BEFORE THE WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

IN THE MATTER OF THE PETITION OF VERIZON NORTHWEST INC.,

FOR APPROVAL OF REVISED DEPRECIATION RATES

DOCKET NO. UT-040520

DIRECT TESTIMONY OF CHARLES W. KING (CWK-1T)

ON BEHALF OF

PUBLIC COUNSEL

FEBRUARY 2, 2005

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I. INTRODUCTION

Q. Please state your name, position and business address.

A. My name is Charles W. King. I am President of the economic consulting firm of Snavely King Majoros O'Connor & Lee, Inc. ("Snavely King"). My business address is 1220 L Street, N.W., Suite 410, Washington, D.C. 20005.

Q. Please describe Snavely King.

A. Snavely King, formerly Snavely, King & Associates, Inc., was founded in 1970 to conduct research on a consulting basis into the rates, revenues, costs and economic performance of regulated firms and industries. The firm has a professional staff of 12 economists, accountants, engineers and cost analysts. Most of its work involves the development, preparation and presentation of expert witness testimony before federal and state regulatory agencies. Over the course of its 34-year history, members of the firm have participated in over 1000 proceedings before almost all of the state commissions and all Federal commissions that regulate utilities or transportation industries.

Q. Have you prepared a summary of your qualifications and experience?

A. Yes. Exhibit___ (CWK-2) is a summary of my qualifications and experience.

Q. Have you previously submitted testimony in regulatory proceedings?

A. Yes. Exhibit___ (CWK-3) is a tabulation of my appearances as an expert witness before state and federal regulatory agencies, including the Washington Utilities and Transportation Commission.

Q. For whom are you appearing in this proceeding?

A. I am appearing on behalf of the Public Counsel Section of the Washington State Attorney General's Office (Public Counsel).

Q. What is the objective of your testimony?

A. The objective of my testimony is to analyze the proposals of Verizon Northwest ("Verizon" or "the Company") with respect to the depreciation rates to be used in setting the Company's regulated intrastate telephone rates and charges. If I find that those depreciation rates are inappropriate, I am to recommend alternative depreciation rates.

II. SUMMARY

Q. Please summarize your testimony.

A. I find that Verizon's proposal to adopt its financial reporting lives is inappropriate because Generally Accepted Accounting Principles ("GAAP") prescribe that plant lives used for financial reporting should, if anything, understate the expected service lives of a company's plant. This observation is supported by Verizon's own showing that many of its plant accounts are almost totally depreciated under financial reporting, even though they have considerable remaining life left.

Verizon has failed to demonstrate that it intends to accelerate the retirements from its circuit, switching and cable plant accounts. To the contrary, Verizon continues to invest in this plant and equipment at rates similar to the recent past.

I agree, however, that market and technological changes probably mean that the record of past retirement patterns is not a good predictor of future service lives. Accordingly, I do not recommend using the life indications from Verizon's actuarial studies. Rather, I recommend projection lives that are generally at the lower end of the range of service lives prescribed by the Federal Communications Commission ("FCC").

While Verizon is eager to have the Commission adopt the service lives it uses for financial reporting purposes, it makes no mention of the treatment of net removal costs that it uses for financial reporting. That treatment is governed by

Statement of Financial Accounting Standards No. 143 ("SFAS 143"), which separates removal cost accounting from depreciation. Under SFAS 143, any legal obligations to incur removal costs are quantified at their present discounted value and declared as liabilities on the balance sheet of the Company. Any reserves already accrued to cover removal costs are offsets to these liabilities.

Verizon, however, has not identified any legal retirement cost obligations. On its financial books, it has removed all prior accruals against future removal costs from the depreciation reserve and has recorded those accruals as a one-time $65 million addition to income. On a going-forward basis, Verizon no longer records any cost of removal accruals on its financial books. In other words, Verizon has taken into income approximately $65 million of non-legal removal costs that it has already collected from ratepayers. If the Commission were to use financial reporting as the basis for depreciation allowances – as Verizon wishes it to – then consistency suggests that the Commission should also disallow any further accruals for net salvage, that is, net removal costs. Moreover, it should flow back the removal cost reserve already recovered from ratepayers through an amortization program.

Although the FCC's rulings do not bind the Washington Commission on this matter, the FCC has indicated its intention to retain the pre-SFAS 143 procedure of incorporating allowances for net salvage into depreciation rates. If the Commission chooses to follow the FCC's lead and retain the traditional incorporation of net removal costs into depreciation, then it must recognize the infirmity of Verizon's calculation of net salvage ratios. Those ratios are calculated by comparing the recent record of net removal costs with the original cost of the plant retired. The retired plant was placed many years before the removal costs were incurred. Consequently, the retired plant is quantified in far

more valuable dollars than removal costs, and a ratio of the two effectively extrapolates past inflation into the future. Such extrapolation is altogether inappropriate, as current estimates of future inflation are much lower than the record of past inflation. When the historical values of original plant and removal costs are restated as though inflation had run at the 2.2 percent rate forecast by the Congressional Budget Office, the resultant removal cost ratios are significantly lower than those proposed by Verizon. My Exhibit____ (CWK-9) presents a schedule of revised net salvage ratios.

If the Commission adopts my recommended lives and uses SFAS accounting to treat removal costs, then "pure" depreciation of Washington State plant based on 1/1/2004 plant balances is $4.3 million more than intrastate depreciation accruals under present WUTC–approved rates. If the Commission chooses to amortize the removal cost reserve back to ratepayers, it must choose an amortization period. I recommend a 5-year amortization, which would translate into an intrastate credit of $9.5 million annually from 2005 through 2009.

On the other hand, if the Commission decides to follow the FCC's policy of ignoring SFAS 143 and its implications, I recommend that it eliminate the implicit extrapolation of past inflation rates into the future that results from the use of Verizon's net salvage analysis procedure. When both retired plant and experienced removal costs are restated at the 2.2 percent inflation predicted by the Congressional Budget Office, the intrastate depreciation and removal cost accruals based on 1/1/2004 plant balances are $5.5 million more than under present WUTC-approved rates.

