Exhibit No. ___ (JHV-4T)
Docket No. UT-023003

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Review of Unbundled Loop and Switching Rates; the Deaveraged Zone Rate Structure; and Unbundled Network Elements, Transport, and Termination	))))))	DOCKET NO. UT-023003

REPLY TESTIMONY OF DR. JAMES H. VANDER WEIDE ON BEHALF OF VERIZON NORTHWEST INC.

COST OF CAPITAL

PUBLIC VERSION

April 20, 2004

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I. INTRODUCTION

Q. WHAT IS YOUR NAME AND BUSINESS ADDRESS?

A. My name is James H. Vander Weide. I am Research Professor of Finance and Economics at the Fuqua School of Business of Duke University. I am also President of Financial Strategy Associates, a firm that provides strategic and financial consulting services to business clients. My business address is 3606 Stoneybrook Drive, Durham, North Carolina.

Q. ARE YOU THE SAME JAMES H. VANDER WEIDE THAT PREVIOUSLY PROVIDED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR RESPONSIVE TESTIMONY?

A. I have been asked by Verizon Northwest Inc. ("Verizon NW") to review the direct testimony of Mr. Thomas L. Spinks on behalf of the Staff of the Washington Utilities and Transportation Commission and to respond to his recommended cost of capital for use in UNE cost studies in this proceeding. I note that Dr. Mark T. Bryant and Dr. Robert T. Mercer on behalf of AT&T and MCI also use the same cost of capital that Mr. Spinks is recommending. All of my testimony regarding Mr. Spinks's recommendation also applies to the cost of capital input recommendations of Dr. Bryant and Dr. Mercer.

II. REPLY TO MR. SPINKS'S RECOMMENDATION

Q. WHAT IS MR. SPINKS'S RECOMMENDED COST OF CAPITAL FOR USE IN UNE COST STUDIES IN THIS PROCEEDING?

A. Mr. Spinks recommends a 9.76% cost of capital for use in UNE cost studies in this proceeding. He bases his recommendation on the Commission's finding in Docket No. UT-960371 that the "authorized rate of return should be used in forward-looking cost studies," and on the Commission's finding in Docket No. UT-931591 that Verizon NW (then GTE-NW) should be allowed to earn a 9.76% rate of return on the book value of its jurisdictional rate base in Washington.

Q. WHEN WERE THE ORDERS IN DOCKET NOS. UT-960371 AND UT-931591 ISSUED?

A. The Order in Docket No. UT-960371 was issued on May 11, 1998; and the Order in Docket No. UT-931591 was issued December 21, 1994.

Q. DO YOU AGREE WITH THE COMMISSION'S DECISION IN DOCKET NO. UT-960371 THAT THE "AUTHORIZED RATE OF RETURN SHOULD BE USED AS THE COST OF CAPITAL INPUT IN FORWARD-LOOKING COST STUDIES"?

A. No. Verizon NW's authorized rate of return was established in a 1994 rate of return proceeding that was initiated for the purpose of setting Verizon NW's allowed rate of return for retail services. Verizon NW's retail services are regulated under rate base rate of return regulation, while Verizon NW's wholesale, or UNE, services are regulated under the FCC's TELRIC standard. Verizon NW faces considerably greater risk that it will not earn its cost of capital under the TELRIC standard than under traditional rate base rate of return regulation. In addition, Verizon NW currently faces substantially greater risk from competition and technology substitution than it did when its authorized rate of return was established in 1994.

Q. WHAT IS THE BASIC ECONOMIC PRINCIPLE UNDERLYING RATE OF RETURN REGULATION?

A. Rate of return regulation is based on the principle that rates should reflect the *historical cost* of providing service. Under this principle, the regulated company, in theory, is given an opportunity to recover its actual operating expenses and to earn a fair rate of return on the historical cost of its rate base.

Q. DOES THE REGULATED COMPANY SUFFER AN ECONOMIC LOSS UNDER RATE OF RETURN REGULATION WHEN NEW TECHNOLOGIES ALLOW NEW TELECOMMUNICATIONS NETWORKS TO BE BUILT AT A LOWER COST THAN THE REGULATED COMPANY'S HISTORICAL COST?

