Exhibit No. ____ (KCC-5T)
Docket No. UT-040788

BEFORE THE

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,	)	
Complainant,	)	
v.	)	**DOCKET NO. UT-040788**
VERIZON NORTHWEST INC.,	)	
Respondent.	)	
. . . . .	)	

REBUTTAL TESTIMONY OF

KEVIN C. COLLINS

ON BEHALF OF
VERIZON NORTHWEST INC.

FEBRUARY 2, 2005

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Kevin C. Collins. My business address is 711 Van Ness, Suite 300, San Francisco, CA 94102.

Q. DID YOU FILE DIRECT TESTIMONY IN THIS CASE?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I respond to Dr. Robert Loube's direct testimony, which was filed on behalf of Public Counsel and AARP, regarding the proper definition of incremental cost and the validity of Verizon NW's incremental cost model, VzCost. Specifically, I explain that (1) Dr. Loube does not appear to understand the types of costs calculated by VzCost and proposes an incorrect method for calculating incremental costs, (2) Dr. Loube makes broad generalizations about VzCost that are not supported, and (3) Dr. Loube proposes several random changes to VzCost's inputs that are erroneous and unsupported. I conclude that all of his proposals should be rejected.

Q. WHY DID VERIZON NW FILE COSTS IN THIS PROCEEDING?

A. Verizon NW filed TSLRIC studies, pursuant to WAC 480-07-510(6), not just as a matter of compliance, but to serve as a valuable input to the rate design process presented by Verizon NW witness Doug Fulp.

Q. HAVE ANY OTHER PARTIES TAKEN ISSUE WITH VERIZON NW'S FILED STUDIES IN THIS PROCEEDING?

A. No. Dr. Loube, representing Public Counsel and AARP, is the only witness to criticize Verizon NW's cost studies and their use in this case. Moreover, as I explain below, Dr. Loube's criticisms indicate that he does not believe any cost studies are appropriate. In contrast, Staff supports the use of cost studies. Staff witness Jing Roth (at 3) states, "The economic principle of cost-based rates requires that rates be set close to the underlying cost of the service. Cost information and cost support provide useful tools in designing fair, just, reasonable, and sufficient rates for services. However, cost should not be viewed as the sole determining factor in designing rates." Staff appears to have relied on Verizon NW's model's output in determining its rate design.

II. COST METHODOLOGY

Q. DR. LOUBE APPEARS TO SUGGEST (AT P. 11) THAT RATES FOR SERVICES SHOULD BE EQUAL TO INCREMENTAL COST, AND HE

REFERENCES THE COMMISSION'S FIFTEENTH SUPPLEMENTAL ORDER (DOCKET NO. UT-950200, AT P. 83). PLEASE COMMENT.

A. I disagree. On page 81 of that order, the Commission made clear that incremental cost studies are used to establish *price floors* for individual services. Here, Verizon NW has calculated costs that can be used to determine price floors for individual services. These are the costs found in the column entitled "Direct" in Exhibit No. KCC-2C. Direct costs are those which vary with the output of the service (or with the output of the entire service), i.e. are caused by the decision to provide the service in question.

However, the purpose of this case is not simply to establish price floors; rather, the purpose of this case is to establish prices that reflect Verizon NW's revenue requirement. This revenue requirement includes all the costs of Verizon NW as explained in Verizon NW witness Nancy Heuring's testimony. In other words, VzCost produces incremental costs that Verizon NW uses as tools to develop its specific pricing proposals. These specific proposals are discussed by Verizon NW witness Doug Fulp.