III. DEPRECIATION – GENERAL

Q. What is depreciation?

A. In 1958, the National Association of Railroad and Utility Commissioners sanctioned the following definition of depreciation:

> "Depreciation," as applied to depreciable utility plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of elements, inadequacy, obsolescence, changes in the art, changes in demand, and requirements of public authorities.[1]

The second commonly cited definition of depreciation is that of the American Institute of Certified Public Accountants:

> Depreciation accounting is a system of accounting which aims to distribute the cost or other basic value of tangible capital assets, less salvage (if any) over the estimated useful life of the unit (which may be a group of assets) in a systematic and rational manner. It is a process of allocation, not of valuation. Depreciation for the year is the portion of the total charge under such a system that is allocated to the year. Although the allocation may properly take into account occurrences during the year, it is not intended to be a measurement of the effect of all such occurrences.[2]

If depreciation can be defined in a single sentence, I would say that it is the process of recovering the initial investment in tangible capital assets, adjusted for salvage and cost of removal, in a systematic fashion over the useful service life of plant, recognizing that utility plant is typically a group of investments.

Q. Can depreciation be calculated with precision?

A. No. Depreciation can no more be calculated with precision than can the required rate of return to equity investors. Both are developed from analyses that, while based on quantitative values, require considerable application of judgment. In the case of rate of return, that judgment pertains to the earnings expectation of

[1] *Uniform System of Accounts for Class A and Class B Electric Utilities*, 1958, rev. 1962.

[2] American Institute of Certified Public Accountants, *Accounting Research and Terminology Bulletin #1.*

investors as indicated by the stock market and corporate financial data. In the case of depreciation, the judgment pertains to the estimation of the future surviving life of plant as indicated by past patterns of retirements, industry trends, and corporate investment plans.

Q. How does this judgmental characteristic of depreciation influence the Commission's approach to the subject?

A. The Commission must recognize that the development of depreciation rates is not a refined science subject to mathematical precision. Because depreciation analysts use judgment in their estimation of depreciation, the Commission must necessarily exercise its own judgment in assessing the rationale and data that underlie alternative depreciation rates. This is why, in this proceeding, the Commission must choose among depreciation rates that yield widely differing annual depreciation accruals.

Q. What are the basic parameters required to develop a depreciation rate?

A. At its simplest level, the only parameter that is absolutely required to develop a depreciation rate is the service life of the asset being depreciated. The reciprocal of that number can be used as the depreciation rate.

However, because most utility depreciation is applied to accounts that are groups of assets, it is usually necessary to estimate the dispersion of retirements around an average service life. For the ex-GTE companies such as Verizon Northwest, this dispersion is described in terms of 31 "Iowa Curves," so named because they were developed at Iowa State University. These curves describe how closely the retirements are grouped around the average service life and

whether they tend to occur most rapidly before, after or coincident with the average service life.[3]

The FCC and almost all state commission include "net salvage" as an additional parameter in the calculation of a depreciation rate. Net salvage is the difference between the positive scrap value of the asset's material and the cost of dismantling and removing the asset when it is retired. It is expressed as a ratio to the cost of the asset and included as a subtraction (when salvage value exceeds removal cost) or an addition (when removal cost exceeds salvage) to the amount to be recovered in depreciation charges. With a few exceptions (e.g. vehicles) most telephone plant has a higher removal cost than its salvage value, so that the inclusion of net salvage in depreciation adds to the amount to be recovered.

Virtually all telephone companies employ what is known as "remaining life depreciation." This procedure computes the depreciation rate by dividing the unrecovered net investment, adjusted for net salvage, by the estimated remaining years of the asset (or group of assets). It effectively ensures that any past under- or over-accruals of depreciation are recovered during the remaining life of the asset.

To complicate matters further, there are two procedures for calculating remaining life. The first is the "vintage group," or "VG" procedure in which all units in each vintage, that is, year of placement, are assumed to have the same remaining life. As the vintage approaches the average service life for the plant category (usually a plant account), it is assumed that the entire vintage will be retired. The other, somewhat more elaborate method for calculating remaining life is the "equal life group", or "ELG" procedure. This procedure hypothetically

[3] For a complete discussion of Iowa Curves, see Appendix A, part 3 of *Public Utility Depreciation Practices*, National Association of Regulatory Utility Commissioners, August 1996.

separates each vintage into separate subgroups of equal life and depreciates each according to its specific remaining life. Both the VG and the ELG procedures ultimately depreciate each vintage fully, but equal life group depreciation results in a higher depreciation rate for new vintages and a lower depreciation rate for older vintages. Additionally, ELG is much more sensitive to the selection of the Iowa survivor curve than is VG depreciation.

IV. VERIZON'S PROPOSED DEPRECIATION RATES

Q. What depreciation parameters does Verizon propose to use in calculating depreciation for its Washington intrastate plant?

A. As noted, there are essentially three parameters that go into calculating a depreciation rate: service life, survivor curve, and net salvage. Owing to the use of remaining life depreciation, there is another parameter, the level of accrued depreciation reserve.

For its service life parameters, Verizon proposes to use the same service lives that it employs for financial reporting purposes, that is, for reporting expenses to its shareholders. For its survivor curves, which are not needed for financial reporting, Verizon has apparently adopted the existing Commission-approved depreciation parameters. Verizon's derives its net salvage parameters using a traditional procedure that compares the value of plant retired with the salvage received and removal cost incurred in retiring that plant. As I shall discuss, this procedure is altogether inconsistent with current financial reporting practices and principles. Finally, Verizon proposes to calculate remaining life rates using the depreciation reserve on its regulatory books rather than its financial books.

Q. What is the effect of Verizon's selection of depreciation parameters?

A. Verizon witness Anthony Flesch indicates that Verizon's proposed depreciation rates would increase total Washington depreciation expense by $64.6 million based on forecast January 1, 2004 plant balances. He indicates that the intrastate portion of this increase would be approximately $48.4 million. [4]

V. SERVICE LIVES

Q. How did Verizon derive the service lives it proposes to use in calculating its depreciation rates?

A. These service lives are those that Verizon uses to calculate depreciation expense for purposes of showing the Company's income on the financial reports that it presents to its shareholders and reports to the Securities and Exchange Commission ("SEC").

