BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Pricing Proceeding for Interconnection, Unbundled Elements Transport and Termination, and Resale	)	**DOCKET NO. UT-960369**
In the Matter of the Pricing Proceeding for Interconnection, Unbundled Elements Transport and Termination, and Resale for US WEST Communications, Inc.	)	**DOCKET NO. UT-960370**
In the Matter of the Pricing Proceeding for Interconnection, Unbundled Elements Transport and Termination, and Resale for GTE Northwest Incorporated	)	**DOCKET NO. UT-960371**

PHASE II

Direct Testimony
of
William Page Montgomery

for
TCG-Seattle

July 9, 1998

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Introduction and Summary

Q. What is your name and business affiliation?

A. My name is William Page Montgomery. I am the principal of Montgomery Consulting in Laguna Beach, California. I submitted Direct and Reply Testimony in Phase I of this proceeding on March 28 and April 25, 1997, respectively.

I have been involved in telecommunications public policy and regulatory matters since 1974. I have also participated in several hundred state-level telecommunications proceedings, and have submitted expert testimony in such matters many times. My consulting assignments have involved analyzing the organization of and the development of competition in telecommunications, as well as numerous policy and economic issues involving rate structures, pricing, cost and cost allocation methods, and tariffs. These issues also have involved forecasting cost, service and structural trends as well as changing telecommunications management objectives. I have been actively involved in many local exchange competition proceedings and arbitrations in Arizona, California, Connecticut, Florida, Illinois, Indiana, Iowa, Kentucky, Maryland, Massachusetts, Michigan, Missouri, Nebraska, Ohio, Oregon, Pennsylvania, Texas, Utah, Washington and Wisconsin. I have degrees in law and economics from Duke University and Butler

University respectively. A more complete statement of my qualifications was included in my Phase I testimony.

Q. What is the purpose of your testimony?

A. I have been asked by Teleport Communications Group, Inc., on behalf of TCG Seattle to address several of the issues that the Commission designated for Phase II of this proceeding. These issues were identified in the Eighth Supplemental Order / Interim Order Determining Costs ("Eighth Order") released by the Commission on April 16, 1998. The Eighth Order concluded the Commission's complex and time-consuming review in Phase I of this case. In Phase I the Commission determined the costs for a number of unbundled network elements ("UNEs") needed for local telecommunications competition in the state. The Commission spent considerable time and effort analyzing economic cost models and setting unbundled loop costs for US West Communications ("USWC") and GTE Northwest Incorporated ("GTNW").[1]

Q. Can you summarize the specific issues that you address in this testimony?

A. Yes. I will discuss four issues pertinent to Phase II. The first issue I address is transport and termination compensation. I propose that the Commission build upon its recent access charge reform decision in Docket No. UT-970325 to advance its formulation of a unified policy of compensation for all types of transport and termination in the State. Not only is this approach economically sound, it is an important step towards realizing the objectives to (a) encourage the development of economically efficient competition through the development of facilities based service providers; (b) achieve lower prices

[1] I refer to these companies collectively as the incumbent local exchange carriers ("ILECs").

for telecommunications services through competition; and (c) create an inter-carrier compensation regime that is geographically neutral. I also elaborate on the proposal I discussed in my Phase I testimony that transport and termination compensation must meet the Telecommunications Act of 1996, Section 252(d)(2)(A)(ii) standard of reflecting only the additional costs incurred to transport and terminate calls. If such additional costs can be established, a flat-rated capacity charge better reflects cost causation.

The second issue I discuss is interim number portability costs. I propose that the Commission adopt essentially the same methodology that the FCC adopted in its May 12, 1998 Order concerning the costs of the permanent local number portability ("LNP") databases and other associated functions. Adopting the FCC's cost allocation method will be competitively neutral and administratively simple for all carriers, particularly in light of the relatively low costs likely to be incurred for INP.

Third, I briefly discuss the issues raised by the Commission concerning tariff filings. A basic schedule of rates should be filed by the ILECs. However, the particular terms and conditions that different carriers want in their interconnection agreements suggest that the Commission should not try to prescribe a single set of terms and conditions in an all-encompassing formal tariff, to the extent this is allowed by law. Such a single set of requirements would reduce all carriers' flexibility and impede consumer welfare by potentially foreclosing otherwise innovative and efficient inter-carrier arrangements.