Q. DR. LOUBE CLAIMS (AT P. 26) THAT VZCOST IS NOT AN INCREMENTAL MODEL. PLEASE COMMENT.

A. He is wrong. Dr. Loube appears to be confused because VzCost produces both direct *and* shared costs. The direct costs produced by VzCost are those costs that are caused directly by the decision to provide a particular service, i.e. they are

incremental by definition. Such costs vary with the output of the service in question. For example, a customer request for residential basic dial tone requires that certain resources be expended to enable such a connection, e.g. pair of copper wires, NID, drop wire, plug-in at digital loop carrier, etc. Again, these are *direct costs*. The FCC explained this point in its definition of incremental cost:

> Incremental costs are the additional costs (usually expressed as a cost per unit) that a firm will incur as a result of expanding the output of a good or service by producing an additional quantity of the good or service. Incremental costs are forward-looking in the sense that these costs are incurred as the output level changes by a given increment. The costs that are considered incremental will vary greatly depending on the size of the increment. For example, the incremental cost of carrying an additional call from a residence that is already connected to the network to its end office is virtually zero. The incremental cost of connecting a new residence to its end office, however, is the cost of the loop. (Par. 675)

In contrast, support structure such as poles and conduit are treated as *shared* investment because they are volume insensitive in nature and they are used by more than one service (e.g. residence and business dial tone services). They are not truly incremental with respect to either residence or business dial tone service viewed in isolation, but they are incremental to the family of dial tone services and interoffice facilities as a whole. That is why shared costs are identified by VzCost separately from direct costs.

Q. DOES VZCOST ACCURATELY CALCULATE TSLRIC?

A. Yes. VzCost separately calculates, identifies and reports direct and shared costs, as can be seen in Exhibit No. KCC-2C. Direct costs, which are incremental to a

single service, are useful in establishing price floors for that particular service in isolation. But as I noted earlier, the purpose of this proceeding is to develop prices that reflect Verizon NW's revenue requirement. As Mr. Fulp explained in his direct testimony, retail services should, in the aggregate, recover both their direct and shared cost and make a contribution to common cost. Therefore, shared costs can provide valuable assistance in establishing a rate design to recover the revenue requirement. Thus, Dr. Loube's claim that shared costs are not relevant is wrong.

Q. PLEASE RESPOND TO DR. LOUBE'S CLAIM THAT (AT P. 26) THAT VZCOST IMPROPERLY "ALLOCATES SHARED FACILITIES AMONG CUSTOMER CLASSES."

A. Here again Dr. Loube is confusing the "Direct" and "Shared" cost results provided in Exhibit No. KCC-2C. Direct costs are those that are causally attributable to the service in question and are, therefore, incremental to the service in question. The shared costs (presented separately in a column in Exhibit No. KCC-2C) are incremental to the service family to which the individual service belongs. These shared costs are expressed on an average per unit basis and are included in the presentation of costs for individual services. So, Dr. Loube's characterization of VzCosts' shared cost results (as opposed to direct costs) would be technically correct if one were looking in isolation at a single retail service. However, such is certainly not the case in this proceeding. The scope of this proceeding includes the family of services that "share" the shared costs to which

Dr. Loube objects. Therefore, those costs are certainly relevant to this proceeding.

Q. DR. LOUBE (AT P. 26) CLAIMS THAT THE LOOP IS A COMMON COST, NOT AN INCREMENTAL COST OF AN INDIVIDUAL SERVICE. DO YOU AGREE?

A. Absolutely not. Dr. Loube's position on the loop as a common cost constitutes a direct violation of the most fundamental of economic costing principles, the principle of cost causation. Verizon NW witness Dr. Carl Danner explains this point in his rebuttal testimony.

I have, however, two observations regarding Dr. Loube's position. First, under his theory, no service would have an incremental cost – i.e., the incremental cost of practically every service would be zero.[1] This means that all incremental cost studies would be meaningless. Such a result is not only nonsensical, it also does not provide us with any information that indicates what causes costs to be incurred, i.e. the type of information that is helpful in setting prices that promotes economic efficiency. The purpose of providing TSLRIC estimates in this case was to provide information to be used as an input to the rate design process. Arbitrarily setting incremental costs at zero (or near zero) deprives the rate design process of a valuable input.

[1] For example, the switch is used to provide a number of different services. One could argue that switching costs are not incremental to basic local service either. This could be done until one reaches the logically absurd conclusion that all costs are shared and that the incremental cost of basic local service is zero.