Q. What regulations or principles govern Verizon's selection of these service lives?

A. To the extent there is regulation, it is that imposed by the SEC and it is presumably enforced by Verizon's independent auditors. However, neither the SEC nor the auditors participate in the selection of financial reporting lives. That is done internally within Verizon, which enjoys wide latitude in making the selection. The principles for this selection must conform to what are known as "Generally Accepted Accounting Principles" or "GAAP." Those principles govern the financial reporting of all publicly held companies.

Q. Are financial book lives biased in any way?

A. Yes. Financial book lives are governed by the GAAP principle of conservatism, which dictates that when alternative estimates are about equally likely, the less optimistic estimate, that is, the estimate that yields the lowest net income should

[4] Testimony of Anthony Flesch, page 4.

be used.[5] As noted in the Dictionary of Accounting Terms: "Conservatism holds that in financial reporting it is preferable to be pessimistic (understate) than optimistic (overstate) since there is less chance of financial readers being hurt by relying on prepared financial states."[6] Pursuant to this principle, GAAP dictates shorter rather than longer lives, as a prudent reaction to uncertainty.

Q. Has any major LEC conceded the conservatism inherent in financial books?

A. Yes. In the FCC's Prescription Simplification proceeding, one of Verizon Northwest predecessor companies, GTE, noted that the GAAP conservatism principle "prefers the understatement (versus overstatement) of net income and net assets where any potential measurement problems exist."[7] As noted earlier, the very nature of depreciation – specifically the requirement to predict future plant lives – makes it a challenge to measure with any precision or certainty.[8] GAAP, independent auditors and the SEC therefore might well prevent LECs from *understating* depreciation, since this would overstate net income and net assets. It is highly unlikely; however, that GAAP, or any financial auditor, would find that a telephone company (or any company, for that matter) had *overstated* its depreciation, since this would result in a conservative view of net income and net assets.

Q. Did the FCC agree with GTE and conclude that financial book depreciation

[5] Statement of Financial Accounting Concepts No. 2, Financial Accounting Standards Board, May 1980, at 95. Conservatism was also discussed in Accounting Principles Board Statement No. 4, October, 1970, which was rescinded in 1993. Since the Concepts Statements stand on their own, superseding APB Statement No. 4 has no impact on financial reporting.

[6] Dictionary of Accounting Terms, Copyright 2000 by Barron's Educational Services, Inc., at 92.

[7] Prescription Simplification, Comments of GTE Service Corporation and its Affiliated Domestic Telephone Operations Companies ("GTE"), March 10, 1993, at 14.

[8] In his discussion of stock option valuation, investor Warren Buffet noted: "It's far more problematic to calculate the useful life of machinery, a difficulty that makes the annual depreciation charge merely a guess." Washington Post, Tuesday, April 9, 2002.

should not be used for regulatory purposes?

A. Yes. In its October 1993 Order, the FCC agreed with GTE, stating:

> One of the primary purposes of GAAP is to ensure that a company does not present a misleading picture of its financial condition and operation results by, for example, overstating its asset values or overstating its earnings, which would mislead current and potential investors. GAAP is guided by the conservatism principle which holds, for example, that, when alternative expense amounts are acceptable, the alternative having the least favorable effect on net income should be used. Although conservatism is effective in protecting the interest of investors, it may not always serve the interest of ratepayers.[9]

The FCC again expressly rejected the use of financial book lives in its ` Universal Service Inputs Order. The FCC stated:

> We also agree with GSA's comments that the projected-life values currently used by LECs [Local Exchange Companies] for financial reporting purposes are inappropriate for use in the model. In addition, the commenters proposing these values have not explained why the values used for financial reporting purposes would also reflect economic depreciation. The depreciation values used in the LECs' financial reporting are intended to protect investors by erring on the side of conservative understatement of net assets, partially achieving this goal by erring on the side of over-depreciation. These preferences are not compatible with the accurate estimation of the cost of providing services that are supported by the federal high-cost mechanism. We, therefore, decline to adopt the proposed life values used by LECs for financial reporting purposes.[10]

The FCC also addressed this issue in response to a petition by the United States Telecom Association ("USTA").[11] In its 1999 USTA Order, the FCC reiterated its conclusion that conservatism "did not offer adequate protection for ratepayers

[9] Prescription Simplification, Report and Order, FCC 93-452, released October 20, 1993, ¶ 46.

[10] Universal Service Inputs Order, at 429 (footnote deleted).

[11] Forbearance from Depreciation Regulation of Price Cap Local Exchange Carriers, Petition for Forbearance of the United State Telephone Association, filed September 21, 1998.

in the case of depreciation accounting."[12] The Commission added:

> We are not persuaded that the role of the conservatism principle has changed or that we should change our previous decision.[13]

The GAAP conservatism principle has certainly not changed since 1999. As the Supreme Court has noted, "financial accounting has as its foundation the principle of conservatism."[14] If anything, the recent accounting scandals involving such companies such as Enron, and their "independent" auditors, have reinforced the instinct of the profession to adhere to the GAAP principle of conservatism. This principle, while vital to investors, precludes the use of financial book lives in TELRIC calculations.

Q. What do you conclude with respect to Verizon's proposal to use its financial reporting lives for purposes of regulatory ratemaking?

A. I conclude that these lives are altogether unsuitable for regulatory ratemaking because they reflect the principle of conservatism which translates into a bias toward understating what objectively should be the expected service lives of the respective categories of plant.

Q. If financial reporting lives are unsuitable for ratemaking purposes, what other indicators of service life are available to guide the Commission?

A. There are broadly two other sources from which the Commission can draw guidance in selecting plant lives to calculate depreciation rates for ratemaking purposes. The first is the evidence of past patterns of retirements, that is, the historical record of the service lives of each of the plant categories. The second is the range of service lives prescribed by the FCC for streamlined represcription.

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[12] United States Telephone Association's Petition for Forbearance from Depreciation Regulation of Price Cap Local Exchange Carriers, ASD 98-91, Memorandum Opinion and Order, FCC 99-397, released December 30, 1999 ("USTA Order").

[13] *Id.*

[14] *Shalala v. Guernsey Memorial Hospital*, 115 S.Ct. 1232 (1995).