A. No. Regardless of the cost efficiencies of new technologies, under rate of return regulation, the regulated company, in theory, is still allowed to earn a fair rate of return on the embedded or historical cost of its existing plant and equipment.

Q. WHAT ARE THE BASIC ECONOMIC PRINCIPLES UNDERLYING THE FCC'S TELRIC STANDARD?

A. The FCC has determined that rates for unbundled network elements should satisfy four basic economic principles. Specifically, UNE rates should: (1) be based on forward-looking economic costs, not embedded or accounting costs; (2) approximate the rates the incumbent LEC would be able to charge in a competitive market for UNEs; (3) provide correct economic signals for the investment decisions of both competitive and incumbent local exchange carriers; and (4) provide the incumbent LEC an opportunity to recover its forward-looking economic cost of providing UNEs.

Q. IS THE USE OF VERIZON NW'S "AUTHORIZED RATE OF RETURN" AS THE COST OF CAPITAL INPUT IN UNE COST STUDIES CONSISTENT WITH THE PRINCIPLE THAT UNE RATES SHOULD BE BASED ON FORWARD-LOOKING ECONOMIC COSTS?

A. No. The use of Verizon NW's authorized rate of return as the cost of capital input in UNE cost studies violates the principle that UNE rates should be based on forward-looking economic costs, not embedded or accounting costs, because Verizon NW's authorized rate of return is calculated from Verizon NW's embedded cost of debt and the percentages of debt and equity in Verizon NW's regulatory book value capital structure. Verizon NW's embedded cost of debt and book value capital structure necessarily reflect historical, embedded, or accounting costs, not forward-looking economic costs. As the FCC states: "Embedded costs are the costs that the incumbent LECs carry on their accounting books that reflect historical purchase prices, regulatory depreciation rates, system configurations, and operating procedures."[1]

Q. HOW CAN THE COMMISSION ESTIMATE THE COST OF DEBT AND CAPITAL STRUCTURE COMPONENTS OF THE UNE COST OF CAPITAL TO

[1] First Report and Order, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 11 FCC Rcd 15499 ¶ 632 (1996).

BE CONSISTENT WITH THE FCC'S FORWARD-LOOKING ECONOMIC COST PRINCIPLE?

A. To be consistent with the FCC's forward-looking economic cost principle, the cost of debt and capital structure components of the UNE cost of capital must be based on market values, not book values. Market values are necessarily forward looking because investors look only to the future in estimating the amounts they are willing to pay for stock and bond investments. In contrast, book values are necessarily based on historical costs because basic accounting principles require that the values shown on the company's books reflect historical costs.

Q. YOU MENTIONED THAT UNE RATES ARE INTENDED TO APPROXIMATE THE RATES THE INCUMBENT LEC WOULD BE ABLE TO CHARGE IN A COMPETITIVE MARKET FOR UNES. DOES THE FCC'S COMPETITIVE MARKET PRINCIPLE HAVE ANY IMPLICATIONS FOR MEASURING THE COST OF CAPITAL INPUT FOR UNE COST STUDIES?

A. Yes. UNE rates can only approximate the rates the incumbent LEC would be able to charge in a competitive market for UNEs if the cost of capital input in UNE cost studies is based on the assumption that ILECs operate in a market with full facilities-based competition. Thus, the competitive market principle implies that the cost of capital input in UNE cost studies must be measured under the *assumption* that Verizon NW operates in fully competitive markets.

Q. HAS THE FCC RECOGNIZED THAT THE COST OF CAPITAL INPUT IN UNE COST STUDIES MUST REFLECT THE RISKS OF A MARKET WITH FULL FACILITIES-BASED COMPETITION?