The final issue is the size of any markups to be applied to the costs of UNEs. Despite the Commission's considerable efforts in Phase I, both ILECs in effect propose to

obviate that work by applying large markups to the economic costs determined by the Commission. These large markups are not related to the cost models; they are designed to raise the ILEC rivals' costs of doing business and impede the growth of local telecommunications competition. As a result, both USWC and GTNW are seeking in effect to set UNE prices at or close to fully allocated costs, an approach which is not only economically inefficient, but also would turn this case into precisely the type of "rate base proceeding" which is precluded by Section 252(d)(1) of the Telecommunications Act. GTNW is particularly blatant in this respect in advocating an "actual cost" approach that is — despite the company's protestations to the contrary — very close to its embedded book costs.

The Commission should limit any UNE markups to the ranges adopted by most other state regulators, i.e., approximately in the range of 8% to 15% above direct costs. Unbundled loops should not be subject to such markups, however. The method used by the Commission to set USWC's $17.00 per month loop cost already involves an implied markup of between 15% and 25%. This markup is not explicitly cost related; it will, however, provide sufficient additional cash flow to offset reasonable levels of common costs and possibly other costs as well.

Transport and Termination

Q. Can you summarize the issue concerning compensation for the transport and termination of calls in this phase of the proceeding?

A. Yes. The Commission stated it would consider whether to require a compensation arrangement different from the bill and keep, or in-kind mutual compensation, system

that has heretofore applied to local call terminations.[2] USWC and GTNW have filed adjusted costs and/or proposed prices for call terminations in their May 18 submissions. In addition, and quite importantly, on June 25 the Commission adopted the rule proposed in Docket No. UT-970325 that requires certain ILECs, including GTNW and USWC, to reduce their terminating access charges for interexchange carriers to the same cost of call terminations.

Q. Do these factors provide a basis for devising a different compensation mechanism for call terminations?

A. Yes. As I noted in my Phase I testimony, "the advantages and disadvantages of mutual in kind compensation for local call terminations are well understood by all parties."[3] If the Commission decides to retain the current bill and keep arrangements for transport and termination, it already has enough information in the Phase I record to make this choice. However, my Phase I testimony also noted that the Commission might well begin considering alternatives to bill and keep in order to establish a market-clearing price for call terminations. This phase of the current proceeding is likely to be the Commission's last good opportunity to consider this issue before ILECs and CLECs begin to renegotiate their first-round interconnection agreements. In view of the new rule adopted in UT-970325 this is the appropriate time for the Commission to consider both a unified approach to transport and termination compensation, as well as setting termination compensation on the basis of capacity pricing.

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[2] Eighth Order, ¶ 436.

[3] Montgomery Phase I Direct Testimony, p. 27.

Q. Are there sound policy arguments in favor of a unified pricing approach for transport and termination?

A. Yes. This is an important step in making telecommunications pricing to the well-recognized concept that "a minute is a minute," but there are more tangible benefits as well. The Staff Memorandum for the rule adopted in docket UT-970325 noted some of the advantages of this approach with respect to access charges. It noted that the new rule

> would require that companies redesign access charges so that more of the [originating access] revenues go with the customer if the customer chooses to switch to a competitor. By making revenues more contestable, the rule promotes competition in the local market. This will not immediately reduce long distance rates, but it promotes competition that may ultimate reduce both local and long distance rates.

The unified approach to transport and termination contemplated by the Act, as well as the reciprocal compensation mechanism, will, when achieved act as an additional spur to facilities based competition. All carriers will be assured of recovering the economic costs of the facilities they build in order to serve end users. Investment and service decisions will not be distorted by geographical factors which have nothing to do with actual business costs. Second, the area of inter-carrier compensation will be cleanly segregated from end user pricing. Not only will this condition increase CLEC incentives to introduce new retail service pricing forms, ultimately competitive conditions may allow most retail services of incumbents to be freed from most aspects of price regulation and regulatory intervention, if any, will be mainly limited to the inter-carrier sector.