Q. Please describe the first of these sources, historical life indications.

A. Verizon, like most of the larger local exchange companies, maintains records of the date of placement of almost all of its units of long-lived plants. By examining the experienced life of retired plant, the Company can calculate with some precision not only the average life of its plant, but the pattern of retirements according to the respective Iowa curves. Retrospectively, at least, these "actuarial" studies provide very specific indications of service life and mortality patterns.

Q. Are these historical life indications useful in setting service lives for ratemaking purposes?

A. For some accounts, such as telephone poles, where the factors determining service life are relatively unchanging, these studies are quite useful. However, the difficulty with most plant accounts is that the use of these retrospective studies as guides to future service lives implicitly assumes that the future will look like the past. As Verizon witness Flesch accurately points out, this assumption is not likely to be accurate in the case of many categories of telephone plant. The dynamic changes in technology and the market for telecommunications services leads to the general conclusion that the future will not look like the past. For many categories of telephone plant, it is likely that the lives of plant currently in service will be shorter than the lives of previously retired plant.

Q. Please describe the FCC's plant lives.

A. Until recently, the FCC reviewed full depreciation studies submitted by each of the larger telephone companies for each state on a triennial basis.[15] The projection lives prescribed by the FCC were the result of its analysis of these studies in consultation with state regulatory commission staffs.

[15] Interim updates are also performed.

The FCC's service life selections were not based solely on retrospective studies of past retirements. Rather, the lives prescribed by the FCC were, and continue to be, forward-looking. As the FCC recently noted, in 1980 it "departed from its previous practice of relying largely on historical experience to project equipment lives and began to rely on analysis of company plans, technological developments, and other future-oriented studies."[16]

In 1995, the FCC prescribed ranges of projection lives for each plant category. Carriers could select plant lives within these ranges for prescription on a streamlined basis. The FCC stated that these ranges were based upon "statistical studies of the most recently prescribed factors. These statistical studies required detailed analysis of each carrier's most recent retirement patterns, the carriers' plans, and the current technological developments and trends."[17] In 1999, the FCC completed a review of these ranges and updated them as appropriate. [18] The FCC stated:

> These ranges can be relied upon by Federal and state regulatory commissions for determining the appropriate depreciation factors for use in establishing high cost support and interconnection and UNE prices.[19]

Indeed, the FCC further stated:

> In adopting a forward-looking mechanism for high-cost support, we found that depreciation expense calculations based on the Commission's prescribed projection lives and salvage factors

[16] 1998 Biennial Regulatory Review-Review of Depreciation Requirements for Incumbent Local Exchange Carriers, CC Docket 98-137, Report and Order, FCC 99-397, released December 30, 1999 ("1999 Update"), ¶ 5.

[17] Simplification of the Depreciation Prescription Process, CC Docket No. 92-296 ("Prescription Simplification" proceeding), Third Report and Order, FCC 95-181, released May 4, 1995, ¶ 11.

[18] 1999 Update, ¶ 14.

[19] *Id.*, ¶ 34.

represent the *best forward-looking estimates* of depreciation lives and net salvage percentages.[20]

Q. How do the FCC's life ranges compare with historical life indications?

A. Exhibit_____ (CWK-4) compares historical life indications with the FCC's ranges. There are two columns for the historical data. Column (a), which covers only the cable and cable support (poles and conduit) categories, is labeled "observed life of retirements." These data are drawn from workpapers submitted by Verizon in connection with its implementation of Statement of Financial Accounting Standards No. 143 ("SFAS 143"), which will be discussed in more detail later. Column (b) is taken from the Company's depreciation study. It shows life indications of plant retired during the three years 2001 through 2003. In some cases, there were no retirements in some of these years, so the data reflect only one or two of these years. Where retirement data are so thin, the indications cannot be considered to have much significance.

Columns (c) and (d) show the FCC life ranges. The table demonstrates that Verizon's current life indications for the two largest central office categories, digital switching and circuit equipment, are toward the low end of the FCC life ranges. For the metallic cable accounts, the FCC life ranges are shorter than either the observed life of retired plant or the life indications of the retirement activity during the period 2001-2003. The 2001-2003 life indications for the fiber cable accounts are also much higher than the FCC ranges. The observed age of retirements is lower, but that is to be expected of a technology that is little more than 20 years old.

[20] USTA Order, ¶61 (emphasis added).

Q. What service lives has Verizon been prescribed for its FCC depreciation?

A. Column (e) shows the lives prescribed by the FCC for Verizon. For purposes of reporting interstate expenses and balance sheet data to the FCC, Verizon has been prescribed the low end of the FCC range in most cases. The most notable exception is digital switching equipment, where the current FCC life is 13.5 years and the low end of the FCC range is 12 years.

Q. How are service lives determined for purposes of intrastate depreciation reporting?

A. On a periodic basis, Verizon submits a depreciation study to the Washington Utilities & Transportation Commission ("WUTC"). The Commission weighs the evidence presented and prescribes the depreciation parameters and consequent depreciation rates for intrastate regulatory accounting purposes. The last represcription occurred in Docket UT-992009 and became effective on January 1, 2000. According to Mr. Flesch, this represcription resulted in an increase in intrastate depreciation expense of $16.1 million.[21]

Q. How do the WUTC service lives compare with those used for FCC accounting?

A. The approved WUTC service lives are presented in column (f) of Exhibit_____ (CWK-4). For most accounts, the WUTC and the FCC lives are the same, but for some of the major accounts, the WUTC prescribed lives are longer. For example, the WUTC digital switching life is 16 years, while the FCC life is 13.5 years. The WUTC life for circuit equipment is 11.4 years, compared with 11 years for FCC reporting purposes. The WUTC life for the poles account is 28 years, as opposed to

[21] Testimony of Anthony Flesch, page 6.

25 years for FCC accounting. The WUTC lives for two metallic cable accounts are also longer than the FCC lives: 21 years vs. 20 years for metallic aerial cable, and 23 vs. 20 years for buried metallic cables.

Q. How do Verizon's proposed service lives compare with those currently used for FCC and WUTC reporting purposes?

A. Column (g) of Exhibit_____ (CWK-4) shows the service lives proposed by Verizon. As noted, these are the service lives that the Company uses for financial reporting. Verizon proposes to shorten the service lives of virtually all of the major plant accounts. Buildings, previously at 43 years, are to be reduced to 25 years. Digital switching is reduced to 12 years from 13.5 years for FCC and 16 years for WUTC accounting. The circuit equipment life is reduced to 9 years from 11.0 years for FCC and 11.4 years for WUTC accounting.

