

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In Re: Investigation Into            )  
Pricing of Unbundled Network    )  
Elements                                )     Docket 990649B-TP

**DIRECT TESTIMONY OF**

**ALLEN E. SOVEREIGN**

**On Behalf of**

**VERIZON FLORIDA INC.**

**SUBJECT: DEPRECIATION**

**November 7, 2001**

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1 February 1994.

2

3 **Q. WHAT ARE YOUR RESPONSIBILITIES IN YOUR CURRENT**  
4 **POSITION?**

5 A. I am responsible for the preparation, filing and resolution of capital  
6 recovery studies and the determination of economic lives for Verizon  
7 Service Corporation, Inc.

8

9 **Q. HAVE YOU PREVIOUSLY TESTIFIED IN FLORIDA?**

10 A. Yes.

11

12 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY OTHER**  
13 **REGULATORY BODIES?**

14 A. Yes, I have also testified before state utility commissions in Arkansas,  
15 California, Hawaii, Idaho, Illinois, Indiana, Iowa, Kentucky, Maryland,  
16 Massachusetts, Michigan, Nebraska, Nevada, New Mexico, Ohio,  
17 Pennsylvania, South Carolina, Texas, Virginia, Washington, and  
18 Washington DC. I have also testified before the Federal Communications  
19 Commission (FCC).

20

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

22 A. The purpose of this testimony is to respond to Issue 7b in this  
23 proceeding, regarding the appropriate depreciation lives and future net  
24 salvages to be used in the unbundled network element ("UNE") cost  
25 studies Verizon Florida Inc. ("Verizon" or "Company") has submitted in

1           this proceeding.

2

3   **Q.   WHAT DEPRECIATION INPUTS DID VERIZON USE IN ITS COST**  
4   **STUDIES?**

5   A.   Verizon used the forward-looking economic lives and future net salvages  
6       recommended in this testimony. These are the same depreciation inputs  
7       that Verizon uses for financial reporting to its stockholders. These  
8       depreciation inputs are developed in accordance with Generally Accepted  
9       Accounting Principles (GAAP). A complete list of Verizon's proposed  
10      depreciation lives and future net salvage percentages is attached as  
11      Exhibit AES-1.

12

13   **Q.   PLEASE SUMMARIZE YOUR DIRECT TESTIMONY.**

14   A.   The Florida Public Service Commission ("FPSC") should approve the  
15       economic depreciation inputs Verizon used in its cost studies. Like the  
16       cost study methodology prescribed for use in this proceeding, Verizon's  
17       depreciation inputs are forward-looking. This forward-looking approach  
18       produces a more accurate estimate of assets' economic lives than an  
19       outdated, historical approach.

20

21       When all local exchange companies were monopoly providers, regulators  
22       could defer capital recovery without affecting the ability of the regulated  
23       company to recover its investments. With the advent of local competition,  
24       regulators no longer have the luxury of postponing capital recovery in the  
25       rate-setting process. The changing telecommunications environment

1 must be taken into consideration when determining the proper recovery  
2 period of an asset. The methodology described in my testimony  
3 considers these developments.

4

5 **II. ECONOMIC LIVES MUST BE USED IN FORWARD-LOOKING COST**  
6 **STUDIES**

7

8 **Q. PLEASE DEFINE THE TERM “ECONOMIC LIFE” AND HOW IT**  
9 **RELATES TO VERIZON'S COST STUDIES.**

10 A. Economic life can be defined as the period of time over which an asset is  
11 used to provide economic value. Verizon’s proposed depreciation  
12 parameters consider the decline in an asset’s value from all causes,  
13 including competition and technological change. They reflect the  
14 principle that depreciation parameters should be consistent with forward-  
15 looking economic assumptions and based on competitive market asset  
16 lives.

17

18 **Q. WHAT ARE “COMMISSION-PRESCRIBED DEPRECIATION LIVES”?**

19 A. These are the lives set by regulatory commissions for regulatory  
20 accounting purposes. As I explain below, the FPSC no longer prescribes  
21 depreciation lives for Verizon or other price-cap regulated companies.

22

23 **Q. IS AN ASSET’S ECONOMIC LIFE EQUAL TO THE DEPRECIATION**  
24 **LIFE OF THAT ASSET AS PRESCRIBED BY STATE COMMISSIONS**  
25 **OR THE FCC?**

1 A. Economic lives are generally shorter than prescribed asset lives.

2

3 **Q. WHY ARE ECONOMIC LIVES SHORTER THAN PRESCRIBED LIVES?**

4 A. Historically, regulatory commissions prescribed asset lives under the  
5 assumption that there would be little or no competition and that  
6 technological innovation would continue at its traditional pace. The  
7 Telecommunications Act of 1996 ("Act") is intended to spur a new  
8 competitive environment that invalidates that basic assumption.