Second, Dr. Loube's "loop as common cost" position is irrelevant, because in this case the Commission must set prices that tie to Verizon NW's revenue requirement regardless of what the "incremental cost" of service is. In other words, if Verizon NW's incremental costs are reduced, then its common costs must be increased on a dollar-for-dollar basis – reducing incremental costs does not magically reduce Verizon NW's revenue requirement. As Staff's testimony points out, the majority of these common costs should be recovered from basic services. Thus, whether you call loop costs "incremental" or "common," the end result is the same – the prices for basic services must increase, and all prices must tie to Verizon NW's revenue requirement.

On this latter point, Dr. Loube appears to be under the mistaken impression that he can lower the revenue requirement through a manipulation of costs (TSLRICs), either by understating them or by declaring the bulk of them to be shared or common in nature. But again, *the costs presented in this case (Exhibit No. KCC-2C) are not tied to the revenue requirement.* Instead, they are economic costs intended to provide guidance during the rate design process.

Q. DO YOU AGREE WITH DR. LOUBE'S CHARACTERIZATION OF HOW VERIZON NW BELIEVES TSLRIC DIFFERS FROM TELRIC (AT P. 19)?

A. No. Dr. Loube has mischaracterized Verizon NW's testimony on the difference between TSLRIC and TELRIC. Please refer to pages 6-8 of my direct testimony.

III. VZCOST SPECIFIC ISSUES

Q. DO YOU AGREE WITH DR. LOUBE THAT RETAINING CERTAIN EXISTING NETWORK CHARACTERISTICS RESULT IN AN INEFFICIENT MODELED NETWORK DESIGN AND THAT REAL WORLD DATA SHOULD NOT BE USED AS THE STARTING POINT FOR A FORWARD-LOOKING NETWORK?

A. No. As Verizon NW explained in the generic cost case, Docket No. UT-023003,[2] VzCost takes advantage of information about the real world in order to construct a network that reflects the existence of real world constraints such as rights-of-way, space restrictions, security considerations, zoning requirements, and geographical limitations like lakes and rivers. This Commission has recognized the value of such realities by repeatedly requiring *validation* of cost models based on a comparison of their average loop lengths to those in the incumbent's actual network.

Q. DOES DR. LOUBE HAVE ISSUES WITH VZCOST'S CALCULATIONS AND/OR INPUTS?

A. Yes. Aside from Dr. Loube's inaccurate methodology assumptions previously discussed in my testimony Dr. Loube also takes issue with several VzCost investment calculation or inputs including the following: SAI and DLC investment quantifications, distribution cable sizing factors, percent integrated

[2] 05-12-04 Rebuttal Panel Testimony, pages 20-27.

DLC, drop length, busy hour versus annual usage inputs and expense and capital factors.

Q. ARE DR. LOUBE'S ADJUSTMENTS AND ASSERTIONS REGARDING VZCOST APPROPRIATE?

A. No, none of Dr. Loube's adjustments should be adopted by this Commission.

Q. IS DR. LOUBE'S ASSERTION THAT THE NUMBER OF SAIS AND DLCS RESULT IN AN OVERSTATEMENT OF INVESTMENT CORRECT?

A. No.

Q. ARE THE VZCOST AND SM SAI AND DLC QUANTITIES IDENTIFIED BY DR. LOUBE (PAGE 23) COMPARABLE?

A. No. Dr. Loube relies on Synthesis Model ("SM") quantities which reflect a model run designed for 18,000 foot copper loop length restrictions, while the VzCost quantities reflect a 12,000 foot design. By definition, the SM model will result in larger distribution areas ("DA") and fewer DLC and SAIs.

