

Exhibit T-\_\_\_ (TLS-15T )  
Docket No. UT-023003  
Witness: Thomas L. Spinks

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Review of )  
Unbundled Loop and Switching Rates and ) DOCKET NO. UT-023003  
Review of the Deaveraged Zone Rate Structure )  
 )  
\_\_\_\_\_ )

REBUTTAL TESTIMONY OF

THOMAS L. SPINKS

WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION STAFF

May 12, 2004

1 **Q. Please state your name and business address.**

2 A. My name is Thomas Spinks. My business address is 1300 South Evergreen Park  
3 Drive Southwest, P.O. Box 47250, Olympia, Washington 98504. My e-mail  
4 address is tspinks@wutc.wa.gov.

5  
6 **Q. By whom are you employed and in what capacity?**

7 A. I am employed by the Washington Utilities and Transportation Commission as a  
8 Regulatory Consultant.

9  
10 **Q. Have you previously filed testimony in this proceeding?**

11 A. Yes, I submitted direct, supplemental direct, and response testimony earlier in  
12 this proceeding.

13  
14 **Q. What is the purpose of your testimony at this time?**

15 A. The purpose of my testimony is to rebut the response testimony Verizon filed in  
16 this proceeding. In particular, I will address Verizon's testimony regarding  
17 depreciation rates, cost of capital, and some of the criticisms it levels at the HAI  
18 5.3 cost model.

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DEPRECIATION

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**Q. What is Verizon’s response to Staff testimony regarding depreciation rates?**

A. Verizon witness Mr. Flesch rejects Staff’s recommendation to use the currently prescribed depreciation rates for calculating TELRIC rates and continues Verizon’s advocacy to use the depreciation lives used for financial reporting purposes (i.e. GAAP lives). Verizon believes that the currently prescribed depreciation rates authorized in Docket UT-992009 are inappropriate to use in UNE cost studies because, (1) “the purpose of the prior proceeding was to calculate retail rates for Verizon NW’s customers under a rate-of-return regulatory regime whose requirements and underlying assumptions are far different than those under TELRIC.” (Ex. \_\_\_ (AJF-1T), at 4, lines 13-16); and (2) “the depreciation inputs adopted in the prior proceeding are now nearly four years old and do not account for competitive and technological developments that have occurred since 2000, all of which have substantially shortened the use lives of Verizon NW’s assets.” (*Id.* at 4, lines 16-20).

**Q. Does Staff agree with Verizon’s first contention?**

1 A. No. The purpose of Docket UT-992009 was to prescribe economic depreciation  
2 rates for Verizon. Nothing in that docket suggests the purpose of the  
3 represcription was to use the depreciation rates only for setting retail customer  
4 rates. In an earlier depreciation proceeding involving Verizon, the company  
5 challenged the then-currently prescribed depreciation rates by arguing that they  
6 did not represent economic depreciation rates. (See Docket UT-961632). In that  
7 docket, the Commission rejected Verizon's argument and found that the  
8 authorized depreciation rates were indeed economic depreciation rates. In an  
9 earlier generic cost case, the Commission affirmed the use of currently  
10 authorized depreciation rates for calculating TELRIC rates. (Docket No. UT-  
11 960369, Eighth Supplemental Order, ¶217). Nothing in the Triennial Review  
12 Order requires the Commission to use a different set of depreciation rates.  
13 Because the currently authorized depreciation rates are economic depreciation  
14 rates, the Commission should use them for all regulatory purposes, including the  
15 calculation of rates for unbundled network elements.

16

17 **Q. Does Staff agree with Verizon's second contention?**

18 A. Staff agrees with Verizon insofar as proper depreciation practices include  
19 restudying and represcription of depreciation rates every three to five years, and

1 that currently prescribed rates are now about four years old. Verizon's current  
2 depreciation rates are ready to be restudied, but Verizon has not put forth  
3 evidence in this case to show that the current rates are no longer appropriate.  
4 Indeed, as discussed in my response testimony, in March 2004, Verizon filed  
5 with the Commission a petition to represcribe depreciation rates, including a  
6 depreciation study.