9

10 As previously discussed, the economic life of an asset is the period of  
11 time over which that asset is used to provide economic value. Both  
12 increased competition and technological change shorten the period over  
13 which an asset will provide economic value. In a world where Verizon  
14 was the sole provider, depreciation rates were based upon artificially long  
15 asset lives. By basing depreciation rates on long asset lives, the  
16 depreciation rates were lower, and the period of time over which the  
17 asset was depreciated was longer. Longer depreciation lives helped  
18 state commissions to keep consumer prices artificially low. Today's  
19 market environment reduces the length of time over which Verizon can  
20 recover its investment in an asset and renders unsustainable the use of  
21 artificially long asset lives in calculating depreciation rates.

22

23 **Q. WHEN ESTIMATING ECONOMIC LIVES, IS IT POSSIBLE TO USE**  
24 **TRADITIONAL LIFE ESTIMATION TECHNIQUES?**

25 A. No. Traditional life estimation techniques are used to predict an asset's

1            *physical* life, but not its *economic* life. The physical life of an asset ends  
2            upon that asset's retirement. Economic lives, however, can be affected  
3            when no retirements are evident. For example, assume Verizon has a  
4            1,200 pair cable that has been used to provide service to 1,000  
5            customers in the pre-1996 single-provider environment. Next, assume  
6            that in the post-1996 industry, only 500 pairs of the 1,200 pair cable are  
7            being used (*i.e.*, providing service to customers and economic value to  
8            Verizon) as a result of 500 customers leaving for competitors' networks.  
9            Retirement-based analysis (*i.e.*, the traditional physical life estimation  
10           technique) assumes that all plant in service has economic life. However,  
11           under this scenario, only 50% of the originally utilized investment actually  
12           has economic life. The economic life of the asset is severely affected by  
13           competition, but there are no associated retirements of the asset.

14

15    **Q.    HAS THE FLORIDA PUBLIC SERVICE COMMISSION FOLLOWED**  
16           **THE TRADITIONAL METHOD FOR SETTING DEPRECIATION LIVES?**

17    A.    Historically, the FPSC followed the traditional method for setting  
18           depreciation rates. However, since January 1996, Verizon has been  
19           permitted to set depreciation rates that reflect competitive and  
20           technological advancements in the marketplace. Verizon uses the same  
21           depreciation inputs for FPSC regulatory purposes that it uses for financial  
22           reporting purposes, and those are the same inputs I recommend here.

23

24    **Q.    WHAT DID THE FPSC RECOMMEND THE LAST TIME IT**  
25           **PRESCRIBED DEPRECIATION INPUTS?**

1 A. As previously stated, the FPSC no longer prescribes depreciation inputs  
 2 for Verizon for regulatory reporting purposes. The last time it did so was  
 3 in Docket 920284-TL, in 1992. The Commission did, however,  
 4 recommend depreciation inputs in its 1998 proceeding to determine the  
 5 cost of basic local service for purposes of establishing a universal service  
 6 fund (USF) mechanism (Docket 980696-TP). The chart below compares  
 7 the FPSC-ordered depreciation lives in Docket 980696-TP with the  
 8 depreciation lives Verizon uses in its cost studies for the major  
 9 technology-sensitive accounts. A complete comparison of all accounts is  
 10 attached as Exhibit AES-2.

11  
 12 **A Comparison of FPSC-Ordered and Verizon's Proposed**  
 13 **Depreciation Lives**

	<b>FPSC</b>	<b>Verizon</b>
	<b><u>Ordered</u></b>	<b><u>Proposed</u></b>
Digital Switching Equipment	13	10
Circuit Equipment	8	9
Copper Cable		
Aerial	18	15
Underground	23	15
Buried	18	15
Fiber Cable		
Aerial	20	20
Underground	20	20

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Buried

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As the chart illustrates, the FPSC accepted Verizon's lives in some of the major technology-sensitive accounts, but ordered somewhat longer lives in others.

Establishing the proper economic lives for these assets is critical to determining economic depreciation in a forward-looking cost study. Economic lives of other assets are used in Verizon's cost studies, but the changes in those assets' economic lives (e.g., motor vehicles) as compared to the prescribed lives are extremely small and have little impact on the depreciation rates for those assets.