A. Yes. For example, in ¶ 680 of the *Triennial Review Order*, the FCC stated:

> First, we clarify that a TELRIC-based cost of capital should reflect the risks of a competitive market. The objective of TELRIC is to establish a price that replicates the price that would exist in a market in which there is facilities-based competition. In this type of competitive market, all facilities-based carriers would face the risk of losing customers to other facilities-based carriers, and that risk should be reflected in TELRIC prices.[2]

Q. DID THE FCC EXPLAIN WHY A TELRIC-BASED COST OF CAPITAL INPUT MUST REFLECT THE RISKS OF A COMPETITIVE MARKET?

A. Yes. In ¶ 682 of the *Triennial Review Order*, the FCC explained that the monopoly-based cost of capital approach recommended by AT&T and WorldCom fails to provide incentives for investment:

> The approach advocated by AT&T and WorldCom does not provide optimal incentives for investment. To calculate rates based on an assumption of a forward-looking network that uses the most efficient technology (i.e., the network that would be deployed in a competitive market), without also compensating for the risks associated with investment in such a network, would reduce artificially the value of the incumbent LEC network and send improper pricing signals to competitors. Establishing UNE prices based on an unreasonably low cost of capital would discourage competitive LECs from investing in their own facilities and thus slow the development of facilities-based competition.

Q. IS THE USE OF VERIZON NW'S "AUTHORIZED RATE OF RETURN" AS THE COST OF CAPITAL INPUT IN UNE COST STUDIES CONSISTENT WITH THE TELRIC PRINCIPLE THAT THE COST OF CAPITAL INPUT SHOULD

[2] Report and Order and Order on Remand, *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Deployment of Wireline Services Offering Advanced Telecommunications Capability*, 18 FCC Rcd 16978 ¶ 680 (2003).

REFLECT THE RISKS OF A MARKET WITH FULL FACILITIES-BASED COMPETITION?

A. No. As noted above, Verizon NW's authorized rate of return was established in 1994 in a proceeding that was initiated to establish Verizon NW's allowed rate of return for retail services. Since the 1994 proceeding occurred prior to the passage of the Telecommunications Act of 1996, the passage of the FCC's *Local Competition Order*, the issuance of the *Triennial Review Order*, and the advent of extensive facilities-based competition from CLECs, wireless providers, cable providers, and Internet providers, the authorized rate of return for retail services certainly does not reflect the risks of a market with full facilities-based competition.

Q. ON PAGE 11 OF HIS SUPPLEMENTAL DIRECT TESTIMONY, MR. SPINKS STATES, "STAFF BELIEVES THAT VERIZON NEEDS TO DEMONSTRATE THE DEGREE OF COMPETITIVE RISK IT FACES IN WASHINGTON BEFORE DETERMINING THE COST OF CAPITAL TO BE USED FOR SETTING TELRIC RATES IN WASHINGTON." IS MR. SPINKS'S STATEMENT CORRECT?

A. No. The FCC's clarification in the *Triennial Review Order* does not depend on the degree of competition Verizon NW actually faces in the state of Washington. Rather, the FCC clarified that the cost of capital must be estimated *under the assumption of full facilities-based competition* in order to make the inputs in UNE cost studies consistent with one another. Since the investment and expense components of UNE costs are estimated *under the assumption* that Verizon NW faces full facilities-based competition, the cost of capital and depreciation components of UNE costs must also be estimated under this assumption. The FCC reiterated the principle that the cost of capital must be consistent with the assumptions of the TELRIC standard again in its TELRIC NPRM:

> [T]he importance of this clarification [in the Triennial Review Order] was to confirm that state commissions must use a consistent set of assumptions when they calculate the three components of rates (operating expenses, cost of capital, and depreciation expense). That is, if the network assumptions are based on projections about what a network would look like in the long-run assuming facilities-based competition, the same approach should be followed in developing the cost of capital.[3]

Thus, the *Triennial Review Order requires* that the cost of capital input in UNE cost studies be based on the *assumption* that Verizon NW operates in fully competitive markets, regardless of the actual level of existing competition. Contrary to the assertion of Mr. Spinks, under the *Triennial Review Order*, there is no need for Verizon NW to demonstrate the degree of competition that it actually faces in Washington.