7 However, Staff does not agree with Verizon's contention that competitive  
8 and technological developments that have occurred since 2000, have  
9 substantially shortened the use lives of Verizon NW's assets, for two reasons.

10 First, Verizon refers to the testimony of Mr. West to support its contention.

11 However, Staff could not find in Mr. West's testimony any evidence establishing  
12 a link between the competitive activity and technological changes described in  
13 that testimony, with the shorter asset lives for Verizon that the company  
14 advocates in the depreciation testimony. Second, Staff has seen mixed effects of  
15 technological and economic changes on asset lives over the last ten years. For  
16 instance, the development of Digital Subscriber Line (DSL) technology increased  
17 the expected life of copper cable plant because it was no longer necessary to  
18 replace the copper with fiber cable in order to provide high-speed data services  
19 to homes and businesses. Therefore, it is not necessarily true that if

1 technological changes are occurring, their effect is to shorten existing plant asset  
2 lives. The Commission should use the economic depreciation rates currently  
3 prescribed for Verizon until such time as Verizon's represcription has been  
4 completed. If there are substantive changes in depreciation rates as a result of  
5 the represcription, the Commission should permit Verizon to update its UNE  
6 rates accordingly.

7  
8 **COST OF CAPITAL**

9 **Q. Dr. Vander Weide states that the capital structure must be based on market  
10 value rather than book value because market value is necessarily forward-  
11 looking, while book values are necessarily based on historical costs. Please  
12 comment. (Ex. \_\_\_ (JHV-4T), at 5, lines 1-9).**

13 **A.** TELRIC requires that the cost of capital be forward-looking, not the capital  
14 structure per se. There is nothing in the TRO that requires state commissions to  
15 use a market-based capital structure in determining the forward-looking cost of  
16 capital. Verizon remains a regulated public utility and therefore has a duty to  
17 maintain a sound capital structure that includes a prudent mix of debt and  
18 equity. To the extent that Verizon's actual capital structure may have changed

1 from the time the Commission last set Verizon's cost of capital, Staff does not  
2 object to an updated capital structure to reflect more current values.

3  
4 **HM 5.3 CRITIQUE**

5  
6 **Q. Mr. Murphy states, "there is absolutely no merit to Staff witness Spinks' claim**  
7 **that HM 5.3 explicitly models high capacity loops in the network." (Ex. \_\_\_**  
8 **(FJM-1T), at 96). Please comment.**

9 A. It appears that Mr. Murphy disagrees with the way the HM 5.3 model sponsors  
10 have chosen to model high capacity loops. Because the high capacity loops have  
11 not yet been separately identified, Mr. Murphy appears to equate that lack of  
12 specific identification with the notion that HM 5.3 does not explicitly model high  
13 capacity loops. My statement that HM 5.3 now explicitly models high capacity  
14 loops refers to the fact that prior to the introduction of HM 5.3, high capacity  
15 loops were not included in the network design. The Commission has been  
16 critical of including all access lines in the network as individual copper loops  
17 when it was known that a significant number of the loops were being  
18 provisioned over DS-1 and above facilities. (See Docket No. UT-960369, Eighth  
19 Supplemental Order, at p.43). The HM 5.3 now explicitly accounts for circuits

1 carried over high capacity facilities, albeit not in a manner that Mr. Murphy  
2 would find acceptable.

3  
4 **Q. Mr. Murphy states that, “there is no merit to Staff witness Spinks’ claim that it**  
5 **was unnecessary to make the Commission’s adjustment for cable costs because**  
6 **the HAI cable costs reflect more current cable cost information.” (Exhibit \_\_,**  
7 **(FJM-1T), at 124. Please comment.**

8 A. Mr. Murphy is criticizing an apparent shift in costs between cable material,  
9 placement, and engineering costs that occurred between HM model versions 5.2  
10 and 5.3. My earlier statement refers to a study of the cost of cable paid by ILECs  
11 to suppliers conducted by the Minnesota regulatory commission staff that  
12 concluded that ILECs were actually paying less for cable than the cable costs  
13 used in the HM 5.2 model. After reviewing the Minnesota study, I determined  
14 that cable prices would not need to be adjusted as they had been in prior  
15 proceedings. I did not make any recommendation regarding placement or  
16 engineering costs other than to note that the model documentation indicated that  
17 the hard rock/soft rock placement multipliers had been increased.