**Q. DID THE FPSC RECENTLY APPROVE DEPRECIATION INPUTS FOR BELL SOUTH IN THIS DOCKET?**

A. Yes. On April 18, 2001, the FPSC approved its Staff's recommended depreciation inputs. The inputs for the technology-sensitive network accounts were similar to those ordered in the USF docket discussed above. The chart below compares the FPSC-approved depreciation lives for BellSouth with the depreciation lives Verizon uses in its cost studies for the major technology-sensitive accounts. A complete comparison of all accounts is attached as Exhibit AES-2.

**A Comparison of FPSC-Approved BellSouth and Verizon's Proposed Depreciation Lives**

		<b>FPSC BS</b>	<b>Verizon</b>
		<u>Approved</u>	<u>Proposed</u>
5	Digital Switching Equipment	13	10
6	Digital Circuit Equipment	9	9
7	Copper Cable		
8	Aerial	18	15
9	Underground	23	15
10	Buried	18	15
11	Fiber Cable		
12	Aerial	20	20
13	Underground	20	20
14	Buried	20	20

15

16 As the chart shows, the depreciation lives the FPSC approved for

17 BellSouth's fiber accounts and those ordered for the large local exchange

18 companies in the USF docket are the same. Verizon recommends the

19 same 20-year life for these fiber cable accounts in this proceeding, so

20 there should be no question about its reasonableness.

21

22 There are differences between Verizon's recommendations and the

23 lives approved for BellSouth in certain other areas—principally, the

24 Digital Switching and Copper Cable accounts. Verizon's

25 recommendations for these accounts more accurately reflect the

1 competitive and technological conditions of the highly competitive  
2 Tampa Bay area in which Verizon operates, as discussed further in  
3 this testimony.

4

5 **III. COMPETITION AND TECHNOLOGICAL INNOVATION REQUIRE THE**  
6 **USE OF ECONOMIC LIVES**

7

8 **Q. WHAT FACTORS SHOULD THE COMMISSION CONSIDER IN**  
9 **APPROVING DEPRECIATION INPUTS FOR THE COST MODEL?**

10 A. The two most important factors that must be considered in establishing  
11 the economic value of Verizon's assets are: (1) technological innovation  
12 and (2) impact of competition.

13

14 **Q. WHAT TECHNOLOGICAL INNOVATIONS WERE CONSIDERED IN**  
15 **ESTABLISHING VERIZON'S ECONOMIC LIVES?**

16 A. Prior to the passage of the 1996 Telecommunications Act, depreciation  
17 analysis consisted primarily of mortality analysis with only slight  
18 adjustments for technological change. Now, the rapid pace of  
19 advancement in technological innovations must be considered in  
20 establishing the depreciation inputs for Verizon's assets. For example,  
21 data traffic is outpacing voice traffic. Packet Switching is much more  
22 efficient in carrying data, as further advancements in voice over packet  
23 occur, the network will evolve over time from a circuit switched to a  
24 packet network. As another example, even with maximum use of DSL,  
25 as customer bandwidth demand increases, fiber will need to continually

1 be moved closer and closer to the consumer, displacing copper.

2

3 **Q. WHAT KINDS OF COMPETITIVE DEVELOPMENTS WERE**  
4 **CONSIDERED IN ESTABLISHING VERIZON'S ECONOMIC LIVES?**

5 A. Verizon witness Dr. James Vander Weide discusses the competitive risk  
6 and Florida-specific competition in his Direct Testimony. Florida is a  
7 particularly attractive market for entry by alternative competitive local  
8 exchange carriers. Some 463 CLECs are certificated to offer local  
9 exchange service, and CLECs have access to all of Verizon Florida's  
10 lines. CLECs own and operate at least 36 switches in Verizon's service  
11 area. Facilities-based competitors to Verizon include, among others, 2<sup>nd</sup>  
12 Century, AT&T, Intermedia, ITC Deltacom, KMC, MCI WorldCom, Sprint,  
13 Teligent, and Time Warner.