The greatest reductions are in the cable accounts, where the life of every account is reduced by two to eight years. As a result, all of the proposed cable lives are below the low end of the FCC service life ranges.

Q. What service lives do you propose on behalf of Public Counsel?

A. The service lives that I recommend are presented in column (h), the final column of Exhibit_____ (CWK-4). For ease of reference, I have **boldfaced** those instances where my recommendation departs from the Company's proposal. Except for digital switching, I recommend accepting Verizon's service lives so long as they remain within the range of lives prescribed by the FCC in its Represcription Simplification Orders. For digital switching, and the accounts where Verizon's proposals are outside of the FCC's range, I recommend the lives prescribed by the FCC. The principal import of this recommendation is that it results in my

rejection of the proposed reductions in the digital switching, circuit equipment and cable plant accounts. I also reject the proposed reduction in the buildings account from 43 to 25 years.

Q. Why have you rejected Verizon's proposed reduction in the buildings account?

A. Verizon has not presented a shred of evidence to support this reduction. The service life indications from its actuarial studies of this account are, with the exception of a single year, well above 25 years, and the three-year band indications for the most recent five intervals are, respectively, 54.1, 50.5, 50.0, 31.0 and 37.9 years. Buildings are not subject to the sort of technological or market obsolescence that affects a number of the other accounts. For this reason, I recommend retention of the current 43 years as the projection life for Account 2121 – Buildings.

Q. How do your recommended service lives compare with those currently in effect?

A. I have recommended service life reductions for the Motor Vehicles account from 12 to 8 years, the computers account from 8 to 6 years, the digital switching account from 16 to 13.5 years, the circuit equipment account from 11.4 to 11.0 years, and the metallic buried cable account from 23 to 20 years. The only lengthened account life is that of the poles account, where actuarial life indications support an increase from 28 to 30 years.

Q. Mr. Flesch focuses considerable attention on the depreciation reserve levels. Have you studied the trends in depreciation reserve?

A. Yes. Exhibit_____ (CWK-5) shows the history of all of Verizon's plant and of each of its eight largest plant accounts. Each page shows the beginning and ending year account balances from 1992 through 2003. It

shows the additions and retirements and the annual levels of reserve. Columns (j), (k) and (l) present the additions rate, the retirements rate, and the depreciation rate for each year. The final column shows the percent of the depreciation reserve relative to the account balance in each year.

Several important relationships should be noted. Quite obviously, whenever the additions rate exceeds the retirement rate, the account grows. The adequacy of the depreciation rate, however, is indicated by its relationship to the retirements rate. When the depreciation rate is higher than the retirements rate, then there is an implicit expectation that retirements in the future will increase relative to the present. Depending on the level of the additions rate, this condition may result in an increase in the depreciation reserve percentage. Only when the depreciation rate falls below the retirements rate is there cause for concern, because if this condition continues, the Company may not be able to recover all of its capital.

Q. Mr. Flesch emphasizes the importance of the level of depreciation reserves. Is there any way to measure the "ideal" depreciation reserve?

A. It is possible to measure the "theoretical reserve," which is the reserve that should exist if all current assumptions about service life, survivor curve and net salvage are accurate. The difference between that reserve and the book reserve will indicate the adequacy of the reserve level. If the theoretical reserve is more than the actual reserve, then past depreciation accruals have not been adequate to recover the consumption of capital assumed by the depreciation parameters. Conversely, if the theoretical reserve is less than the book reserve, then past depreciation has been more

than adequate to recapture capital as it was consumed over the plant's service life.

The difficulty with this measurement is that it puts the cart before the horse. It tests the adequacy of the reserve relative to a set of assumed depreciation parameters. It does not indicate the propriety of those parameters.

Mr. Flesch asserts that the Company's Washington intrastate reserve levels are too low. Whether that is the case or not depends entirely on the assumptions one makes regarding service life, survivor curve and net salvage. If his service life assumptions are correct, then he may have a point. But as I have pointed out, his financial reporting service lives are no doubt conservative, that is, biased to the low side. With more realistic service lives, the level of reserves does not appear at all inadequate.

Q. What can you discern from the data In Exhibit ____ (CWK-5)?

A. Page 1 of Exhibit_____ (CWK-5) shows that Verizon's depreciation reserve ratio overall has increased steadily over the past decade. The 2003 reserve ratio stood at 53.1 percent, indicating that the service life of Verizons' plant, adjusted for net salvage, has now more than half expired. There is nothing on this page to suggest that depreciation has been inadequate to recover the Company's capital.

The subsequent pages show the same pattern of rapidly increasing depreciation reserve percentages. As one would expect, the reserve ratios for the metallic cable accounts are much higher than those for the fiber accounts. Each of the three metallic cable accounts displays a reserve ratio at or above 50 percent.

The only account which might justify some concern is the digital switching account. The reserve ratio for this account fell during several annual intervals when the retirement's rate exceeded the depreciation rate. This condition partly accounts for my recommendation that the service life of this account be shortened from 16 to 13.5 years.

Q. Mr. Flesch expresses concern that the Washington intrastate reserve levels are lower than those in the FCC books and in other states. Is this cause for concern?

A. No. The FCC reserve is higher for two reasons. First, several of the FCC lives have been shorter than those prescribed by the WUTC. Second, the FCC instituted ELG accounting in 1981, whereas the WUTC did not introduce this form of depreciation until 1995. Since the effect of ELG is to accelerate the depreciation of newly installed vintages of plant, the earlier introduction of this procedure by the FCC resulted in an earlier buildup of depreciation reserve. That shows up in Mr. Flesch's comparisons.

I do no know when the other states and telephone companies referred to by Mr. Flesch instituted ELG, but I suspect that most of them adopted this procedure at the same time as the FCC. All other things being equal, that factor would account for the higher depreciation reserve levels in those jurisdictions.

