INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is David E. Griffith. My business address is 1300 S Evergreen Park Dr SW, P.O. Box 47250, Olympia, Washington, 98504.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by the Washington Utilities and Transportation Commission (Commission) as a Telecommunications Engineer.

Q WHAT ARE YOUR QUALIFICATIONS?

A My qualifications and work experience are shown in my résumé which is attached as Exhibit ___ (DEG-2).

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THE GENERIC COST PROCEEDING?

A. Yes. I filed testimony in Phase 2 of the generic cost proceeding, Docket Nos. UT-960369, *et al.*[1], on recurring and nonrecurring charges for interim number portability, on the treatment of single point of termination (SPOT) frames, the pricing for physical collocation in incumbent local exchange carrier (ILEC) central offices, the use of cages to

[1] *In the Matter of the Pricing Proceeding for Interconnection, Unbundled Elements, Transport and Termination, and Resale,* Docket Nos. UT-960369, *et al.*

enclose equipment for competitive local exchange carriers (CLECs), and whether third-party vendors should be used to determine prices for site preparation.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony in this proceeding is to present Commission staff's position on several issues that were previously considered in Phase 2 of Docket Nos. UT- 960369, *et al.*, and remain open for this proceeding. Specifically, I will address the costs of: (1) space preparation; (2) power cabling; (3) cages, entrance facilities, and security; and (4) some additional issues. I will discuss each issue in order and specify how each issue applies to the cost studies of both Qwest Communications International, Inc. (Qwest) and Verizon Communications (Verizon).

Q. WHAT IS THE CURRENT STATUS OF THE COLLOCATION TARIFFS FOR QWEST AND VERIZON?

B. Both Qwest (formerly U S WEST Communications, Inc.) and Verizon (formerly GTE-Northwest Incorporated) have filed rates and costs with this Commission for collocation services. On April 28, 2000, Qwest filed its Statement of Generally Available Terms and Conditions for Interconnection, Unbundled Network Elements, Ancillary Services, and Resale of Telecommunications Services (SGAT) in Docket No. UT-003022.[2] The SGAT contains terms, conditions, and rates for collocation. Qwest refiled the SGAT in Docket

[2] *In the Matter of the Investigation Into U S WEST Communications, Inc.'s Compliance with Section 271 of the Telecommunications Act of 1996.*

No. UT-003040.[3] The Commission neither suspended nor approved the SGAT, which became effective on June 28, 2000. The terms, conditions, and rates of the SGAT will be modified in both this proceeding and in Docket No. UT-003022.

Verizon filed its tariff for collocation service on December 30, 1999 under Docket No. UT-992044. On April 28, 2000, Verizon withdrew this filing and refiled it under Docket No. UT-000630. Verizon filed a similar tariff as a revision to its federal collocation tariff on December 6, 1999.[4] On December 20, 1999, the FCC suspended Verizon's revisions to its collocation tariff and instituted an investigation.[5] Verizon reacted to the FCC's order by eliminating major heating, ventilating, and air conditioning (HVAC) non-recurring charges and crediting customers who had been billed for these site preparation charges. On May 15, 2000, the FCC terminated its tariff investigation[6] and allowed Verizon's tariff revisions to go into effect. These changes were also submitted to this Commission on April 28, 2000. Verizon's collocation service tariff in Docket No. UT-000630 currently has an effective date of August 1, 2000.

[3] *In the Matter of U S WEST Communications, Inc.'s Statement of Generally Available Terms Pursuant to Section 252(f) of the Telecommunications Act of 1996.*

[4] Verizon Telephone Operating Companies Revisions to F.C.C. No. 1, Transmittal No. 1234 (filed December 6, 1999).

[5] Verizon Telephone Operation Companies Revisions to Tariff F.C.C. No.1,Transmittal No. 1234, Order DA 99-2966 (rel. Dec. 20, 1999) (Suspension Order).

[6] Verizon Telephone Operation Companies Revisions to Tariff F.C.C. No.1,Transmittal No. 1234, CC Docket No. 00-36 (adopted May 15, 2000).

SPACE PREPARATION

Q. WHAT IS QWEST'S PROPOSAL FOR A SPACE PREPARATION CHARGE?

A. Qwest has proposed a one-time space preparation charge for cageless collocation of $33,658,[7] which includes the cost of 40 amps of power and two equipment bays. The non-recurring charge for caged collocation is $56,145[8] for 100 square feet of space. The caged collocation charge includes the costs for 60 amps of DC power, but no equipment bays. In addition to the nonrecurring charge for space construction there is a recurring charge for construction plus a rental charge of $2.97 per month per square foot of space.

Q. WHAT ARE STAFF'S CONCERNS WITH QWEST'S PROPOSED SPACE CONSTRUCTION CHARGES?

A. Staff has several concerns with the proposal. First, the proposed charges are based on a sample of collocation jobs from 41 central offices throughout Qwest's serving areas. Second, the category of costs for DC power appears to be overstated. Third, the proposed engineering charge is overstated. I will address my concerns about DC power under the section on Power Costs.