14

15 In addition, the FPSC's Division of Policy Analysis and Intergovernmental  
16 Liaison recently observed that the local broadband services markets are  
17 increasingly competitive. ILECs are, and will be, battling on a number of  
18 fronts for control of the marketplace. Many consumers now have a  
19 number of choices for local telephone and broadband services from a  
20 variety of service providers and technologies. Cable, wireless, satellite,  
21 competitive local exchange companies are fiercely competing with the  
22 ILECs for subscribers in one or more arenas. Because of this  
23 competition, the number of access lines in service has declined for a  
24 number of ILECs. (Understanding the Local Exchange and Broadband  
25 Markets in Florida, Telecommunications Competition and its

1           Developments, Prepared by The Division of Policy Analysis and  
2           Intergovernmental Liaison, October 2001 (Broadband Study), at 26). The  
3           report also noted that the telecommunications industry is undergoing  
4           dramatic structural and technological changes: “The global phone  
5           system is on the verge of its biggest technology shift since Alexander  
6           Graham Bell’s invention eclipsed the telegraph” (quoting a June 24, 2001,  
7           *Florida Times Union* article). Data traffic has now surpassed voice traffic  
8           and continues to grow. It is possible, with today’s technology, to deliver  
9           integrated voice, data and video services over existing connections. This  
10          opens up tremendous possibilities for new applications, revenue sources,  
11          and network efficiencies for companies that successfully combine voice  
12          and data technologies and networks to bring integrated services to  
13          homes and businesses over a single broadband connection.  
14          (Broadband Study at 25).

15  
16          The FPSC’s December 2000 Report on Competition in  
17          Telecommunications Markets in Florida likewise noted the competitive  
18          strides ALECs have made and continue to make. The Commission’s own  
19          statistics (based on ALECs’ self-reported data) demonstrate the  
20          acceleration of competitive activity in Verizon’s territory, particularly in the  
21          business market. This trend will only become more pronounced, as more  
22          and more competitors enter the market.

23  
24          **Q.    SHOULD ONLY THE CURRENT LEVEL OF COMPETITION AND**  
25          **TECHNOLOGY BE CONSIDERED IN DEVELOPING DEPRECIATION**



- 1                                    b.     Decay or deterioration
- 2                                    c.     Action of the elements and accidents
- 3                                    2.     Functional Factors
- 4                                    a.     Inadequacy
- 5                                    b.     Obsolescence
- 6                                    c.     Changes in art and technology
- 7                                    d.     Changes in demand
- 8                                    e.     Requirements of Public Authorities
- 9                                    f.     Management discretion
- 10                                   3.     Contingent Factors
- 11                                   a.     Casualties or disasters
- 12                                   b.     Extraordinary obsolescence

13

14                                    These same factors can be used to help estimate an asset's economic

15                                    life expectancy by allocating the appropriate weighting to each factor.

16                                    That is, Verizon uses the NARUC factors as a guideline for choosing

17                                    economic lives of certain assets, but only after allocating proper

18                                    weighting to those factors that reflect the significant roles competition and

19                                    technological change play in determining an asset's economic life.

20

21                                    Specifically, the "Functional Factors" (Part 2 of the NARUC factors) are

22                                    sensitive to competition and technological change and are given

23                                    substantially greater weight when Verizon considers the NARUC criteria

24                                    in establishing the economic lives of Verizon's assets. As I explained

25                                    above, the effects of competition and technological change on an asset's

1 economic life must be properly considered when determining competitive  
2 market asset lives. It has long been recognized in the industry that  
3 traditional methods for determining lives for accounts most affected by  
4 technology and competition are inadequate. Most Commissions,  
5 including this one, have thus seen it fit to make adjustments to the  
6 physical life indications produced by historical mortality analysis.

7

8 **Q. WHAT OTHER GUIDES DO YOU USE IN ESTABLISHING ASSET**  
9 **LIVES?**

10 A. To help quantify our professional judgment as to the appropriate lives for  
11 telephone plant, Verizon also benchmarks against competitors, such as  
12 AT&T, MCI Worldcom, and cable television providers, and considers  
13 industry studies performed by Technology Futures Inc. ("TFI").

14

15 **Q. PLEASE EXPLAIN WHY BENCHMARKING IS USEFUL AND**  
16 **APPROPRIATE.**

17 A. Benchmarking affords an excellent example of the reasonableness of  
18 Verizon's recommended depreciation lives. As we transition to a  
19 competitive environment, we should be treated the same as our  
20 competitors with respect to setting depreciation rates. Competitors'  
21 depreciation rates are not reviewed or approved by any regulatory body,  
22 and are a good guide to reasonable practices in a competitive market.