Q. IS IT EFFICIENT AND PRACTICAL TO DESIGN A NETWORK WITH SUCH LARGE DISTRIBUTION AREAS (DA)?

A. No. As discussed in Docket No. UT-023003, the larger cluster results in a larger DA in terms of land area. Such a design would lead to a smaller number of larger

clusters, served by larger backbone cables, SAIs and DLC systems. This would have the effect of shifting the mix of feeder and distribution cable in the modeled network towards the relatively more expensive distribution plant, since reducing the number of DAs means that, on average, customers will be farther away from an SAI.[3]

Q. IS IT APPROPRIATE TO CHANGE VERIZON NW'S DISTRIBUTION CABLE SIZING FACTOR AS DR. LOUBE SUGGESTS?

A. No. Dr. Loube incorrectly reduces the residential sizing factor based only on second line data provided in a data request response. Reducing this factor is incorrect because the factor Verizon NW utilized is conservative for two reasons. First, temporarily vacant customer locations are not included in the calculation of the average number of pairs per customer; thus, the factor does not account for cables in place to serve temporarily vacant locations. Second, Verizon NW's engineers typically design distribution facilities to have more than 2.5 pairs per business location. Because Verizon NW applies the same 2.19 sizing factor to residential and business demand, Verizon NW's cost studies understate the number of distribution pairs that would be installed to serve business customers.[4]

[3] 04-20-04 VZ Reply Testimony of Richter, page 12.
[4] See WA 06-26-03 PANEL Testimony (PROPRIETARY), pages 41-42.

Q. IS DR. LOUBE CORRECT IN MAKING VZ'S PERCENTAGE DLC 100% INTEGRATED DLC?

A. No. The percentage of loops using IDLC versus UDLC utilized in Verizon NW's studies is based on Verizon NW's experience deploying these technologies in the current network. Because of the need to support demand such as private lines (non-switched services), Verizon NW has found it necessary in the existing network to install UDLC for a small percentage of the loops served by DLCs. Verizon NW continues to install UDLC because of the need to support these services.[5]

Q. DID VERIZON NW PROVIDE WASHINGTON SPECIFIC DROP LENGTH DATA IN THIS PROCEEDING?

A. Yes. As provided in supplemental response to WUTC Staff Data Request No. 3. The statewide average drop length for each period is greater than the maximum drop length input used in Verizon NW's cost study, indicating that the estimates of Verizon NW's subject matter experts used in Verizon NW's cost studies were conservative.

Q. DO YOU AGREE WITH DR. LOUBE'S SHARING ASSUMPTIONS?

A. No. Dr. Loube's recommends using either FCC or Virginia arbitration inputs in this Washington proceeding. As litigated in Docket No. UT-023003, Verizon

[5] Id.

NW, in its studies, utilized sharing estimates based on Washington data. This data should be used as the basis for any sharing assumed in VzCost.[6]

Q. ON PAGES 14 AND 15, DR. LOUBE DISCUSSES WHETHER OR NOT VERIZON NW'S COSTS ARE BASED ON BUSY HOUR USAGE, AND WHY HE BELIEVES THAT IT IS IMPORTANT THAT THE COSTS BE BASED ON BUSY HOUR USAGE. DOES HE CORRECTLY CHARACTERIZE WHAT VZCOST UTILIZES IN ITS STUDIES?

A. No. As Dr. Loube asserts, the network is engineered to provide service in the busiest hour. If a switch, for instance, can meet demand in the busy hour, it can meet demand for any other time during the year. Therefore, the appropriate investment to consider is busy hour investment. Contrary to what Dr. Loube states in his testimony, this is exactly what is used in the Verizon NW cost studies. In the Basic Component ("BC") runs for switching, for instance, the busy hour investments for the various components of the switch required for local usage are summed to a total per setup and per conversation minute. Because usage occurs per minute, however, the busy hour to annual ratio is applied to these investments so that they are applicable to any setup or conversation minute, at any point in the year. Service specific average holding times, and calls per line per month, are then applied to these investments, as well as cost factors, in order to generate service specific usage costs to include in flat rated residential, single line business or PBX monthly costs.

[6] 05-12-04 Rebuttal Panel Testimony, pages 62-64.

Q. DR. LOUBE RUNS VZCOST USING HIS INTERPRETATION OF A BUSY HOUR BASIS AND YIELDS COST RESULTS (EXHIBIT RL-6C) THAT INDICATE THAT PBX AND KEY NON-LOOP COSTS ARE FIVE TIMES HIGHER THAN RESIDENTIAL SERVICE (AT P. 16). ARETHESE RESULTS LOGICAL?