[7] J. Thompson, Direct Testimony, Exhibit ____ (JLT-4), Collocation Model (CM) Interconnection TELRIC Results, 1999 Cost Study, at 4 (February 15, 2000).

[8] *Id.* at 5.

Q. WHAT ARE THE PROBLEMS WITH QWEST'S CALCULATIONS OF ENGINEERING COSTS?

A. Qwest provided backup material for engineering in its response to staff data request number 12, which appears to be on a central office by central office basis. In general, each central office shows multiple engineering charges. It is unclear whether these engineering invoices are for a single collocator or for several collocators within the same central office. In any event, final calculation for engineering costs was calculated at the central office level, but is being charged to each collocator. Staff believes that this method of charging costs is in error. In addition, staff's review of the invoices showed that some of the invoices were labeled "installation labor," but the invoice amounts were charged to the engineering category.

Q. WHAT IS STAFF'S RECOMMENDATION?

A. Staff recommends that the Commission direct Qwest to recalculate engineering costs using only Washington-specific collocation jobs. Qwest also should be directed to compute the average engineering cost per collocator and correct any errors such as the misapplied "installation labor."

Q. DOES STAFF HAVE CONCERNS WITH QWEST'S PROPOSED INSTALLATION INTERVAL CHARGES?

A. Yes. Qwest has prepared costs for both 45-day and 90-day collocation site preparation.

Both cost studies use the same material costs, but Qwest uses somewhat different allocations of overtime in each study. In the 45-day study, Qwest assumes 25 percent of the labor hours will be charged at overtime (time-and-a-half) rates. For the 90-day installation interval, Qwest assumes that 20 percent of the labor will use overtime rates. Staff questions the methods Qwest is using to determine the use of overtime, and does not agree with Qwest's emphasis for using a 90-day installation interval.

Q. WHAT IS STAFF'S RECOMMENDATION?

A. Staff believes that CLECs should be able to order collocation space on a 45-day interval. Staff believes that it is appropriate to include overtime rates when space construction requires the use of overtime. However, staff believes that Qwest should base the charges on actual experience in Washington and not use hypothetical calculations of overtime.

Q. WHAT DOES VERIZON PROPOSE FOR A SPACE PREPARATION CHARGE?

A. Verizon dropped its nonrecurring charge for space preparation, or building modification, in favor of recurring charges. There is a building modification charge (mainly for security) of $162[9] per month and an environmental charge (HVAC) of $73 per month. There is also a rental charge of $2.84 per square foot per month for caged space. For cageless collocation, Verizon charges per linear foot at about five to six times the square

[9] R. Tanimura, Direct Testimony, Exhibit ____ (RT-2), Verizon Summary of Proposed Rates, at 2 (May 19, 2000).

foot rate. Nonrecurring charges are still included for cages, overhead racking, and engineering.

Q. WHAT IS VERIZON'S INSTALLATION INTERVAL?

A. Verizon appears to only have a collocation site preparation interval of 90 days.

Q. WHAT IS STAFF'S RECOMMENDATION?

A. Staff believes that Verizon also should prepare collocation prices such that a 45-day installation interval is available.

POWER COSTS

Q. DID QWEST AND VERIZON RESPOND TO STAFF'S REQUEST FOR DETAILS ON THEIR POWER CALCULATIONS INCLUDING TIME AND MOTION STUDIES?

A. Qwest submitted costs and labor estimates based on RS Means Electrical Cost Data in response to staff's data request number 18S2. Verizon provides time and motion studies embedded within its collocation cost study.

Q. DOES QWEST'S COST STUDY PROVIDE A REASONABLE COST ESTIMATE FOR DC POWER?

A. No. Staff believes Qwest's calculations for power costs are flawed and should be recalculated using data that is both accurate and Washington-specific. In Phase 2 of the generic case, Qwest submitted what it considered representative power costs for five Qwest offices. It appears that this same data is being offered again in this Phase of the case. The five-office study presented by Qwest includes two Washington offices, and both have cable runs below the Qwest calculated average for the five offices. One of the offices (Crystal, Minnesota) has cable lengths that are more than 300 feet. This one office distorts the overall average calculation and inflates the costs for Washington users. Staff believes this type of calculation increases the actual cost of power cabling in Washington and unduly discriminates against competitors, especially those requesting caged collocation, and those that have large power requirements.

Q. WHAT FACTORS IN QWEST'S CALCULATION DISTORT THE TRUE COST OF POWER CABLING?

A. The inflated distances create two problems in the cost calculation. First, the length of cable run itself is overstated, so the cost will be higher. Second, because power losses in the cable are critical, a longer cable run will typically require a larger size or gauge of copper, again increasing the cost.

Q. ARE THERE OTHER PROBLEMS WITH QWEST'S POWER CALCULATIONS?

A. Yes. Qwest assumes that in the caged environment more power will be required, and also designs a longer power cable run than for cageless collocation. In the caged power design, the cables extend all the way back to the office's main power board rather than to the battery distribution frame board (BDFB), which is much closer to the equipment bays and the cages. This assumption requires longer lengths and larger gauge cables for the caged enclosure option.