23

24 **Q. WHAT DID YOU DETERMINE USING BENCHMARK COMPARISONS**  
25 **WITH AT&T?**

1 A. Comparing the economic lives proposed by Verizon to the lives AT&T  
2 uses affords an excellent example of how reasonable Verizon's  
3 recommendations are. AT&T's 2000 annual report states that the useful  
4 life of communications and network equipment ranges from 3 to 15 years.  
5 The useful life of other equipment ranges from 3 to 7 years. The useful  
6 life of buildings and improvements ranges from 10 to 40 years. Verizon's  
7 recommended lives are not as short as AT&T's. In comparison, Verizon's  
8 recommendation for network equipment ranges from 9 to 50 years. My  
9 testimony also recommends 5 to 15 years for Other Equipment, and 35  
10 years for buildings.

11

12 **Q. WHAT WAS DETERMINED BY THE COMPARISON WITH MCI**  
13 **WORLDCOM?**

14 A. MCI WorldCom's 1996 annual report stated that the weighted average  
15 depreciable life of the assets comprising the communications system in  
16 service approximates 10 years. Furniture, fixtures and equipment are  
17 depreciated over a weighted average life of 6 years. Buildings are  
18 depreciated using lives of up to 35 years. In comparison, Verizon's  
19 recommendation for equipment that comprises the communication  
20 system ranges from 9 to 50 years. My testimony recommends 5 to 15  
21 years for furniture, fixtures and equipment, and 35 years for buildings.

22

23 In 1998, MCI WorldCom again shortened the lives of its communications  
24 facilities from approximately 10 years to 9 years, stating that the company  
25 periodically reviews and adjusts the useful lives assigned to fixed assets

1 to ensure that depreciation charges provide appropriate recovery of  
2 capital costs over the estimated physical and technological lives of the  
3 assets. The weighted average of depreciable life of the assets  
4 comprising the communications system in service approximates nine  
5 years.

6

7 **Q. WHAT WAS DETERMINED BY THE COMPARISONS TO LIVES USED**  
8 **BY THE CABLE TELEVISION (CATV) OPERATORS?**

9 A. Verizon's lives are not as short as the lives used by CATV operators. The  
10 FCC adopted a flexible range of lives to be used by CATV operators  
11 seeking to justify depreciation rates in cost of service filings. The useful  
12 lives adopted by the FCC for distribution facilities were from 10 to 15  
13 years. This range was developed from a statistical analysis of lives used  
14 by CATV operators for their own facilities. The 15-year economic life for  
15 copper cable and the 20-year life for fiber cable calculated selected by  
16 Verizon are not as short as the lives within the FCC-allowed range for  
17 CATV distribution facilities. Additionally, the lives proposed by Verizon  
18 for support assets such as office furniture and equipment, vehicles, and  
19 buildings are reasonable when compared to the FCC-allowed ranges for  
20 CATV operators. The FCC CATV range for office furniture and  
21 equipment is 9-11 years, which compares favorably to Verizon's proposal  
22 of 10-15 years for these accounts. The FCC range for vehicles and  
23 equipment is 3-7 years, which is shorter than Verizon's proposal of 8-12  
24 years. The FCC range for buildings is 18-33 years, which is shorter than  
25 Verizon's proposal of 35 years. (FCC MM Docket No. 93-215,

1           Implementation of Sections of the Cable Television Consumer Protection  
2           and Competition Act of 1992: Rate Regulation and FCC CS Docket No.  
3           94-28, Adoption of a Uniform Accounting System for Provision of  
4           Regulated Cable Service, Second Report and Order, First Order on  
5           Reconsideration, and Further Notice of Proposed Rulemaking, January  
6           26, 1996).

7

8   **Q.   HAVE ANY OTHER COMMISSIONS DETERMINED THAT**  
9           **BENCHMARKING IS A VIABLE METHOD TO ASSESS THE**  
10           **REASONABLENESS OF VERIZON'S PROPOSED DEPRECIATION**  
11           **INPUTS?**

12   A.   Yes.   The Missouri Public Service Commission Staff agreed that  
13           benchmarking is a viable method to determine the reasonableness of  
14           Verizon's proposal, stating:

15                   Staff believes that benchmarking GTE TELRIC rates against  
16                   those booked for financial purposes of likely competitors  
17                   and other companies using similar technologies is  
18                   appropriate and is the best method to determine if GTE's  
19                   TELRIC rates pass the muster of reasonableness.

20           (Case No. TO-97-63, Missouri Public Service Commission, Final  
21           Arbitration Order, July 31, 1997 ("Missouri Order"), Attachment C at 77).

22

23           The Missouri Staff chose 19 of the largest IXC, CATV, cellular, CAP, and  
24           PCS companies to benchmark against and found that the depreciation  
25           rates used to calculate GTE TELRIC costs were at the bottom or second

1 from the bottom of the list and were significantly lower than several  
2 companies in similar industries, concluding that “This is the most  
3 significant factor to Staff’s belief that GTE’s proposed depreciation rates  
4 are reasonable.” (Missouri Order, Attachment C at 79).