Q. MR. SPINKS ALSO STATES ON PAGE 11 OF HIS TESTIMONY THAT "VERIZON FILED TESTIMONY EARLIER IN THIS PROCEEDING URGING THE COMMISSION TO USE A COST OF CAPITAL BASED ON A BROAD STUDY OF COMPETITION IN THE NATIONWIDE MARKET AND ASKED THAT THE COMMISSION APPLY THE RESULT IN WASHINGTON STATE." IS HIS STATEMENT CORRECT?

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[3] Notice of Proposed Rulemaking, *Review of the Commission's Rules Regarding the Pricing of Unbundled Network Elements and the Resale of Services by Incumbent Local Exchange Carriers*, 18 FCC Rcd 18945 ¶ 84 (2003).

A. No. My estimate of the cost of capital in this proceeding is supported by the testimony of Mr. Harold E. West III, who supplied extensive evidence that Verizon NW faces significant competition for local exchange services in Washington State. However, as I have noted above, this Commission need not rely upon that testimony in order to adopt Verizon NW's proposed cost of capital in this proceeding, because the FCC clarified in the *Triennial Review Order* that full facilities-based competition should be assumed.

Q. HAVE ANY COMMISSIONS RECOGNIZED THAT THE FCC'S TELRIC STANDARD REQUIRES THE ASSUMPTION THAT THE INCUMBENT LEC PROVIDES UNES IN A MARKET WITH FULL FACILITIES-BASED COMPETITION?

A. Yes. The Massachusetts Department of Telecommunications and Energy,[4] the Pennsylvania Public Utilities Commission,[5] and the FCC's Wireline Competition Bureau[6] all have set costs of capital between 11.45% and 12.95%, based on the risks of a market with full facilities-based competition.

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[4] Final Order, *Investigation by the Department of Telecommunications and Energy on its own Motion into the Appropriate Pricing, based upon Total Element Long-Run Incremental Costs, for Unbundled Network Elements and Combinations of Unbundled Network Elements, and the Appropriate Avoided-Cost Discount for Verizon New England, Inc. d/b/a Verizon Massachusetts' Resale Services in the Commonwealth of Massachusetts*, D.T.E. 01-20 (Mass. D.T.E. July 11, 2002) (adopting a weighted average cost of capital of 11.45%).

[5] Final Opinion and Order *Generic Investigation Re Verizon Pennsylvania Inc.'s Unbundled Network Element Rates*, Dkt. R-00016683 (Pa. P.U.C. Dec. 11, 2003) (*Pennsylvania Order*) at 61-62 (finding that the previous cost of capital was not TELRIC-compliant and adopting a cost of capital of 12.37% based on a DCF analysis of the S&P Industrials).

[6] *See* Memorandum Opinion and Order, *I/M/O Petition of WorldCom, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia Inc. and for Expedited Arbitration*, 18 FCC Rcd 17722 ¶¶ 90, 104 ("*Virginia Arbitration Order*") (adopting a cost of capital of 12.95% and finding that "the overall beta of 1.0 for the S&P 500 companies . . .

(continued . . .)

Q. HAVE ANY FEDERAL COURTS RECOGNIZED THAT THE FCC'S TELRIC STANDARD REQUIRES THE ASSUMPTION THAT THE INCUMBENT LEC PROVIDES UNES IN A MARKET WITH FULL FACILITIES-BASED COMPETITION?

A. Yes. The United States District for the Northern District of Georgia found that the Georgia Public Service Commission erred when it "decided to retain the 9.27% cost of capital set in 1997 because it believed that *actual* competition in telecommunications markets had not increased sufficiently to warrant a higher cost of capital."[7] In making this decision, the Court explicitly recognized that, "[u]nder TELRIC, the cost of capital must be based upon the risk that BellSouth would face in a competitive market with multiple-facilities-based providers, not the risk that BellSouth actually faces to date or currently."[8] The Court ordered the Georgia Commission to set a new cost of capital consistent with federal law requiring the cost of capital to reflect the risks of a competitive market.

Q. IS USE OF VERIZON NW'S AUTHORIZED RATE OF RETURN AS THE COST OF CAPITAL INPUT IN UNE COST STUDIES CONSISTENT WITH THE FCC'S PRINCIPLE THAT UNE RATES SHOULD PROVIDE CORRECT ECONOMIC

(. . . continued)
does produce a useful benchmark for the risk faced on average by established companies in competitive markets").