1 **Q. Mr. Murphy is critical of the HM 5.3 because it fails to follow the outside plant**  
2 **planning process, ignores existing or planned cable routes and ignores man-**  
3 **made barriers. (Exhibit \_\_\_ (FJM-1T), at 20, 38-44) Please comment.**

4 A. Staff is perplexed by Mr. Murphy's criticisms given that cost models are  
5 simplifications of reality and the assumptions of long run incremental costing do  
6 not require cost models to rebuild the network as it exists today. The outside  
7 plant planning process is a short-run "subdivision at a time" procedure. The  
8 TELRIC assumption is a "what if you could rebuild the network in an  
9 economically efficient manner using the most current technology" exercise. The  
10 economics of re-creating the network within the TELRIC framework are different  
11 from the economics of adding a new subdivision to the existing network.  
12 Existing or planned cable routes are irrelevant or only marginally relevant to the  
13 TELRIC process. Mr. Murphy, moreover, provided no specific evidence showing  
14 that HM 5.3's failure to explicitly account for geographic or man-made barriers  
15 results in any understatement of required loop plant.

16  
17 **Q. Dr. Tardiff proposes that current investment be used as a benchmark to judge**  
18 **the reasonableness of the HM investment. (Exhibit \_\_\_ (TJT-1T) at 47-50).**  
19 **Please comment.**

1 A. Staff believes that current investment levels do not make a good benchmark for  
2 judging the reasonableness of HM investment levels because current investment  
3 levels represent the embedded costs of the historic monopoly era network, and  
4 as such, may contain investments in excess plant and equipment that are  
5 remnants of the monopoly, regulated rate of return legacy in which there existed  
6 incentives to overbuild plant.<sup>1</sup>

7  
8 **Q. Dr. Tardiff is critical of the inability of the HM 5.3 to accurately model loop**  
9 **lengths and claims VzCost has much less error in its loop lengths. (Exhibit \_\_\_\_**  
10 **(TJT-1T) at 97). Please comment.**

11 A. The analysis I provided in response testimony, Ex.C-\_\_ (TLS-14), showed that the  
12 VzCost model also produces some grossly inaccurate loop lengths for certain  
13 wirecenters. Dr. Tardiff also states that he found an average deviation of 15  
14 percent in the VzCosts loop lengths, whereas I reported finding that VzCost  
15 produced loop lengths that were generally 54 percent longer than average. Staff  
16 is rechecking the information received from Verizon regarding the loop length  
17 data to see why the discrepancy exists between Dr. Tardiff's and my Verizon  
18 loop length analysis.

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<sup>1</sup> See, e.g., Alfred A. Kahn, The Economics of Regulation, Volume II, at. 49 (1971).

1           The point Staff would like to make here, however, is that an analyst can  
2 easily adjust the HM model investments for loop length differences using Staff's  
3 modified distribution module. The VzCost model has no known means to make  
4 such an adjustment.

5  
6 **Q. Mr. Dippon criticizes HM preprocessing methodology, which results in 1.166**  
7 **million customer accounts being converted to 437,027 lots, and states "this**  
8 **method of modeling plant is absurd and leads to a significant understatement**  
9 **of costs." (Exhibit \_\_\_ (CMD-1), at 14-15). Please comment.**

10 A. I read the 92 pages of Mr. Dippon's reply testimony and could not locate any  
11 evidence that supported his contention that conversion of 1.16 million records  
12 into 437,027 lots was inaccurate or unreasonable. Verizon did not produce  
13 evidence, such as the actual number of lots to which Verizon provides service, to  
14 refute the HM preprocessing method. Instead, Mr. Dippon provided a very one-  
15 sided analysis in which he identified a number of circumstances suggesting that  
16 costs may be lower than appropriate. As discussed later in this testimony, Mr.  
17 Dippon does not provide any quantifiable evidence that would lead the  
18 Commission to conclude that the model as a whole is unreasonable.