5

6 **Q. HAVE ANY ALECS PROVIDED INFORMATION IN THIS DOCKET**  
7 **THAT CONFIRMS THE REASONABLENESS OF VERIZON’S**  
8 **PROPOSED LIVES?**

9 A. Yes. A number of ALECs responded to BellSouth’s discovery requests in  
10 its phase of this docket.

11

12 For example, Florida Digital Network confirmed that it owned or operated  
13 switches and cable in Florida to provide telephone exchange services. It  
14 stated that the life it uses for switches is 10 years, which is the same as  
15 Verizon recommends; and 15 years for cable, which is the same as  
16 Verizon’s recommended 15 years for copper cable and shorter than  
17 Verizon’s recommended 20 years for fiber cable. It also listed lives for  
18 support equipment which ranged from 5–10 years, which were generally  
19 shorter or the same as Verizon’s recommendations of 5–15 years for  
20 similar equipment. (BellSouth Hearing, Ex. 33.)

21

22 Intermedia Communications also responded to BellSouth interrogatories  
23 (BellSouth Hearing, Ex. 35). Intermedia stated that it uses a 7-year life for  
24 switches, which is the much shorter than Verizon’s recommendation of 10  
25 years; and 20 years for fiber cable, which is the same as Verizon’s

1 recommended 20 years. It also listed lives for telecommunication  
2 equipment and furniture and fixtures which ranged from 2–7 years, which  
3 is shorter than Verizon’s recommendations of 5–15 years for similar  
4 equipment.

5

6 In its responses (BellSouth Hearing, Ex. 36), Rhythms Links admitted that  
7 that it owns or operates digital circuit equipment used to provide digital  
8 subscriber line services in Florida. Rhythms uses a 5-year life for digital  
9 circuit equipment, which is much shorter than Verizon’s recommendation  
10 of 9 years. Its lives for equipment and furniture ranged from 3–7 years,  
11 which are also shorter than Verizon’s recommendations of 5–15 years for  
12 similar equipment. Even though Rhythms is in bankruptcy, its assets  
13 have value (they have been acquired by WorldCom) and depreciation  
14 rates for those assets still provide useful benchmarks.

15

16 Time Warner Telecom of Florida also owns or operates facilities to  
17 provide telephone exchange services in Florida. It uses a 10-year life for  
18 switches, which is the same as Verizon recommends; and 15 years for  
19 fiber cable, which is shorter than Verizon’s proposed 20 years. For  
20 vehicles and other equipment, Time Warner’s lives range from 3–10  
21 years, which are generally shorter or the same as Verizon’s  
22 recommendations of 5–15 years for similar equipment. (BellSouth  
23 Hearing, Ex. 36.)

24

25 This information provides further evidence that Verizon’s

1 recommendations are reasonable and should be accepted in this  
2 proceeding.

3

4 **Q. PLEASE EXPLAIN VERIZON'S USE OF THE INDUSTRY STUDIES**  
5 **PERFORMED BY TECHNOLOGY FUTURES INC. (TFI).**

6 A. TFI forecasts the remaining lives for certain assets when technological  
7 change is driving the shortening of asset lives. To quantify this  
8 technological change, TFI uses a model to analyze remaining economic  
9 lives using patterns of technological substitution observed in the  
10 communications industry, as well as other industries. The industry studies  
11 conducted by TFI forecast the combined effects that competition and  
12 technological change will have on an asset's remaining useful life. The  
13 studies generally project shorter lives than traditionally prescribed by  
14 most Commissions. Verizon uses the TFI lives as a reasonableness  
15 benchmark comparison with the lives used by other companies, both  
16 regulated and non-regulated, with similar types of telecommunications  
17 assets.

18

19 **Q. WHAT DO THE TFI STUDIES RECOMMEND VERIZON USE AS**  
20 **ECONOMIC LIVES FOR ITS ASSETS?**

21 A. Verizon's recommendations here are in line with TFI's recommended  
22 economic life ranges, as shown by the following chart. (*Transforming the*  
23 *Local Exchange Network: Analyses and Forecasts of Technology*  
24 *Change*, Larry K. Vanston, Ray L. Hodges, and Adrian J. Poitras, 2d Ed.  
25 1997, Technology Futures, Inc., at 33).

