Q. PLEASE STATE YOUR NAME, EMPLOYER, AND BUSINESS ADDRESS.

A. My name is Thomas L. Spinks. I am employed by the Washington Utilities and Transportation Commission. My business address is 1300 South Evergreen Park Dr SW, P.O. Box 47250, Olympia, Washington, 98504.

Q. IN WHAT CAPACITY ARE YOU EMPLOYED?

A. I am employed as a Regulatory Consultant in the Telecommunications Section.

Q. HAVE YOU PREPARED A STATEMENT OF YOUR QUALIFICATIONS?

A. Yes. A summary of my education and experience is provided as Exhibit ___ (TLS-2).

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to address the cost model and cost study issues presented in the filings of Qwest and Verizon relating to their proposals for monthly recurring charges (MRCs) for various unbundled network elements (UNEs). I am also providing the Staff's response to the Qwest and Verizon estimates for sub-loop rate elements.

COST MODELS AND COST STUDY RESULTS

Q. PLEASE DESCRIBE THE COST MODELS THAT HAVE BEEN PRESENTED IN THIS PROCEEDING.

A. Qwest filed the following cost models:

1. NAC and LoopMod models used to develop DS-1 and DS-3 costs.

2. Transport Model (Tmv4) for high capacity OCN interoffice transport costs.

3. ENRC model for estimating non-recurring costs.

Q. DID STAFF REVIEW THE QWEST DS-1 AND DS-3 COST MODEL ESTIMATES?

A. Yes. Staff's review of the NAC and LoopMod models raised several concerns with the models and the resulting cost estimates.

Q. WHAT ARE THE STAFF CONCERNS WITH THE DS-1/DS-3 MODEL AND RESULTING ESTIMATES?

A. The Qwest DS-1/DS-3 costs are estimated using the NAC Program and LoopMod models. The LoopMod feeder and distribution modules appear to contain compiled programs which Staff was unable to access. Staff was not able to locate or review any of the formulae used to calculate the loop cost. The model primary cost drivers for DS-1 and DS-3 service are described by Qwest as being the terminating and multiplexing equipment investments, fiber optic and copper facilities, and associated installation and engineering labor. Staff has concerns with the estimation methods used for the loop facility and may have some concerns with the installation and engineering costs.

The first concern is that the cost of the DS-1 loop facility has already been set by the Commission with the adoption of statewide average and density zone loop rates in

Docket Nos. UT-960369, et al. In the Eighth Supplemental Order in Docket Nos. UT-960369, et al., the Commission specifically adjusted the Qwest line count to remove derived channels counted as loops in the line count. (See Eighth Supp. Order at pp. 43-44.) This adjustment resulted in a higher UNE loop cost than would have otherwise been estimated, and the resulting cost estimate includes the UNE loops needed to provision DS-1 service. The company methodology results in a different, higher cost for the loop used to provide the DS-1 service than the costs previously approved by the Commission.

Q. HAS QWEST RECENTLY PROVIDED ADDITIONAL COST MODEL AND COST STUDY INFORMATION?

A. Yes. On October 18, 2000 the Commission received additional worksheets and revised model documentation. Staff was not able to review these additional materials prior to submitting this testimony and does not know if the additional information would result in changes to this testimony.

Q. WHAT IS THE STAFF CONCERN WITH THE INSTALLATION AND ENGINEERING COSTS?

A. The Qwest cost models apply a Total Investment Factor (TIF) to equipment costs in order to arrive at an Engineered, Furnished, and Installed (EF&I) investment amount which is then input into the WINPC3 model to calculate rates for services. The use of a TIF to adjust investment is a new procedure not previously used by the company in these cost

dockets. Staff is not certain of the extent of our concerns at this time as we are awaiting responses to a data request regarding how they were calculated. As a general matter, Staff is perplexed as to why the company did not simply use work orders for DS-1 and DS-3 installations to develop the costs which was the method used for estimating collocation costs. Note here that the TIF is used throughout the Qwest cost studies submitted in this proceeding and if problems exist in the development of the TIF, they would extend to all of the cost studies.

