACTORS THAT VERIZON NW**
18 **CONSIDERED IN DETERMINING DEPRECIATION LIVES.**

19 A. Verizon NW first considered the National Association of Regulatory Utility
20 Commissioners’ (“NARUC”) factors relating to the retirement of assets. These include:

- 21
22 1. Physical Factors
23 a. Wear and tear
24 b. Decay or deterioration
25 c. Action of the elements and accidents

- 1 2. Functional Factors
2 a. Inadequacy
3 b. Obsolescence
4 c. Changes in Art and Technology
5 d. Changes in Demand
6 e. Requirements of Public Authority
7 f. Management Discretion
8

- 9 3. Contingent Factors
10 a. Casualties or Disasters
11 b. Extraordinary Obsolescence⁴
12

13 For the technology-driven accounts — digital switching, circuit equipment, and cable —
14 the functional factors were given virtually exclusive weight relative to the other factors
15 listed above. Verizon NW took a more traditional approach for the determination of
16 depreciation lives for the remaining accounts, which are less dependent on technological
17 change. For example, in accounts such as motor vehicles or furniture, the Physical
18 Factors and past patterns of retirement may be more useful in predicting future
19 depreciation lives.

20
21 **Q. DID YOU REVIEW ALL ACCOUNTS IN CONDUCTING THE DEPRECIATION**
22 **STUDY?**

23 A. Yes, all accounts were reviewed, and revisions were made as required. However, the
24 primary focus was placed on the accounts most impacted by technology, specifically the
25 network technology accounts. These are the central office equipment accounts (Digital

⁴ National Association of Regulatory Utility Commissioners (“NARUC”), *Public Utility Depreciation Practices* at 14-15 (1996).

1 Switching Equipment and Circuit Equipment), and the Copper Cable accounts. Verizon
2 NW's recommended lives for all accounts are set forth in Exhibit No. ____ (AJF-4).

3
4 **Q. PLEASE DESCRIBE THE PRIMARY FACTORS IMPACTING THE DIGITAL**
5 **SWITCHING ACCOUNT LIVES.**

6 A. There are two primary factors that impact the life of digital switching; digital switches are
7 modular, and they will eventually be replaced with new technology.

8
9 First, since the current digital switches are modular, some retirements and replacements
10 of switch parts are occurring in this account due to upgrades of processors, memory, or
11 line cards. With proper maintenance, components will generally not be replaced because
12 they wear out. Rather, the greatest influence on component retirement is technological
13 improvement. An applicable analogy is the desk top computer ("PC"). PCs are not
14 replaced because they wear out, but because of technological improvements that prevent
15 an older PC from properly functioning on an internal network or on the Internet.
16 Likewise, digital switches must be upgraded in order to continue to function in the
17 current national communications network.

18
19 Second, like its predecessors, Electromechanical, and Analog Switches, today's current
20 Digital circuit switch technology will become technologically obsolete and be replaced
21 by Packet Switch technology. A replacement packet switch is available today, and at
22 least one other ILEC has announced plans to replace its current digital switches.
23 Currently, although there is no plan in place for the wholesale retirements of individual

1 digital switches in the Verizon network, Verizon NW has already placed a packet switch
2 in Mt. Vernon, WA.

3
4 The FCC recognized the evolution of the network when it lowered its range to 12 years
5 for digital switching in 1999. Verizon NW believes that 12 years is appropriate at this
6 time, with the caveat that the life might shorten even further when management makes a
7 decision to wholesale replace current digital switches.

8
9 **Q. PLEASE DESCRIBE THE PRIMARY FACTORS IMPACTING THE CIRCUIT**
10 **EQUIPMENT ACCOUNT.**

11 A. Much like digital switching, retirements to this account are not made because of wear and
12 tear, but because of continued technological improvements. Electronic devices that allow
13 the copper and fiber cable networks to connect to the digital switches are included in this
14 account. This account also includes pair gain and line concentrator equipment. As the
15 network evolves, these devices must be upgraded to accommodate increased speed.
16 Therefore, this equipment has a necessarily short life of nine years.