A. Not at all. Dr. Loube's so-called cost results indicate that customers with greater local minutes of use generate lower total switching costs than do customers with fewer local minutes of use. Exhibit No. KCC-6C shows how such a result makes no logical sense. This exhibit starts with Dr. Loube's Exhibit RL-6C, which includes non-loop costs for Verizon NW's filing and those performed by Dr. Loube and described as "busy hour estimates." Using Dr. Loube's supporting workpapers I was able to isolate the conversation portion of the cost estimates, i.e. focusing only those costs attributable to usage of the switch. I also added a column that shows Verizon NW's actual average local minutes per line per month for Residential, Business, and Key/PBX trunks. According to Dr. Loube's estimates, business customers with an average of 559 local minutes generate $7.09 of usage cost while Key/PBX customers with an average of 471 minutes generate a usage cost of $48.72, nearly seven times that of business customers! To make matters even worse, Dr. Loube's estimate for residential customers, who average 1,204 minutes, yields the lowest cost estimate. This simply does not make any sense.

Q. CAN DR. LOUBE'S "NEW COST RESULTS" BE USED AS GUIDELINES FOR PRICING AS DR. LOUBE CLAIMS? (AT P.16)

A. Not in any economically meaningful way. First, Dr. Loube's "new cost results" are completely meaningless, as described above. Second, Dr. Loube fails, in this case, to consistently apply his own flawed logic to all aspects of service costs. As described above, if Dr. Loube were to apply the same logic used to eliminate the loop from consideration (as an incremental cost of local service), then he should do the same for switching, which would leave the incremental service costs at or near zero.

Q. DR. LOUBE ARGUES THAT VERIZON NW'S EXPENSE FACTORS ARE NOT FORWARD-LOOKING. IS THIS TRUE?

A. No. Verizon NW's Annual Cost Factors ("ACFs") reflect all efficiencies of a forward-looking cost model.

Q. DOES DR. LOUBE CORRECTLY DESCRIBE THE PROCESS BY WHICH VERIZON NW DEVELOPS ITS ACFS (AT P. 24)?

A. No. Mr. Loube states that "VZCost's expense-to-investment ratio[s] (factors) are calculated as the ratio of the embedded expenses to adjusted embedded investment," which is misleading and incorrect. The network factors that Verizon NW applies to the Forward-looking investment in the product studies represent the relationship of the Forward-Looking expenses to the related Forward-Looking investment. Verizon NW creates and uses *forward-looking* ACFs (*i.e.*, ratios of

forward-looking — not embedded — expenses to forward-looking investments) for its filing in this Washington Rate proceeding. Although Verizon NW *starts* its analysis with current expenses, it then identifies (and makes) forward-looking expense adjustments that are appropriate for the forward-looking network; in those cases where no adjustment is made to a current expense, this reflects the fact that the current expense is the best prediction of forward-looking expenses. Thus, all of the expenses used in Verizon NW's factors study are analyzed and, if necessary, adjusted, to ensure that they are forward-looking. This distinction is important, because Dr. Loube's criticism flows from his misguided assertion that Verizon NW's ACFs are not forward-looking and represent embedded expenses. But this is at best a misstatement or a misunderstanding of Verizon NW's entire approach, which has as its fundamental purpose the identification and production of forward-looking expenses.

Q. WHAT IS THE FLC FACTOR AND WHY IS IT APPROPRIATE?

A. As litigated in Docket No. UT-023003, the Forward-Looking Calibration ("FLC") factor is an adjustment specific to Verizon NW's studies and is designed to ensure that Verizon NW's expense-to-investment ACFs produce forward-looking expenses when applied to forward-looking investment in Verizon NW's cost studies. The FLC is necessary because, as explained, Verizon NW uses forward-looking expenses (*not* embedded or current expenses, as Mr. Loube maintains) in the numerator for its ACF calculations.

Q. IS DR. LOUBE CORRECT THAT THE FLC IS DESIGNED TO RECOVER EMBEDDED EXPENSES?

A. No, not at all. The FLC is designed to ensure that Verizon NW's ACFs operate correctly to produce forward-looking expenses. While Dr. Loube is correct that the FLC ensures that expenses Verizon NW uses in developing its ACFs are produced by the studies, this is as it should be, because those expenses are forward-looking and already have been adjusted - a fact Dr. Loube ignores.