1 Q. Mr. Dippon states that he “will demonstrate, the cluster database, while  
2 certainly a major cost driver, is severely flawed, and thus renders HM 5.3’s cost  
3 estimates useless.” (Exhibit \_\_\_\_ (CMD-1), at 1). Please comment.

4 A. To begin with, Mr. Dippon’s characterization of the cluster base inputs as “major  
5 cost drivers” is misleading. For the most part, the inputs consist of factual record  
6 data from the Census Bureau, city and state governments, and Verizon itself.  
7 The assumptions used in sizing the network and the like are integral to the type  
8 of model and network being developed, and would not represent an input like  
9 cost of capital or depreciation that can or should be adjusted at will. Therefore,  
10 calling them major cost drivers does not truly denote their nature. Second, and  
11 more importantly, Mr. Dippon does not substantiate his contention that “the  
12 cluster database is severely flawed.”

13  
14 Q. Why does Staff believe Mr. Dippon has not substantiated his allegations  
15 regarding the cluster database?

16 A. Mr. Dippon is critical of the use of rectilinear routing, yet despite the fact he has  
17 the GIS capability to map the cluster data and make measurements with which  
18 he could show where and how frequently the rectilinear method understates  
19 plant, he fails to do so. In another case, Mr. Dippon contends that the cluster

1 database preprocessing steps need to be completely explained or it's just a black  
2 box. (*See id.* at 10-11). While Staff does not condone or support models that are  
3 not open to inspection, we see no reason why Mr. Dippon could not compare for  
4 instance, the number of households and businesses within a given cluster with  
5 the information actually existing in the geographic area of the cluster to see how  
6 accurately the clusters portray reality in a given cluster area. Mr. Dippon has not  
7 substantiated his assertions because he fails to provide any quantitative analysis  
8 to support them.

9  
10 **Q. Mr. Dippon states that, "when HM's network is illustrated in map form, it**  
11 **becomes clear the model produces entirely unrealistic distribution areas,**  
12 **resulting in absurd outside plant estimates." (Exhibit \_\_\_ (CMD-1), at 58.)**

13 **Please comment.**

14 A. Staff reviewed a number of the maps Mr. Dippon produced and found that his  
15 projection of the cluster data produced results similar to Staff's analysis of the  
16 HM cluster data conducted earlier in this proceeding. Staff withdrew that  
17 analysis as part of the settlement agreement with Qwest. In performing that  
18 analysis, Staff found that two types of errors could occur with the cluster data.

19 The cluster may be wrongly positioned, over a body of water for instance, but

1 can be moved to its correct location by rotating the cluster up or down without  
2 changing the radial distance. In that case, the error has no effect on cost. The  
3 other errors Staff found occurred in situations where the cluster was misplaced  
4 and could not be correctly positioned without changing the radial distance of the  
5 cluster. Mr. Dippon, in his analysis, makes no attempt to quantify, correct, or  
6 estimate cost if these corrections were made. He simply sees that clusters are  
7 misplaced, or in one case, produced insufficient coverage, and concludes the  
8 model produces incorrect and absurd results. Yet without any quantifiable  
9 analysis, the Commission is left to guess the extent, if any, of any cost impact  
10 caused by the misplacement of clusters. Generally, in the Qwest analysis Staff  
11 found many more rotational errors, which have no effect on cost, than radial  
12 distance errors, which do affect cost. Since the identification and correction of  
13 these errors can be easily accomplished, the Commission should look to  
14 correcting the errors rather than throwing out the model.

15  
16 **Q. Does this conclude your testimony?**

17 **A. Yes.**