17
18 **Q. PLEASE DESCRIBE THE PRIMARY FACTORS IMPACTING THE LIVES OF**
19 **THE COPPER CABLE ACCOUNTS.**

20 A. Fiber technology is the primary factor impacting the lives of copper cable. Additionally
21 copper cable is not fungible: copper cable cannot be moved from one house to the next,
22 or reused in another place in the network. Also, fiber networks and copper twisted pair
23 networks are not easily connected. A new housing community or office complex which

1 is serviced by a combination of fiber and copper cannot take full advantage of the
2 transmission speed associated with a full fiber network. The full advantage will come
3 only when the total network is fiber. Since so much of the existing customer base is
4 connected to the twisted pair copper network, that copper network must continue to be
5 maintained. For the purpose of estimating the life of copper cable, the historical life
6 indication can and should be ignored. Indeed, the FCC has deviated from historical life
7 indications, and in its most recent prescriptions, has prescribed lives at the low end of its
8 ranges for copper cable. Fiber technology is available, and customer demand indicates
9 that faster speeds are a competitive advantage. Verizon and other providers are already
10 replacing copper plant with fiber today, which demonstrates that this technology is
11 nearing its obsolescence. Verizon has also publicly stated that it is committed to
12 transitioning towards a fiber network. This is consistent with the depreciation lives of
13 16-18 years that Verizon NW Washington recommends for these accounts. The current
14 WUTC ordered lives for the copper accounts range from 21 – 25 years, which reflect the
15 transition to fiber in a much longer time period.

16
17 **Q. HOW DID YOU DETERMINE THE RECOMMENDED FUTURE NET**
18 **SALVAGE VALUES?**

19 A. I started with the Future Net Salvage values approved by the WUTC in the 2000
20 depreciation study and then made adjustments based on my review and analysis of
21 salvage experience as well as anticipated future trends. A comparison of the currently
22 prescribed WUTC salvage values and Verizon NW's proposed future net salvage values

1 is shown on Exhibit No. ____ (AJF-4). Historical salvage data is included for each
2 account in the depreciation study which is attached as Exhibit No. ____ (AJF-7).

3
4 **IV. VERIZON NW USED BENCHMARKING TO**
5 **VALIDATE ITS ECONOMIC LIVES**
6

7 **Q. WHAT OTHER GUIDES DOES VERIZON NW USE IN ESTABLISHING ASSET**
8 **LIVES?**

9 A. To help validate its professional judgment as to the appropriate lives for telephone plant,
10 Verizon NW “benchmarks” (i.e., compares) its lives against those of its competitors, such
11 as WorldCom, AT&T, and cable television providers, and considers industry studies
12 performed by Technology Futures, Inc. (“TFI”).
13

14 **Q. PLEASE EXPLAIN WHY BENCHMARKING IS USEFUL AND APPROPRIATE.**

15 A. Benchmarking against competitors affords Verizon NW another tool to assess the
16 reasonableness of its recommended depreciation lives. Generally, competitors’
17 depreciation lives are not subject to distortion by the regulation that ILECs experience,
18 and are a good guide to reasonable practices in a competitive market. A table illustrating
19 the results of Verizon NW’s benchmarking study is appended to this testimony as Exhibit
20 No. ____ (AJF-5).
21

1 **Q. HAVE OTHER STATE COMMISSIONS USED SUCH BENCHMARKING TO**
2 **ESTABLISH TELRIC RATES?**

3 A. Yes. For example, the Missouri Public Service Commission compared Verizon's lives to
4 the lives of the largest interexchange carriers ("IXC"), cable television ("CATV")
5 operators, cellular providers, competitive access providers ("CAPs"), and personal
6 communications services ("PCS") providers, and found that the depreciation for these
7 companies were, in general, significantly shorter than Verizon's lives. The Missouri
8 Commission concluded that "benchmarking GTE TELRIC rates against those booked for
9 financial purposes of likely competitors and other companies using similar technologies
10 is appropriate and is the best method to determine if GTE's TELRIC rates pass the
11 muster of reasonableness."⁵ In the last depreciation prescription, the South Carolina
12 Commission noted that the depreciation lives "reflect conditions both experienced and
13 expected within comparable telephone company operations."⁶ In fact, the lives adopted
14 by the Commission were "based primarily" on those used by other telephone companies.⁷
15 The Commission stated that these lives "are appropriate for adoption in today's
16 competitive telecommunications environment and represent what we think is reasonable
17 judgment, based on a study of data from other South Carolina telephone operations and
18 certain other telecommunications information obtained from other states."⁸