Q. Should the Commission adjust depreciation for its later adoption of ELG?

A. It already does. The remaining life technique automatically adjusts for any perceived shortfall in depreciation reserve. As discussed earlier, this methodology depreciates the remaining net investment, that is, gross plant less reserve, over the remaining life years of each account. To the extent

that ELG has left any shortfall in the depreciation reserve, that shortfall is being recaptured in the form of higher depreciation rates. No further adjustment is required.

Q. In his Exhibit (AJFf-5) Mr. Flesch provides "benchmark" comparisons with other Verizon companies, AT&T, Worldcom/MCI and CATV operators. Are these comparisons relevant?

A. No. The Verizon lives are financial reporting lives which, as I have discussed, are biased toward overstatement of depreciation and hence understatement of service lives. The same is true of the AT&T, Worldcom/MCI and CATV lives. These financial reporting lives are not appropriate for cost-based ratemaking. Such lives may protect the interests of investors, but they are not appropriate for setting intrastate telephone rates.

Q. When it filed its depreciation study, Verizon also included a study of future service lives by Technology Futures, Inc. ("TFI"). Mr. Flesch refers to the life ranges developed by TFI. Should the Commission consider this evidence?

A. No. TFI's recommendations are based upon studies sponsored by the Telecommunications Technology Forecasting Group ("TTFG"), an industry association of major incumbent LECs in the United States and Canada.[22] TFI's studies have been used frequently by incumbent local exchange carriers ("LECs") to support shorter lives in regulatory depreciation proceedings. TFI's president Dr. Lawrence Vanston, has testified on behalf of GTE, Rochester Telephone Corporation, Southern New England Telephone, and various Regional Bell Operating Companies ("RBOCs") in the U.S. and on behalf of Bell Canada and the other Stentor Companies in Canada.

[22] L.K. Vanston, "The Local Exchange Network in 2015," Technology Futures (2001) ("2015 TFI Study"), at v.

TFI develops its life estimates largely through “substitution analysis”, which attempts to forecast the pattern by which new technology will replace old technology. TFI predicts an "avalanche" of retirements in various accounts based upon the application of past retirement patterns of obsolete technologies to future circumstances. This technique relies, for example, on retirement patterns such as those describing the replacement of crossbar switches in the 1980's.

TFI’s recommended lives are based upon the premise that the incumbent LECs will replace their narrowband telecommunications networks with broadband integrated networks capable of providing both telecommunications services and video services. According to TFI, Fiber In The Loop ("FITL") will bring broadband to the home, displacing copper plant. This will result in the upgrading of transmission systems, replacing existing circuit equipment. Also, Asynchronous Transfer Mode and Internet Protocol (“ATM/IP”) switching equipment will provide a broadband switching capability replacing today's digital switches.

The substitution analyses TFI performs with respect to these forecasted technology developments appear quite sophisticated, but the lives generated by them are only as correct as TFI’s assumptions. Substitution analysis merely provides a convenient method for plotting by year the growth of new technology assuming the inputs to one’s formula are correct. As the Supreme Court has explained “[t]he calculations [of depreciation expenses] are mathematical but the predictions underlying them are essentially matters of opinion.”[23]

Substitution analysis is not even relevant unless it is known that a new technology will replace, not supplement, an older technology. For example,

[23] Lindheimer v. Illinois Bell Tel. Co., 292 U.S. 151, 169, 54 S.Ct. 658, 78 L.Ed. 1182 (1934).

ATM/IP switches are generally being deployed as a supplemental technology to digital switches, not as a replacement for them. As such, substitution analysis is of no relevance.

Indeed, even when a substitution has started, it does not necessarily follow that it will finish according to pattern. It appeared at one point, for example, that nuclear fuel would replace fossil fuel in electrical generation in this country. The use of substitution formulas in that case would have resulted in dramatically incorrect predictions.

Even if a full substitution is likely, the formula requires the user to predict both the rate of substitution and the point at which the replacement technology will reach 50 percent of the universe of equipment being studied.[24] In other words, the analyst must insert as an input the average remaining life of the old technology, since this is essentially the 50 percent level of the new technology. Although the substitution methodology allows the preparation and presentation of impressive looking charts and tables, it is merely charting the assumptions made by the analyst. This methodology's outputs at the hands of TFI are no more credible than TFI's inputs.

As noted above, TFI assumes that fiber cable will replace copper cable in both the feeder and distribution portions of the local loop.

Exhibit_____ (CWK-6) provides an analysis of TFI's fiber in the feeder estimates. Page 1 of this analysis shows the percent of fiber in the feeder to working lives predicted by TFI in its 1988, 1994, 1997 and 2003 industry-wide

[24] The formula can also be used by selecting the rate of substitution and the 1 percent level.

studies.[25] In 1988, TFI predicted a substitution of 78.54 percent by 2001; in 1994 its prediction dropped to 45.9 percent; in 1997 its prediction dropped to 34.6 percent; and in 2003 its prediction dropped to 32.7 percent. Page 2 graphically portrays this data and demonstrates how TFI's fiber in the feeder substitution rate estimates have lengthened as actual data became available.

Exhibit_____ (CWK-7) provides a similar analysis of TFI's fiber in the distribution industry estimates. Page 1 of this analysis shows TFI's predictions of the percent of fiber in the distribution network to household lines in its 1994, 1997 and 2003 industry-wide studies.[26] In 1994, TFI predicted there would be a substitution of 42.4 percent by 2003; in 1997 its prediction dropped to 16.8 percent, and its latest prediction is .5 percent. Page 2 graphically portrays this data and again demonstrates the lengthening of TFI's substitution rate estimates over time.

Although TFI's forecasts have been provided to the FCC for over a decade, they have not been relied upon in the selection of plant projection lives. The FCC has stated:

> Given the significant uncertainty that even TFI acknowledges exists in forecasting plant replacement over the next fifteen years, we do not find that the carriers that advocate adoption of TFI's much shorter projection lives have met their burden. Depreciation reserves are at 52 percent, an all-time high, and have increased for each of the past five years. There is no evidence that the large wave of plant replacements forecast by TFI, which should result in increased retirements, has begun or is about to begin.