Again, though, as discussed earlier, the purpose of this case is to set prices that reflect Verizon NW's actual revenue requirement, not simply forward-looking costs produced by a cost model.

Q. DR. LOUBE ARGUES THAT VERIZON NW'S MARKETING LOADING DOES NOT COMPLY WITH TSLRIC BECAUSE IT REFLECTS THE RECOGINTION IN PRODUCT COSTS OF TOTAL MARKETING EXPENSES. IS HE CORRECT?

A. No, Dr. Loube's criticism is erroneous. A loading, by definition, is not meant to indicate or identify direct cost causation. It's a method to assign expenses that, by their nature, do not have a direct cost-causative relationship to any specific operation but are incurred to support the entire operation. The Marketing loading is meant to include expenses like product management, sales, advertising, and customer service that are incurred to serve all customers. And, as such, when performing a product cost study, the costs associated with these areas are assigned

to a product as a portion of its total network costs (capital and expense). In order to accomplish this, a loading factor is developed based upon the relationship of Total Marketing Expenses to Total Recurring Expenses less Marketing and Common expenses. This loading factor can then be used to apportion the marketing expenses to all products in the same manner.

Therefore, Dr. Loube is correct in his statement that "VZCost does not develop service specific costs, rather it allocates total marketing costs to each service using [ ] marketing factors". However, he never explains why this tried and true method is wrong or invalid when used in the context of this case. He further states that the method, when applied across all services, allows for the recovery of all marketing costs. But this is as it should be, especially in the context of this proceeding where the recovery of a Total Revenue shortfall is the objective.

Q. IS THERE ANY MERIT TO DR. LOUBE'S ALLEGATION THAT THE APPLICATION OF A MARKETING LOADING FACTOR IS NOT VALID BECAUSE IT IS NOT PRODUCT SPECIFIC?

A. There is no basis for Dr. Loube's assertion. He suggests that a service specific marketing costs can be developed for basic residential and business services. The support for his position is based upon a methodology he draws from a Massachusetts Universal Service case, which focused only on basic residential service, and is based upon very old 1992 data. Not only is this data over ten years old but he gives no reasoning as to why it is applicable to Verizon NW in this

case. The total actual demand times the expense loading amount will determine the total level of marketing expense for the service because the total level of demand for all services times the loading factor will, in theory, generate the total level of forward-looking marketing expense for the entire company. Therefore, a marketing loading factor is the best method to assure that the total forward-looking level of marketing expense is reflected in all product costs.

Q. DOES DR. LOUBE INDICATE WHICH SERVICES WILL BEAR A GREATER BURDEN OF MARKETING COSTS TO COMPENSATE FOR HIS PROPOSED DECREASE IN THE PORTION OF MARKETING COSTS HE ASSIGNS TO RESIDENTIAL AND BUSINESS SERVICES?

A. No. Dr. Loube's position does not identify which services should be adjusted to reflect a higher level of expenses to compensate for his adjustment to residential and business services so that the aggregate level of forward-looking expenses for VZ NW are fully reflected.

Q. SHOULD THE COMMISSION ADOPT ANY OF DR. LOUBE'S RECOMMENDATIONS IN REGARD TO VZCOST OR COST STUDIES IN GENERAL.

A. No. Dr. Loube's criticisms of Verizon NW's cost model (VzCost) and its results are largely based on his misunderstanding of the types of costs calculated by VzCost, rendering such criticisms invalid. In addition, the incremental costing logic advocated by Dr. Loube, when carried forward in a consistent manner,

would yield nonsensical results (i.e. incremental costs at or near zero), which would serve to deny this proceeding a valuable input into the rate design process. Dr. Loube's attempt to manipulate switching costs yields results that are absurd on their face and should be afforded no weight in this proceeding. Finally, Dr. Loube's proposed changes to inputs are erroneous and unsupported and should all be rejected.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.