Q. SHOULD RATES FOR DS-1 AND DS-3 SERVICE BE DEAVERAGED?

A. Given that the underlying loop facility used to provide DS-1 service is deaveraged, rates for DS-1 services should also be deaveraged. Verizon has proposed deaveraged rates for DS-1 service. If the Commission decides that deaveraging is not necessary for Qwest, an adjustment to cost still needs to be made to reconcile the estimated LoopMod loop costs with the Commission's prior findings regarding Qwest's Washington loop cost.

Q. WHAT ARE THE STAFF CONCERNS WITH THE DARK FIBER UNE COST MODELS AND RESULTING ESTIMATES?

A. Qwest uses a 14 state average sheath mile weighting for direct buried and underground investment to calculate the cost of interoffice dark fiber. (See Exhibit ___ (TKM-10) "July 99 Sheath Miles - Tax 7A report" page 1 of 1) Staff recommends that the company not use region-wide weighting in calculating Washington specific costs. Since Washington has a lower proportion of the higher cost direct buried dark fiber than the

region-wide average, the study results in higher cost estimates than the costs actually incurred by Qwest in Washington. In addition, since the higher cost direct buried dark fiber is associated predominately with rural areas, the Commission may want to consider whether this service should also be subject to geographic deaveraging.

Q. PLEASE DISCUSS STAFF'S REVIEW OF THE VERIZON COST MODEL.

A. Verizon estimated monthly recurring costs for the services included in this proceeding using the Integrated Cost Model Version 4.1b (ICM). Staff has two major concerns with the model. First, the ICM is a very large complex model with documentation that fills some nine binders, comprising three to four feet of paper documentation. In the timelines set out for conducting this proceeding, Staff cannot conduct a thorough review of the model itself. Second, even if time were given for a more thorough review, the model programming is compiled, which prevents anyone from examining the model itself for programming errors. The Commission will recall that programming errors were discovered in the open models examined by the Commission in Phase 1 of the generic cost docket. The Verizon response to Staff Data Request 2 shows that the ICM V1.4b has not yet been accepted by any state commission. Staff is encouraged to see that Verizon has adopted the Hatfield model geographic customer location approach for estimating loop costs in its ICM model but, at this point, the uncertainty as to the ability of the model to accurately and correctly estimate cost precludes Staff from recommending that the Commission adopt UNE rates for Verizon's services that were developed using the ICM. The limited review conducted by Staff results in a number of concerns discussed below.

Q. WHAT CONCERNS RESULT FROM THE STAFF REVIEW OF THE ICM COST ESTIMATES?

A. Staff's concerns include the sub-loop cost estimates, depreciation rates, plant mix, and structure sharing used in the model.

Q. WHAT ARE THE CONCERNS WITH THE SUB-LOOP COST ESTIMATES?

A. Exhibit ___ (DBT-2) of Verizon witness Mr. Trimble at page 1 shows proposed sub-loop elements and rates for feeder, distribution, and drop wire. The sum of the feeder and distribution rates equals the deaveraged zone rate for each zone. Since drop costs are already included in the deaveraged zone rates, the inclusion of a separate drop wire rate is inappropriate and results in higher than approved deaveraged loop rates for the UNE loop. Staff does not object to Verizon establishing a separate rate for the drop if a CLEC desires to interconnect at the drop but the proposed charge needs to be established by determining the portion of the drop cost that was included in the Commission's earlier determination of the statewide average loop cost.

Q. WHAT IS THE CONCERN WITH DEPRECIATION RATES?

A. In volume 9 of 9, Tab 22, of the ICM cost documentation and support, Verizon provides a table showing the development of Dark Fiber loop TELRIC cost used in Mr. Trimble's Exhibit ___ (DBT-2), page 3, line 103. The capital recovery rates shown in Tab 22 do not match up with the current Commission authorized depreciation rates. For instance, the circuit equipment capital recovery rate used by Verizon exceeds 14 percent and the

authorized depreciation rate is 8.3 percent. Staff discovered this same problem with Qwest in Part A of this proceeding. In response to Bench Request 13 in Part A, Qwest provided a calculation of its Computer Account 2124 capital recovery rate which indicated that the company had added in additional cost factors to the authorized depreciation rate to develop a capital recovery rate. The question of whether any cost factors should be added to the depreciation rate has never been addressed by the Commission and neither company has ever provided any testimony to justify the application of a capital recovery rate to investment rather than the depreciation rate. Staff recommends that the Commission direct the companies to use the authorized forward-looking depreciation rates in their cost studies until the Commission has the opportunity to review and decide the issue of capital recovery factors.