[25] Technology Substitution in Transmission Facilities for Local Telecommunications, Lawrence K. Vanston and Ralph C. Lenz (1988), Exhibit 4.10; Transforming the Local Exchange Network: Analyses and Forecasts and Technology Change, Lawrence K. Vanston (1994) ("1994 TFI Study"), Exhibit 3.9; Transforming the Local Exchange Network: Analyses and Forecasts and Technology Change, 2nd Edition, Lawrence K. Vanston, Ray L. Hodges, and Adrian J. Poitras (1997) ("1997 TFI Study"), Exhibit 3.9; Transforming the Local Exchange Network: Review & Update 2003, Lawrence K. Vanston, Ray L. Hodges (2003) ("2003 TFI Study"), Table 7.1.

[26] 1994 TFI Study, Exhibit 3.15; 1997 TFI Study, Exhibit 3.37; 2002 TFI Study, Table 7.4.

* * *

> We conclude, therefore, that the TFI study fails to establish convincingly that current projection lives are inadequate.[27]

In Washington State, both GTE Northwest and U S West have previously presented depreciation petitions based on TFI studies. Dr. Vanston testified in the GTE docket in support of the TFI approach. On both occasions the Commission rejected the TFI methodology, finding it a flawed and inadequate basis for revising depreciation lives. *In the Matter of the Petition of GTE Northwest Incorporated for Depreciation Accounting Changes,* UT-961632, Fourth Supplemental Order Denying Petition, p. 34, ¶9; *In the Matter of the Petition of U S West Communicatsions Inc. for Depreciation Accounting Changes*, UT-940641, Fifth Supplemental Order on Remand, p.22.

While TFI's discussions concerning the future of technology are interesting, the lives it has recommended have been consistently too short. As a result, TFI's recommendations do not provide an appropriate benchmark for the lives proposed by Verizon.

VI. NET SALVAGE

Q. How has Verizon developed its net salvage ratios?

A. Verizon has followed the traditional procedure of comparing the original cost of retired plant with the net of salvage proceeds and cost to remove that plant. This comparison, usually for a number of years, yields a ratio that is then used to reduce (for positive salvage) or increase (for negative salvage) the total amount to be recovered over the plant's service life.

Q. Is net salvage a significant factor in depreciation?

A. Yes, particularly for "outside plant." Verizon's proposed net salvage ratio for the poles account, for example, is minus 150 percent. This means that for every

[27] FCC, 1998 Biennial Regulatory Review-Review of Depreciation Requirements for Incumbent Local Exchange Carriers, CC Docket 98-137, Report and Order, FCC 99-397 (rel. December 30, 1999) ("1999 Update") at ¶ 16 (footnotes deleted).

dollar of capital in telephone poles recovered, Verizon seeks to recover $1.50 as an advance against the cost of removing those telephone poles. The proposed negative salvage ratios for aerial and underground metallic cable, two very large accounts, are 27 and 22 percent respectively. Overall, I estimate that negative net salvage accounts for about $14 million in annual depreciation expense.

Q. Is the procedure for treating net salvage that you have described consistent with financial reporting and GAAP?

A. No. It is notable that Verizon seeks to use financial reporting lives but ignores the financial reporting treatment of negative salvage, that is, removal costs. In June 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 143, *Accounting for Asset Retirement Obligations.* Under this standard, if the Company has an actual legal obligation to incur a future removal cost, then the net present value of that amount will be capitalized as part of the cost of the asset and depreciated over the asset's life. If such a legal obligation does not exist, then no provision will be made for estimated future cost of removal. Thus, under GAAP, there can be no accruals for future net salvage that does not result from a legal obligation.

For financial reporting, the telephone companies have acknowledged that their prior use of negative salvage values has inflated their depreciation costs by *billions* of dollars. These companies are reducing depreciation rates and recording significant gains as a result of their prior inclusion of cost of removal allowances in depreciation rates.

Verizon is no exception. In its September 2002 Form 10Q to the SEC, Verizon reported as follows:

> Effective January 1, 2003, we adopted SFAS No. 143, "Accounting for Asset Retirement Obligations." This statement provides the accounting for the cost of legal obligations associated with the retirement of long-lived assets. SFAS No. 143 requires

> that companies recognize the fair value of a liability for asset retirement obligations in the period in which the obligations are incurred and capitalize that amount as part of the book value of the long-lived asset. We have determined that Verizon does not have a material legal obligation to remove long-lived assets as described by this statement. However, prior to the adoption of SFAS No. 143, we included estimated removal costs in our group depreciation models. These costs have increased depreciation expense and accumulated depreciation for future removal costs for existing assets. These removal costs were recorded as a reduction to accumulated depreciation when the assets were retired and removal costs were incurred.
>
> For some assets, such as telephone poles, the removal costs exceeded salvage value. Under the provisions of SFAS No. 143, we are required to exclude costs of removal from our depreciation rates for assets for which the removal costs exceed salvage. Accordingly, in connection with the initial adoption of this standard on January 1, 2003, we have reversed accrued costs of removal in excess of salvage from our accumulated depreciation accounts for these assets. *The adjustment was recorded as a cumulative effect of an accounting change, resulting in the recognition of a gain of approximately $3,499 million ($2,150 million after-tax).* Effective January 1, 2003, we began expensing costs of removal in excess of salvage for these assets as incurred. The impact of this change in accounting will result in a decrease in depreciation expense and an increase in cost of services and sales.[28]

Q. If the Commission were to follow GAAP, how would it treat net salvage?

A. If the Commission were to follow GAAP, it would immediately eliminate all future accruals for removal costs. Henceforth those costs would be expensed as incurred. The only exception would be removal costs for which there is a legal obligation, in which case they would be established as a liability pursuant to SFAS 143. The money already collected from ratepayers should then be amortized back to them over a reasonable period of time.

[28] Verizon Communications Inc., September 30, 2002 Form 10-Q report, page 5, Notes to Condensed Consolidated Financial Statements, 2. Accounting Changes, Asset Retirement Obligations (emphasis added).

Q. How much would this amortization be annually?

A. That, of course, depends on the amortization period. Verizon indicates that its adjustment to the depreciation reserve for Washington State operations is $63,138,519.[29] If the intrastate portion is 74.923 percent,[30] then the amount owed back to Washington intrastate ratepayers is approximately $47.3 million. Over a five year period, the amortization to ratepayers would be approximately $9.5 million annually.