Q. WHAT DOES STAFF RECOMMEND?

A. Staff recommends that Qwest be directed to: (1) use only data that is Washington-specific in calculating average power cable lengths; (2) use a cable design that always runs power cables between a BDFB and the collocator's equipment bays for both caged and cageless installations; and (3) provide the cost per 20 amps of capacity, so that users can purchase the cabling in increments of 20 amps.

Q. DOES VERIZON'S COST STUDY PROVIDE A REASONABLE COST ESTIMATE FOR DC POWER?

A. No. The RS Means Electrical Cost Data that was provided by Qwest indicate the labor required to install power cable varies greatly depending on the size of the cable being

placed. To contrast, Verizon's cost study uses a single rate of 0.25 hours per foot,[10] or 15 minutes per foot. The RS Means Electrical Cost Data, used in Qwest's study, range from two minutes per foot for the smallest size cable (4/0) to six minutes per foot for the largest size (1000 MCM). For the largest size cables three people are needed for the installation, while only two people are needed for the smaller ones.

Q. ARE THERE OTHER PROBLEMS WITH VERIZON'S POWER CALCULATIONS?

A. Yes. Verizon has a single charge of $2,731 for 40 amps of DC power. On the surface, this item appears to be a reasonable charge. However, a more detailed look shows that it is for a cable pull of some 246 feet, about double the Qwest cable length. In addition, there is a material charge for the power cables and a recurring charge of about $513 per month for each 40 amps of DC power.

Q. WHAT IS STAFF'S RECOMMENDATION?

A. Staff recommends that the Commission direct Verizon to use an average of three to five minutes per foot for installation of power cabling. This range would be the equivalent rate for cable sizes 300 MCM to 400 MCM, which are in the middle range of power placement jobs that Verizon submitted to staff during staff's review of Verizon's collocation service tariff. This data is attached in Exhibit C-___ (DEG-3C). Verizon also

[10]Verizon: EIS Cost Study - Washington, COEI Time Study, Exhibit LR-2C, page 9-WA1, May, 2000.

should be directed to use Washington specific data for computing anticipated power cable lengths.

Q. WHAT IS THE CONCERN WITH VERIZON'S PROPOSAL TO RECOVER NONRECURRING COLLOCATION COSTS IN A MONTHLY RECURRING CHARGE?

A. While the FCC allows state commissions to require ILECs to establish monthly recurring charges for nonrecurring costs,[11] Verizon's proposal is problematic for two reasons. First, the monthly charge is open-ended. No specific date is established when the charge will end. The second problem is that the costs used to establish the charge are company-wide costs, not Washington-specific. The nonrecurring costs for collocation in Washington should be based on the costs of providing collocation in Washington.

Q. HOW CAN ILECS STRUCTURE A MONTHLY RECURRING CHARGE FOR NONRECURRING COLLOCATION COSTS?

A. The ILECs should estimate nonrecurring costs on a Washington-specific basis using the estimated number of CLECs anticipated to collocate in Washington central offices to calculate the Washington-specific nonrecurring cost each would have to pay. CLECs could then be offered the option of either paying the cost up front or choosing between several payment options that would recover the nonrecurring cost during a one to five

[11] *See* 47 CFR § 51.507(e).

year time period. This method would ensure that ILECs fully recovered their nonrecurring costs in Washington and would afford CLECs the same payment options that the ILECs provide to their other customers.

CAGES, ENTRANCE FACILITIES, AND SECURITY

Q. WHAT IS STAFF'S RECOMMENDATION CONCERNING THE COSTS FOR CAGES, ENTRANCE FACILITIES, AND SECURITY?

A Although the prices for cages or entrance facilities do not appear to have changed materially since the last phase of this case, there are cageless options available to collocators. Building modification and space conditioning costs appear to have dropped. Staff is not taking a position on whether the pricing of cages, entrance facilities, or security should be changed at this time.

OTHER ISSUES

Q. ARE VERIZON AND QWEST USING WASHINGTON SPECIFIC PRICING?

A. Verizon is using a cost of money of 9.76 percent. However, Qwest is using 11.75 percent, which is not a Washington prescribed rate of return. Qwest also does not appear to be using Washington prescribed rates for depreciation. For instance, Qwest uses 10

years, or 10 percent, depreciation for power, but should have used the same rate as the buildings account.

Q. SHOULD QWEST BE REQUIRED TO PLACE DSL LINE SPLITTERS ON THE INTERMEDIATE DISTRIBUTING FRAME?

A. Yes. Commission staff sees no physical reason why line splitters cannot be located on the intermediate distributing frame (IDF). Staff would not recommend that splitters be placed on a COSMIC frame due to space limitations. If an IDF were severely congested there may be a legitimate reason to locate the splitters elsewhere, but it should still be possible to place a terminal block on the IDF that connects directly to the splitters.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.