Thus, this is an important step towards encouraging the development of economically efficient competition through the development of facilities based service providers and create an inter-carrier compensation regime that is geographically neutral.

Q. Would this be a fully "unified" approach to transport and termination?

A. Probably not. As I am sure the Commission considered in the access reform rulemaking, it may not be completely possible at this time to fully integrate originating interexchange access pricing with transport and termination pricing. But the Commission can integrate call termination pricing. This approach will be more administratively efficient for all carriers; and will, as the Commission noted in UT-970325, allow various carriers to have more potential flexibility with respect to their end user rate structures.

At this stage, then, the "unified" approach would simplify the pricing treatment of calls carried between different carriers' switching points in this fashion:

"UNIFIED" TRANSPORT AND TERMINATION			
Originating Point	**Terminating Point**	**Charge type**	**Reciprocal ?**
ILEC	CLEC	Termination	Yes
CLEC	ILEC	Termination	Yes
LEC	IXC	Origination	No
IXC	LEC	Termination	No

Q. How are costs determined in the more unified approach to transport and termination pricing you illustrated above?

A. Section 252(d)(2) of the Telecommunications Act specifically addresses how state commissions should determine a reasonable compensation arrangement:

> [A] State commission shall not consider the terms and conditions for reciprocal compensation to be just and reasonable unless -- (I) such terms and conditions provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier;

> and (ii) such terms and conditions determine such costs on the basis of a reasonable approximation of the additional costs of terminating such calls.

The Act's "additional costs" pricing standard for the transport and termination of calls is obviously different from the interconnection and network element pricing standard in § 252(d)(1)(A). The Act should be read as literally as possible and these differences must be presumed to have meaning.

Q. Can you discuss the effect of the additional cost standard on transport and termination pricing?

A. Yes. There are two important considerations. First, any reasonable approximation of additional costs associated with call termination and transport would also have to consider the affects of cost savings and cost deferrals that each LEC — the incumbent and every competing CLEC — experiences when its network capacity no longer is required to carry the call end-to-end. Replacement of traffic that would have been carried end-to-end by one carrier, but which is carried in part by a second carrier, frees capacity on the first carrier's network for future growth and delays new construction. Both carriers receive some benefit in terms of reduced construction costs; these savings offset some of the apparent "additional costs" that an ILEC might otherwise appear to experience. These cost savings would accrue to either company regardless of whether traffic is in or out of balance.

Second, a reasonable approximation of the additional costs also must mean the lowest cost that is practically achievable in inter-carrier relationships. Any telecommunications network is built according to certain cost-minimizing criteria. Capacity with high

installation or placement costs is added in large, cost-minimizing increments to avoid re-incurring such costs unnecessarily. Therefore, the technology that all providers install is relatively insensitive to changes in demand that do not exceed peak capacity. It is that CLECs' termination of traffic will require impose additional overall network capacity costs compared to those that the incumbent would have had to incur to serve its own customers in the absence of local competition. This result is particularly correct when one excludes the additional costs of collecting, measuring and billing transport and termination on a real time, minutes of use basis.

Q. The ILECs' cost studies express the call termination cost as a cost per minute. Are flat rated capacity charges preferable to minutes of use charges?

A. Yes. The widespread application of minutes of use pricing involves a serious market distortion. Minutes of use charges cannot address what some economists have labeled "the classic peak load problem in its extreme form,"[4] because reflecting different network peaks requires very complex pricing structures. Minutes of use charges provide no economic signal for conservation of peak capacity resources, thereby limiting the benefits of local competition.[5]

Flat rate capacity charges provide the strongest efficiency incentives. Such charges have been typically reflected in trunk pricing, like PBX or special access lines. The number

[4] Bridger Mitchell and Ingo Vogelsang, Telecommunications Pricing (Cambridge University Press, 1991), p. 11.