Q. Would this treatment be consistent with FCC practice?

A. No. While it would be consistent with GAAP, it would not be consistent with the FCC's policy regarding SFAS 143. On December 20, 2002, the FCC determined that it would continue with its traditional approach of including net salvage in depreciation even though SFAS 143 now prohibits such inclusion. [31]

Q. Please describe the FCC's traditional approach.

A. The FCC's traditional approach is to compare the original cost of plant retired over the years with the net salvage associated with the retirement of that plant. The net salvage factor is thus the result of a fraction, the denominator of which is original cost, the numerator of which is net salvage. This procedure is intended to produce a projection of the future net salvage that will be incurred when present plant is retired.

Q. Assuming that the Commission follows the FCC lead and continues to collect removal costs through depreciation, are the removal cost ratios proposed by Verizon appropriate?

[29] Verizon response to PC-28, Attachment PC 28.2.

[30] Based on the ratio of $48.4 million intrastate depreciation expense to $64.6 million total state expense in the testimony of Anthony Flesch, page 4.

[31] The FCC stated that it's "rules account for the cost of asset retirements as part of the net salvage estimates included in the calculation of depreciation rates …", and "the Commission's accounting rules and prescribed depreciation rates include the cost of plant removal in depreciation whether or not an actual obligation exists." FCC Docket WCB/Pricing 02-35, December 20, 2002.

A. No, they are not. From a purely computational standpoint, Verizon's procedure is flawed. Verizon follows the FCC procedure of comparing the original cost of the plant removed over the years with the cost of removing that plant net of salvage proceeds. The result is very large fractions (150/100 in the case of telephone poles). That is because the original costs are quite small relative to the current costs incurred in removing or dismantling plant.

To illustrate, the Company's SFAS 143 workpapers reveal that the average age of recently retired poles was 55 years.[32] If so, then the average year of placement of a telephone pole being retired during the year 2003 was 1948. In 1948, the dollar was worth 7.6 times its value in 2003, as measured by the Consumer Price Index.[33] If 1948 original cost dollars are used as the denominator of the net salvage ratio, and 2003 removal costs are the numerator, the fraction is quite large, 150/100 in this case.

The rationale behind this calculation is that by the time the telephone poles currently being placed are removed from service, the dollar will have depreciated at the same rate it has in the past. Thus, the ratio method assumes that Verizon's cost of removal will have inflated to the point where, in the case of poles, it amounts to 150 percent of present pole installation costs.

The fallacy of this approach is that it presumes that the change in the value of the dollar in the future will match that in the past. As noted, the dollar has dropped in value by 7.6 times since 1948, which implies an average annual rate of inflation during the past 55 years of 3.75 percent. Only if future inflation equals

[32] Response to PC Data Request No. 28, Attachment PC 28.2, column o.

[33] 1948 Consumer Price Index = 24.1; 2003 CPI = 184.0; 184.0/24.1 = 7.63. Source: Bureau of Labor Statistics Web Site.

the same 3.75 percent will Verizon's 150 percent net salvage ratio for poles be accurate.

The difficulty, of course, is that inflation during the past 10 years has been far less than 3.75 percent. More important, it is predicted to be less than this level for the next ten years. Specifically, the Congressional Budget Office forecasts the Consumer Price Index to increase at a rate of only 2.2 percent through the year 2014. If this rate of inflation continues, then Verizon's net salvage ratios, which implicitly assume 3.75 percent inflation, overstate future removal costs by about 70 percent (3.75/2.2).

Q. Can you correct for this overstatement of future net salvage cost?

A. Yes. Exhibit _____ (CWK-8), I restate all of Verizon's net removal cost factors as though historical inflation had been at the 2.2 percent CPI increase projected by the CBO through 2014. I do this by back-casting the 2003 CPI index of 184.0 at a rate of 2.2 percent annually to the year when the average retired dollar plant was placed. I then compare that restated CPI to the actual CPI at that time and inflate the denominator of the net salvage fraction (original cost of retired plant) by the difference. I do the same adjustment for the net salvage costs, restating them as though historical inflation had been 2.2 percent. However, since these costs were incurred much later than the original placement costs of the plant retired, the adjustments are not nearly as large.

Exhibit _____ (CWK-8) contains a separate page for each of the plant accounts incurring significant net salvage costs. The restated original costs are set forth in column G of each page, and the restated net removal costs are shown in column N. A comparison of the sum of column G with column N provides the restated net salvage ratios in column O.

Q. What net salvage ratios do you recommend for Verizon?

A. Exhibit _____ (CWK-9) shows the present FCC and WUTC net salvage ratios, the ratios proposed by Verizon, and those that I recommend based principally on the analysis performed in Exhibit _____ (CWK-8). The most dramatic reduction is in the poles ratio, which I recommend be -54 percent in lieu of the Company's proposed -150 percent. Other important reductions are in the metallic aerial cable ratio, which I proposed be reduced to -9 percent from the Company's proposed -27 percent, and in the metallic underground cable ratio, where I recommend -17 percent instead of the Company's -22 percent. The data reveal negligible negative net salvage in the buried cable accounts, and I find justification for only a -4 percent negative net salvage ratio for the conduit account.

VII. CONCLUSION – TOTAL EFFECT ON DEPRECIATION

Q. What depreciation rates do you recommend for Verizon's Intrastate Washington plant?

A. Exhibit ___ (CWK-10) develops my recommended depreciation rates if the Commission adopts my proposed lives and uses SFAS accounting to treat removal costs. Exhibit ___ (CWK-11) develops my recommended depreciation rates if the Commission adopts my proposed lives and future net salvage percents.

Q. What is the composite effect of your recommended service lives and net salvage ratios on Verizon's depreciation rates and accruals?

A. My proposed lives and SFAS accounting for removal costs results in $4.3 million more intrastate depreciation accruals than under present WUTC accrual rates. The $9.5 million credit resulting from the amortization of past accruals over 5 years, therefore, would result in a net decrease in accruals of $5.2 million.

My proposed lives and future net salvage percents results in $ 5.5 million more intrastate depreciation accruals than under present WUTC accrual rates.

Q. Does this conclude your testimony?

A. Yes it does.