7 *BellSouth Telecommunications, Inc., v. The Georgia Public Service Commission, et al.*, No. 1:03-CV-3222-CC, slip op. ¶ 24 (N.D.G.A. April 6, 2004).

8 *Id.* at ¶ 22.

SIGNALS FOR THE INVESTMENT DECISIONS OF BOTH INCUMBENT LOCAL EXCHANGE CARRIERS AND COMPETITORS?

A. No. Use of Verizon NW's authorized rate of return as the cost of capital input in UNE cost studies violates the FCC's correct economic signal principle because the authorized rate of return: (1) reflects embedded and accounting costs, while Verizon NW and its competitors make investment decisions at market prices; and (2) fails to reflect the competitive, technology, and regulatory risks Verizon NW faces when it makes investment decisions under the TELRIC standard and the competitive and technology risks competitors face when they decide to invest in their own network facilities.

Q. HAS THE FCC RECOGNIZED THAT EVEN TELRIC RATES MAY NOT PROVIDE CORRECT ECONOMIC SIGNALS FOR THE INVESTMENT DECISIONS OF BOTH INCUMBENT LECS AND COMPETITORS?

A. Yes. In its TELRIC NPRM, the FCC stated:

> Today, now that competition has taken root in many areas of the country, we initiate this proceeding to consider whether our pricing methodology is working as intended and, in particular, whether it is conducive to efficient facilities investment. To the extent that the application of our TELRIC pricing rules distorts our intended pricing signals by understating forward-looking costs, it can thwart one of the central purposes of the Act: the promotion of facilities-based competition. While our UNE pricing rules must produce rates that are just, reasonable and nondiscriminatory, consistent with the Act's goal of promoting sustainable competition, they should not create incentives for carriers to avoid investment in facilities. ¶ 3.

Q. DO YOU HAVE ANY EVIDENCE THAT USE OF VERIZON NW'S 9.76% AUTHORIZED RATE OF RETURN AS THE COST OF CAPITAL IN UNE COST STUDIES WOULD NOT PROVIDE CORRECT ECONOMIC SIGNALS FOR THE

INVESTMENT DECISIONS OF EITHER VERIZON NW OR ITS COMPETITORS?

A. Yes. In its compelled response to Verizon NW data request 4-1, AT&T stated that it currently uses an internal cost of capital of **[BEGIN AT&T PROPRIETARY] [END AT&T PROPRIETARY]** to evaluate local exchange network investments. This number is actually a lower bound for the cost of capital that is used in UNE cost studies, because the UNE cost of capital to be determined in this proceeding is a before-tax weighted average cost of capital, while AT&T's internal cost of capital is an after-tax weighted average cost of capital. The equivalent before-tax weighted average cost of capital associated with AT&T's **[BEGIN AT&T PROPRIETARY] [END AT&T PROPRIETARY]** after-tax cost of capital is **[BEGIN AT&T PROPRIETARY] [END AT&T PROPRIETARY]**.

If AT&T and MCI are able to obtain UNEs from Verizon NW based on Washington State's last authorized rate of return of 9.76%, they clearly will have no incentive to invest in their own network facilities that require a rate of return of **[BEGIN AT&T PROPRIETARY] [END AT&T PROPRIETARY]**. In addition, since Verizon NW faces essentially the same competitive and technology risks in investing in the local exchange as AT&T and MCI, Verizon NW's cost of capital would be approximately equal to AT&T's and MCI's. Indeed, Verizon NW's risk and cost of capital should be higher than AT&T's and MCI's, because AT&T and MCI are not subject to the regulatory risk of the TELRIC standard. Thus, use of a 9.76% cost of capital input in UNE cost studies would provide no incentive for either Verizon NW or CLECs to invest in the telecommunications network in Washington State.