[5] As I noted, minutes of use charges are the predominant pricing method for LEC-IXC switched access traffic. However, these access charges have never been differentiated by peak and off peak pricing.

of trunks or lines needed to maintain a consistent grade of service during the peak usage period reflects the capacity cost. If more peak traffic occurs, more trunks must be added. Thus, the number of trunks reflects that carrier's usage at the peak period. Flat rated capacity charges are also easy to apply to inter-local carrier termination of calls. They avoid the added and unnecessary costs of measuring minutes of use in real time. Most importantly, flat rate charges based upon the number of inter-carrier trunks used to terminate calls to another carrier's network better reflect actual cost causation than minutes of use charges.

Q. Does the current bill and keep regime provide incentives for economic efficiency?

A. Any such incentives are indirect, at best, because bill and keep does not establish any market-clearing price. Bill and keep arrangements are essentially flat rate pricing fixed at zero and do include some efficiency incentives — albeit indirect in nature. Because each carrier bears its own costs under bill and keep, it alone can minimize such costs. However, the stronger argument for bill and keep concerns competitive policy rather than economic efficiency. No carrier has the ability to strategically impair its competitors by setting a call termination price in excess of costs — an incentive which is inherent in any monetary compensation scheme.

Bill and keep arrangements also recognize that the "additional cost" standard discussed above pertains to each carrier's net additional costs. Incumbents will save the costs of terminating calls that would have largely been their responsibility in a sole source environment. In addition, bill and keep is administratively simple and avoids costly measurement expenses like the flat rated capacity charge.

Q. Are the flat rated capacity charges consistent with cost causation?

A. Yes. The cost of linking large communications networks is not incurred on a usage sensitive basis. Rather, network costs are incurred on a capacity basis. These capacity costs are not spread evenly over the telecommunications network. Instead, different nodes experience peak capacity requirements at different times of day. To some extent, peaks are specific to nodes or to the transmission links between nodes. Minutes of use pricing cannot accommodate these conditions without utilizing hopelessly complex rate structures and measurements. Thus, minutes of use pricing is based on average costs across an entire network without regard to different peaks at specific nodes and transmission links.[6] Even where minutes of use pricing does contain some peak/off-peak differentiation, the pricing structure cannot fully reflect actual off peak variable costs. Off-peak rates are still far above the "nearly zero marginal costs" caused by off-peak calling.[7]

Q. Does the existence of a local competition regime affect the possibility of capacity pricing in ways that might not exist in an environment of only monopoly retail services?

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[6] In addition, studies by some incumbent LECs indicate that most digital switches reach the exhaust point, where their fixed cost central processor and other non-traffic sensitive components must be upgraded, based on line growth rather than usage growth. This conclusion can be confirmed by comparing the results of switch cost model runs based on marginal versus average cost assumptions. The difference between the marginal and average cost assumptions impacts the investments per working line rather than peak CCS; thereby confirming that switch growth and replacement are not driven by minutes of use.

[7] Id., p. 14.

A. Yes, in three ways. First, the connections among different local service providers are specific to nodes and transmission links. Call terminations represent direct pairwise links between local carriers. The different carriers place capacity between their networks for call terminations that directly reflect the different traffic loads.[8] These conditions are quite different from the retail pricing environment, where capacity costs have typically been translated into per minute charges because it would be too complicated to account for retail end users' many different usage patterns among many different nodes. In the inter-carrier context, however, flat rate capacity charges more effectively reflect the cost causation of terminating traffic -- the number of ports needed to handle the peak period traffic.

Second, the existence of multiple local service providers offers more opportunity for different non-linear pricing structures. Individual carriers can experiment with different retail pricing structures that are more tailored to the demand characteristics of different segments of end user subscribers. Multiple pricing structures create more ways for individual carriers to offer stronger price incentives for increased use of network capacity in off-peak periods. Both of these effects offer opportunities to increase the efficiency of network utilization. The flat rate charges effectively value off-peak network utilization closer to its true, near zero, marginal costs, and thus provide carriers with the opportunity to test different non-linear pricing plans.

[8] As a carrier's peak traffic grows, it will be required to order more trunks and incur greater costs. The competing carriers must install sufficient numbers of trunks to reflect specific node to node traffic levels.