⁵ Final Arbitration Order, *In the Matter of AT&T Communications of the Southwest Inc.'s Petition for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement between AT&T Communications of the Southwest, Inc. and GTE Midwest Inc.*, Case No. TO-97-63, Attachment C at 77 (Mo. Pub. Serv. Comm'n July 31, 1997) ("*Missouri Order*").

⁶ *March 11, 1997 Order* at 4.

⁷ See Order Approving Depreciation Rates, *Application of GTE South, Inc. for Approval of Depreciation Rates to be Effective January 1, 1996*, Docket No. 96-282-C, at 4-5 (S.C. P.S.C. Mar. 11, 1997) ("*March 11, 1997 Order*").

⁸ See Order Approving Depreciation Rates, *Application of GTE South, Inc. for Approval of Depreciation Rates to be Effective January 1, 1996*, Docket No. 96-282-C, at 4-5 (S.C. P.S.C. Mar. 11, 1997) ("*March 11, 1997 Order*").

1 **Q. HOW DO VERIZON NW'S DEPRECIATION LIVES COMPARE WITH THOSE**
2 **OF OTHER TELECOMMUNICATIONS PROVIDERS?**

3 A. As is demonstrated in Exhibit No. ____ (AJF-3) to this testimony, Verizon NW's lives
4 are actually longer than those used by AT&T, and are very comparable to those used by
5 WorldCom. Specifically, Verizon NW used depreciation lives of 8 to 20 years (8 to 50
6 including Poles and Conduit) for communications and network equipment; 5 to 12 years
7 for Other Equipment; and 25 years for buildings. In comparison, AT&T stated in its
8 2002 annual report that depreciation is based on the asset's useful life, which ranges from
9 3 to 15 years for communications and network equipment; 3 to 7 years for other
10 equipment; and 10 to 40 years for buildings and improvements. Similarly, WorldCom's
11 2001 annual report states that, for the MCI Group, the useful life for Transmission
12 Equipment is 4 to 10 years; 5 to 10 years for Communications Equipment; and 4 to 39
13 years for Furniture, Fixtures, Buildings, and Other. For the WorldCom Group, the useful
14 life is 4 to 40 years for Transmission Equipment (including Conduit); 5 to 10 years for
15 Communications Equipment; and 4 to 39 years for Furniture, Fixtures, Buildings, and
16 Other.

17
18 **Q. HOW DO THE LIVES USED BY CATV OPERATORS COMPARE WITH THE**
19 **LIVES USED BY VERIZON NW?**

20 A. The lives used by CATV operators are also shorter than Verizon NW's recommended
21 lives. The lives adopted by the FCC for CATV distribution facilities were from 10 to 15

1 years.⁹ This range was developed from a statistical analysis of lives used by CATV
2 operators for their own facilities. Verizon NW, on the other hand, has recommended a
3 16 to 18-year depreciation life range for copper cable and a 20-year life for fiber cable,
4 which are longer than the range allowed by the FCC for CATV distribution facilities.

5
6 Likewise, the lives proposed by Verizon NW for support assets such as office furniture
7 and equipment, vehicles, and buildings are reasonable when compared to the ranges
8 allowed by the FCC for CATV operators. The FCC/CATV range is 9 to 11 years for
9 office furniture and equipment and 3 to 7 years for vehicles and equipment, which
10 compares favorably to Verizon NW's proposal of 5 to 15 years for these accounts. The
11 FCC/CATV range for buildings is 18 to 33 years, which compares favorably to Verizon
12 NW's proposal of 25 years.¹⁰

13
14 **Q. WHAT IS TECHNOLOGY FUTURES, INC. ("TFI")?**

15 A. TFI is an independent research organization, unaffiliated with incumbent local exchange
16 carriers, that specializes in conducting technology/market forecasts. TFI forecasts the
17 remaining lives for certain telecommunications assets due to technological change and
18 competition. The TFI team has a very impressive record of successful forecasts in a wide
19 range of technology areas. Shown below is one of the many TFI forecasts that have
20 proved accurate, despite considerable skepticism when they were made.