Q. DO YOU HAVE ANY EVIDENCE THAT VERIZON HAS REDUCED ITS CAPITAL EXPENDITURES IN RESPONSE TO THE REGULATORY RISKS OF THE TELRIC STANDARD?

A. Yes. Verizon's capital expenditures for its domestic telecom operations are reported in the notes to the consolidated financial statements in its annual reports. As the regulatory risks of the TELRIC standard have become apparent, capital expenditures for Verizon's nationwide domestic telecom operations have declined. See Table 1 below.

Table 1

Verizon's Nationwide Domestic Telecom Capital Expenditures ($Millions)

Year	Capital Expenditure	%Change
2001	12,731	
2002	8,004	-37%
2003	6,820	-15%

Capital expenditures for Verizon's telecom operations in Washington State have also declined significantly in recent years, as shown in Table 2 below.

Table 2[9]

Verizon's Telecom Capital Expenditures In Washington State ($Millions)

Year	Capital Expenditure	%Change
2000	214.7	
2001	175.0	-19%
2002	140.6	-20%
2003	106.2	-24%

That capital expenditures are declining throughout the domestic wireline industry, including both the ILEC and CLEC segments of the industry, is corroborated in a recent study by Hazlett, Havenner, and Bazelon filed before the FCC.[10]

Q. WITH REGARD TO THE COST OF CAPITAL INPUT IN UNE COST STUDIES, HOW CAN THE COMMISSION PROVIDE AN INCENTIVE FOR VERIZON NW AND THE CLECS TO INVEST IN NEW TELECOMMUNICATIONS TECHNOLOGIES AND SERVICES UNDER THE TELRIC STANDARD?

A. The Commission must assure that the cost of capital input in UNE cost studies fully reflects the competitive, technology, and regulatory risks that Verizon NW faces in making network investments under the TELRIC standard. The cost of capital I recommended in my direct testimony, including the regulatory risk premium, meets these criteria for Verizon NW.

[9] Verizon's capital expenditures nationwide also declined from 2000 to 2001. However, the numbers reported in Verizon's annual reports for 2000 and prior years are not strictly comparable to the numbers reported for 2001 – 2003 because the latter figures include expenditures for capitalized software, whereas the figures reported for earlier years do not include those expenditures.

[10] Declaration of Thomas W. Hazlett, Ph.D., Prof. Arthur M. Havenner, and Coleman Bazelon, Ph.D., filed on December 16, 2003, in WC Docket No. 03-173, *Review of the Commission's Rules Regarding the Pricing of Unbundled Network Elements and the Resale of Service by Incumbent Local Exchange Carriers*, at 4.

With regard to offering an incentive for CLECs to invest in their own network facilities, the Commission can only provide an incentive for investment if it uses a cost of capital input in UNE cost studies that is at least as large as the cost of capital the CLECs use in making their own network investment decisions. As noted above, the CLECs typically use costs of capital to evaluate internal investment decisions that are higher than the cost of capital I recommend for Verizon NW.

Q. YOU NOTED EARLIER THAT UNE RATES MUST BE BASED ON FORWARD-LOOKING ECONOMIC COSTS, NOT EMBEDDED OR ACCOUNTING COSTS. HOW DOES THE FCC DEFINE FORWARD-LOOKING ECONOMIC COSTS?

A. The FCC defines forward-looking economic cost to be the cost the incumbent LEC would incur if it were to reconstruct and operate its entire network using the most efficient available technology. For example, in the TELRIC NPRM, the FCC stated:

> The Commission's TELRIC pricing rules equate the incumbent LEC's cost of providing network elements with the cost today of building a local network that can provide all the services its current network provides, using the least-cost, most-efficient technology currently available. … The TELRIC methodology assumes that the relevant increment of output is all current and reasonably projected future demand, *i.e.*, it is designed to calculate the total cost of building a new, efficient network. ¶¶ 17, 18.

Q. DO INCUMBENT LECS SUCH AS VERIZON NW HAVE A REASONABLE OPPORTUNITY TO RECOVER THEIR FORWARD-LOOKING ECONOMIC COSTS UNDER THE TELRIC STANDARD?