Q. WHAT IS THE STAFF CONCERN WITH STRUCTURE SHARING?

A. The Verizon cost studies do not reflect the Commission's prior determinations on structure sharing that were decided in Docket Nos. UT-960369, et al. (e.g., see Binder 9 of 9, Tab 22, Dark Fiber Investment Worksheet, page 1.) The company should be directed to use the prior approved structure sharing percents from Exhibit ___ (TLS-3) from Phase 1 of the docket to reflect structure sharing in its density zones. Staff could not discern whether this concern also extends to the Qwest cost studies.

SUB-LOOP UNBUNDLING

Q. WHAT IS SUB-LOOP UNBUNDLING?

A. Sub-loop unbundling is the provisioning of a portion of the loop as an unbundled network element (UNE). The unbundling of the loop is restricted to any feasible point of access. The primary point of loop access is generally acknowledged to be at the feeder distribution interface (FDI), hence ratios for splitting the UNE loop charge between loop segments involves estimating the relative amount of investment between feeder and distribution facilities. Qwest and Verizon have proposed rates for the feeder and distribution portions of the loop in direct testimony filed earlier in this proceeding. Staff reviewed the proposed rates and has concerns with the proposals.

Q. WHAT ARE THE CONCERNS WITH THE ILEC ESTIMATES FOR THE SUB-LOOP UNE?

A. Staff has two concerns with the estimates. The first concern is that, on a conceptual level, one would expect the ratio of feeder and distribution investment in Washington to be somewhere around a 50/50 split for feeder/distribution investment in dense urban areas and for the amount of distribution investment to increase relative to feeder investment in less dense rural areas. The rationale for this concept has to do with engineering considerations regarding the length of the feeder facilities relative to the length of distribution facilities and the fact that less dense (rural) wire centers have longer loops. The ILEC's estimates of feeder and distribution investment, however, show little or no

variation between density zones. Verizon and Qwest both estimate that approximately 30 percent of investment is in feeder facilities and 70 percent in distribution facilities for all five density zones with very little or no variation. In order to demonstrate that the ratios of feeder and distribution plant do in fact vary between density zones, Staff is providing estimates of feeder and distribution ratios using the HM31 model.

The second concern is that both companies estimated the feeder and distribution investments using new cost models which have heretofore not been seen in Washington. Staff is unable, in this proceeding, to determine what concerns it would have with the new models and why the models do not produce much variation in the relative amounts of feeder and distribution investment.

Q. DO THE STAFF ESTIMATED SUB-LOOP RATES FOR DENSITY ZONES SHOW MORE VARIATION THAN THE COMPANY ESTIMATES?

A. Yes. Table 1 below shows Staff's estimates of feeder and distribution investment ratios and the resulting zone rates for the sub-loop elements. The estimates were made using the HM3.1 cost model and follows the Commission's prior decisions regarding inputs and other adjustments. At this point Staff has not been able to exactly replicate the Commission's methodology and has requested some clarification. If, after receiving clarification, the results in Table 1 change, Staff will revise the table accordingly.

Table 1.

Verizon Sub-Loop Ratios and Rates

Zone	UNE Rate	Distribution		Feeder	
1	$ 14.96	0.526	$ 7.87	0.474	$ 7.09
2	$ 16.74	0.656	$10.98	0.344	$ 5.76
3	$ 20.11	0.692	$13.92	0.308	$ 6.19
4	$ 23.36	0.674	$15.74	0.326	$ 7.62
5	$ 49.85	0.479	$23.88	0.521	$ 25.97

Qwest Sub-Loop Ratios and Rates

Zone	UNE Rate	Distribution		Feeder	
1	$7.50	0.602	$ 4.51	0.398	$2.99
2	$13.89	0.615	$8.54	0.385	$5.35
3	$15.73	0.639	$10.06	0.361	$5.67
4	$17.78	0.678	$12.06	0.322	$5.72
5	$24.18	0.716	$17.31	0.284	$6.87

Q. DOES THIS COMPLETE YOUR TESTIMONY?

A. Yes.