⁹ Second Report and Order, First Order on Reconsideration, and Further Notice of Proposed Rulemaking, *In the Matter of Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992: Rate Regulation and Adoption of a Uniform Accounting System for Provision of Regulated Cable Service*, 11 FCC Rcd 2220 (1996).

¹⁰ *See id.*

1 For example, a headline in The Wall Street Journal stated, “Larry Vanston [TFI
2 President] Makes Some Pretty Bold Predictions for the Future of Telecommunications -
3 He Has Been Right Before.” In 1986, TFI projected that local switching would be all
4 digital by 1997-2000; while most of the industry thought most analog electronic switches
5 would survive the 1990s. Actually, digital switching adoption reached 98% by 2000¹¹

6
7 **Q. WHAT METHODOLOGY DOES TFI USE TO CALCULATE THESE LIVES?**

8 A. To quantify the technological change, TFI uses a model to analyze remaining economic
9 lives using patterns of technological substitution observed in the communications
10 industry and other industries. To quantify the competitive change, TFI analyzes the
11 impact of expected changes in customer demand on the economic value of the
12 telecommunications assets. This change in economic value is then translated into a
13 useful life impact. A 2001 TFI study forecasts that the local exchange network will
14 continue to modernize and evolve, and that by 2015 only about 10% of the equipment in
15 the local exchange network that was in place at the turn of the century will still be in
16 use.¹²

17

¹¹ Source: <http://www.tfi.com/about/index.html#trackrecord>

¹² Larry K. Vanston, Technology Futures Inc., The Local Exchange Network in 2015, Telecom & Technology Reports (2001) (reproduced at www.tfi.com).

1 **Q. HOW DO THE DEPRECIATION LIVES THAT VERIZON NW RECOMMENDS**
 2 **COMPARE WITH TFI'S RECOMMENDED LIFE RANGES?**

3 A. The depreciation lives that Verizon NW proposes are within the TFI recommended life
 4 ranges, as shown by the following:¹³

| | <u>TFI</u> <u>Recommended</u> | <u>Verizon</u> <u>Proposed</u> |
|----------------------|----------------------------------|-----------------------------------|
| 5 Digital Switching | 9-12 | 12 |
| 6 Digital Circuit | 7-9 | 9 |
| 7 Metallic Cable | 10-20 | 16-18 |
| 8 Non-Metallic Cable | 15-20 | 20 |

12
 13 **Q. HOW DO VERIZON NW WASHINGTON'S DEPRECIATION LIVES**
 14 **COMPARE WITH THOSE OF OTHER VERIZON STATES?**

15 A. Just as Verizon NW Washington has the lowest reserve ratio of any Verizon state, it also
 16 has the longest lives of any Verizon state. Many states allow Verizon the freedom to use
 17 the depreciation lives it deems appropriate, while others require State approvals similar to
 18 Washington. The disparity in Washington's depreciation lives are shown when they are
 19 when compared to lives ordered or allowed by other state commissions. A chart
 20 comparing the lives of the major technology accounts of near-by states, that have rate of
 21 return regulation and also require commission approval of depreciation, is attached as
 22 Exhibit No. _____ (AJF-6).

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¹³ Lawrence K. Vanston & Ray L. Hodges, Transforming the Local Exchange Network: Review and Update tbl. 1.2 p. 5 (Technology Futures, Inc. 2003).

V. CONCLUSION

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Q. PLEASE SUMMARIZE YOUR DIRECT TESTIMONY.

A. Verizon NW's proposed intrastate depreciation rates should be adopted for use in this proceeding and for intrastate depreciation accounting purposes. Verizon NW has used the same depreciation lives that it uses for external financial reporting (GAAP). These inputs are annually evaluated and updated, and best represent the assets' depreciation lives.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.