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**A Comparison of The TFI Ranges with  
Verizon's Proposed Economic Lives**

	<b><u>TFI</u></b>	<b><u>Verizon</u></b>
	<b><u>Ranges</u></b>	<b><u>Economic</u></b>
Digital Switching Equipment	9-12	10
Circuit Equipment	6-9	9
Copper Cable	14-20	15
Fiber Cable	20	20

TFI specifically addresses the appropriate lives to be used for outside plant cable, central office switching, and circuit equipment accounts, as these accounts report equipment that are most affected by changes in competition and technology.

**V. VERIZON'S ECONOMIC LIVES HAVE BEEN ENDORSED BY OTHER  
STATE REGULATORY COMMISSIONS**

**Q. HAS ANY OTHER REGULATORY BODY APPROVED THE ECONOMIC LIVES PRESENTED HERE?**

A. Yes. In 1996, the California Public Utilities Commission ("CPUC") endorsed the use of the same economic lives presented here except that they approved a 14-year life for copper cable, one year less than

1 requested here. The CPUC concluded that the economic lives used by  
2 GTE and Pacific Bell for external financial reporting were the appropriate  
3 forward-looking lives for cost studies. The CPUC rejected the suggestion  
4 made by AT&T and others that FCC-prescribed lives are forward-looking,  
5 stating:

6  
7 We agree with Pacific that the schedules formally adopted  
8 in the represcription proceeding reflect the previous  
9 paradigm of the regulated monopoly environment, and so  
10 are difficult to justify in a cost study that looks forward to an  
11 environment in which there is local exchange competition.  
12 We also see little merit in the Coalition's original suggestion  
13 that we use FCC schedules. These schedules also reflect  
14 the previous paradigm; moreover, they are based on  
15 different assumptions and applied in different ways than  
16 our own. It also seems to be the case, however, that Pacific  
17 is now using these schedules in financial reports it is  
18 required to file, and thus for purposes of these cost studies,  
19 the schedules also appear consistent with generally  
20 accepted accounting principles. The schedules also  
21 appear realistic for a firm having to operate in a competitive  
22 environment, as Pacific will soon have to do. Accordingly,  
23 we will approve their use in this proceeding.

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(California Public Utilities Commission Decision No. D.96-08-

1 021, August 2, 1996, in Rule Making R.93-04-003, I.93-04-  
2 002).

3

4 In 1997, the Missouri Public Service Commission, likewise, adopted the  
5 same economic lives proposed in this case, stating:

6

7 Staff's goal has been to recommend depreciation rates  
8 based on parameters that GTE is likely to experience for  
9 financial purposes so as to fully recover its long run capital  
10 costs in a timely fashion.

11

12 (Missouri Order, Attachment C at 76.)

13

14 In 1998, the Michigan Commission approved GTE's use of economic lives:

15

16 GTE proposes to reduce its asset lives in accordance with  
17 their economic lives....The Staff's view is that GTE's  
18 proposed asset lives are largely consistent with a forward-  
19 looking approach and are reasonable....The Commission  
20 finds that GTE's proposal related to depreciation is  
21 appropriate for TSLRIC purposes....The Commission further  
22 finds AT&T/MCI's proposal to be insufficiently forward  
23 looking for purposes of a TSLRIC study.

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25 (Michigan Docket No. U-11281, Feb. 25, 1998 Order,

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Section d).

**VI. CONCLUSION**

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

A. Traditional historical methods of establishing depreciation lives are not forward-looking. The economic lives used in Verizon’s cost studies are properly based on a forward-looking approach. Verizon’s proposed rates are reasonable in comparison to the financial reporting lives of competitive telecommunications providers, including those in this docket, and should be approved by this Commission for use in establishing permanent UNE rates.

**Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

A. Yes.

**Verizon Recommended Depreciation Lives and Salvage Values**

<b>USOA ACCT</b>	<b>ACCOUNT DESCRIPTION</b>	<b>VERIZON LIFE YEARS</b>	<b>VERIZON SALVAGE %</b>
2112	Motor Vehicles	8	15
2113	Aircraft	8	50
2114	Special Purpose Vehicles	12	0
2115	Garage Work Eq	12	0
2116	Other Work Eq	12	0
2121	Buildings	35	0
2122	Furniture	15	0
2123.1	Office Support Eq	10	0
2123.2	Company Communications Eq	8	0
2124	General Purpose Computers	5	0
2212	Digital Electronic Switching	10	2
2220	Operator Systems	10	0
2231	Radio Systems	5	0
2232	Circuit Eq	9	2
2362	Other Terminal Eq	7	0
2411	Poles	30	-75
2421.1	Aerial Cable Metallic	15	-10
2421.2	Aerial Cable NonMetallic	20	-10
2422.1	Underground Cable Metallic	15	-10
2422.2	Underground Cable NonMetallic	20	-10
2423.1	Buried Cable Metallic	15	-5
2423.2	Buried Cable NonMetallic	20	-5
2424.1	Submarine Cable Metallic	15	-10
2424.2	Submarine Cable NonMetallic	20	-10
2425.1	Deep Sea Cable Metallic	15	-10
2425.2	Deep Sea Cable NonMetallic	20	-10
2426.1	Intrabuilding Cable Metallic	15	-15
2426.2	Intrabuilding Cable NonMetallic	20	-10
2431	Aerial Wire	15	-5
2441	Conduit Systems	50	-10
2690	Network Software	3	0

**Comparison of Verizon Recommended Depreciation Lives and Salvage Values  
with Commission-Ordered Depreciation Lives and Salvage Values in  
Docket No. 980696-TP, Order No. PSC-99-0068-FOF-TP, Table V-A(3); and  
Docket 990649-TP 4/6/01 Table 7a & 7b FPSC Approved for BellSouth**

USOA ACCT	ACCOUNT DESCRIPTION	990649-TP	990649-TP	980696-TP	990649-TP	990649-TP	980696-TP
		2001 UNE VERIZON Proposed LIFE YEARS	2001 UNE FPSC Proposed LIFE YEARS	1998 USF FPSC Approved LIFE YEARS	2001 UNE VERIZON Proposed SALVAGE %	2001 UNE FPSC Proposed SALVAGE %	1998 USF FPSC Approved SALVAGE %
2112	Motor Vehicles	8.0	8.0	7.5	15	16	1
2113	Aircraft	8.0	na	5.0	50		0
2114	Special Purpose Vehicles	12.0	7.0	7.0	0	0	0
2115	Garage Work Eq	12.0	12.0	12.0	0	0	0
2116	Other Work Eq	12.0	15.0	12.0	0	0	0
2121	Buildings	35.0	45.0	40.0	0	0	0
2122	Furniture	15.0	15.0	11.0	0	10	10
2123.1	Office Support Eq	10.0	11.5	10.0	0	5	0
2123.2	Company Communications Eq	8.0	7.0	7.0	0	10	10
2124	General Purpose Computers	5.0	4.5	5.0	0	2	0
2212	Digital Electronic Switching	10.0	13.0	13.0	2	0	0
2220	Operator Systems	10.0	10.0	10.0	0	0	0
2231	Radio Systems	5.0	9.0	9.0	0	-5	0
2232	Circuit	9.0	*7.5/8/9	8.0	2	2	0
2362	Other Terminal Eq	7.0	na	6.0	0	na	0
2411	Poles	30.0	36.0	30.0	-75	-55	-75
2421.1	Aerial Cable Metallic	15.0	18.0	18.0	-10	-14	-35
2421.2	Aerial Cable NonMetallic	20.0	20.0	20.0	-10	-14	-35
2422.1	Underground Cable Metallic	15.0	23.0	23.0	-10	-8	-10
2422.2	Underground Cable NonMetallic	20.0	20.0	20.0	-10	-8	-10
2423.1	Buried Cable Metallic	15.0	18.0	18.0	-5	-7	-10
2423.2	Buried Cable NonMetallic	20.0	20.0	20.0	-5	-7	-10
2424.1	Submarine Cable Metallic	15.0	18.0	18.0	-10	-5	-5
2424.2	Submarine Cable NonMetallic	20.0	20.0	20.0	-10	-5	-5
2425.1	Deep Sea Cable Metallic	15.0	na	na	-10	na	na
2425.2	Deep Sea Cable NonMetallic	20.0	na	na	-10	na	na
2426.1	Intrabuilding Cable Metallic	15.0	20.0	20.0	-15	-10	-10
2426.2	Intrabuilding Cable NonMetallic	20.0	20.0	20.0	-10	-10	-10
2431	Aerial Wire	15.0	na	na	-5	na	na
2441	Conduit Systems	50.0	55.0	50.0	-10	-10	-10

\* Note The FPSC recommended different lives for categories of Circuit Equipment:  
Digital 9, DDS 8, Analog 7.5, in Docket 990649-TP for BellSouth

In USF Docket 980696-TP the FPSC approved a combined life for  
Circuit Equipment.

Verizon recommends a combined life for Circuit Equipment in this proceeding,  
since Verizon typically studies this account on a combined basis.