A. No. As described in my direct testimony at pp. 31 - 38, incumbent LECs such as Verizon NW will have no opportunity to recover their forward-looking economic costs of providing UNEs under the TELRIC standard. The incumbent LECs' inability to recover their forward-looking economic costs under the TELRIC standard arises primarily because: (1) UNE rates are generally reset to reflect the lower cost of new technology before the incumbent LECs' assets are fully depreciated; (2) the incumbents' investments in the facilities required to provide UNEs are generally long-lived and largely sunk, while CLECs have the option to cancel their lease on a monthly basis; (3) UNE rates are based on the unrealistic assumption that the incumbent serves the entire demand for telecommunications service, even though competitors serve a significant and increasing share of the market; and (4) state commissions have frequently used the TELRIC standard as a justification for using highly optimistic revenue and expense forecasts in UNE cost studies.

Q. HAVE ECONOMISTS RECOGNIZED THAT THE ILECS WILL NOT BE ABLE TO RECOVER THEIR FORWARD-LOOKING ECONOMIC COST OF PROVIDING UNES UNDER THE TELRIC STANDARD?

A. Yes. That the ILECs will not recover their forward-looking economic costs under the TELRIC standard is widely recognized in the economics literature. In a recent working paper prepared by the FCC's Office of Strategic Planning and Policy Analysis, for example, Mandy and Sharkey evaluate the use of static cost proxy models such as TELRIC in setting forward-looking prices for UNE services. They conclude that TELRIC will not allow the ILECs to recover their forward-looking cost of providing UNE services:

> When TELRIC prices are recomputed at intervals shorter than asset lives, the firm will generally not earn the target rate of return.

> In these cases, a correction factor must be applied to the TELRIC price path in order for revenues to exactly recover investment cost, including the target rate of return. (David M. Mandy and William W. Sharkey, "Dynamic Pricing and Investment from Static Proxy Models," abstract.)

Two other papers by Mandy reach similar conclusions, "TELRIC Pricing with Vintage Capital," Journal of Regulatory Economics, 22:3 215:249, 2002, and "Pricing Network Elements When Costs Are Changing," Telecommunications Policy 26 (2002) 53-67.

Q. HAS THE FCC'S WIRELINE COMPETITION BUREAU ALSO RECOGNIZED THAT THE INCUMBENT LEC WILL HAVE NO OPPORTUNITY TO RECOVER ITS FORWARD-LOOKING ECONOMIC COSTS UNDER THE TELRIC STANDARD?

A. Yes. The FCC's Wireline Competition Bureau recognized this risk in the *Virginia Arbitration Order*:

> As the Commission found in the *Triennial Review Order*, if equipment prices are declining, an incumbent LEC needs to recover more of its investment in an asset during the early years of the asset's life and less in the later years in order to compete effectively with a subsequent entrant that pays less for the same asset. Even if there is no new entry, but the cost of an asset is continuously decreasing, an incumbent LEC would not recover the initial capital outlay for the asset if regulators at each rate proceeding establish successively lower UNE prices based on the application of straight line depreciation to lower asset prices.[11]

Q. IS THE RISK THAT VERIZON NW WILL BE UNABLE TO EARN ITS COST OF CAPITAL UNDER THE TELRIC STANDARD REFLECTED IN ESTIMATES OF

[11] *Virginia Arbitration Order*, ¶ 94.

THE MARKET COST OF CAPITAL USING THE DCF OR OTHER COST OF CAPITAL MODELS?

A. No, as described in my direct testimony at pp. 39 – 41, the risk of under recovery under the TELRIC standard is not reflected in the estimated market cost of capital using the DCF or risk premium models because the risk of under recovery arises from the CLECs' option to either cancel their lease on a monthly basis and use other facilities, or cancel their lease and renew at lower rates when rates are reset to reflect the cost of new lower-cost technologies. The financial community recognizes that the value of options such as those offered to the CLECs are not reflected in the market cost of capital as estimated from the DCF or other cost of equity methodologies.

III. CONCLUSION

Q. DOES THIS CONCLUDE YOUR RESPONSIVE TESTIMONY?

A. Yes, it does.