Third, the capacity cost concept also provides a indirect, but quite apparent, signal to ILEC and CLEC network planners — without revealing competitively sensitive information that each firm would rather hold in confidence. The installation and additions of flat rated trunks avoids this problem by providing a signal regarding each provider's capacity requirements.[9]

Q. Can you describe how a flat-rated capacity charge would be calculated?

A. Yes. The flat-rated capacity charge should be based on the efficient cost of providing the trunk capacity for the termination of calls. The trunk capacity may be connected to subscriber lines, as in an incumbent LEC's end office, or to other trunks and transport ring facilities, as in a tandem switching office As I said, this differs from usage studies for retail calling that are reported as "minutes of use" values. In order to get a MOU charge, there must be an underlying facility or capacity cost, which then gets divided by a number of minutes that reflects average usage characteristics of classes of subscribers. This type of computation disguises the actual cost structure by including both peak-sensitive and peak-insensitive costs.

While true peak capacity costs could be the basis for computing flat rated per trunk charges for call terminations,[10] the charge can also be computed by adjusting the bundled

[9] Conservation of overall network peak capacity was not a significant issue under monopoly conditions. It is an issue when multiple providers exist. Under a monopoly, network capacity conservation was not a realistic public policy goal. Peak capacity additions could actually be profitable under rate base regulation . Under rate base regulation, any mis-specification of the authorized rate of return for telephone utilities could create incentives to add inefficient investments to serve peak traffic conditions.

[10] End office and tandem capacity charges could be set without <u>any</u> reference to the number of (continued...)

costs shown on a minutes of use basis. Like the direct cost estimates filed by USWC and GTNW in this proceeding, most cost estimates for both end office switching and tandem switching are quite similar, and are within the cost ranges estimated by the FCC in the Local Interconnection First Report and Order.

Q. If the Commission uses the ILECs' adjusted per minute cost estimates to compute a capacity charge are any other adjustments necessary?

A. Yes. First, the added cost of measuring minutes of traffic in real time must be deducted in order to better approximate the true "additional costs" of call terminations using flat rated charges. Real time usage measurement decreases the capacity of the switch resource at the peak. Therefore, eliminating this switching "overhead" contributes to efficient capacity utilization.

Second, in addition to removing measuring costs, part of the costs associated with billing MOU charges and fixed processor cost allocations, using an ILECs MOU-based cost estimates requires a conversion factor to mimic the peak capacity costs. The established conversion factors reflect 5,000 minutes of use per channel for DS1 trunks (120,000 minutes per month per 24 channel trunk) that connect to lines at end offices and 9,000 minutes for trunk to trunk connections at a tandem switch.[11]

(…continued)
minutes that may or may not pass through the port. The capacity cost could be calculated at its peak usage of the switch resource.

[11] As I noted in my Phase I testimony, regulators in both Connecticut and Massachusetts determined that the 120,000 minute cap (i.e., 5,000 per channel times 24) was appropriate for a DS1 local call terminating trunk. Montgomery Phase I Direct Testimony, p. 38. The 5000 minutes per channel end office usage is implicitly reflected in a number of interconnection agreements which
(continued…)

Q. Can you illustrate how the capacity charge should be calculated?

A. Yes. Illustrative, but representative, examples of the calculation of such a charge are shown on Tables 1 and 2 in my Exhibit. The Tables are identical except that Table 2 also reflects a cost estimate for the actual transport links. The 5,000 minute factor and the 9,000 minute factor are used to create three types of flat rate charges. 5,000 minutes stands for a trunk to line connection and 9,000 minutes for a trunk to trunk or other tandem connection. The direct trunk to trunk connection price would apply if two carriers routed traffic between their network through the tandem switch of a third carrier, i.e., "transiting" traffic. Such arrangements necessarily must be provided over distinct trunk groups, in order to avoid attributing part of the traffic to the interpositioned third carrier. The charge for a call termination at another carrier's tandem should consist of both the end office charge and the transiting charge. Thus, the tandem capacity charge is higher than the end office charge either to reflect the capacity costs associated with a subtending end office or accurately reflects the higher costs associated with a tandem termination.

The flat-rated cost or target compensation level would then be divided between the two carriers using the ports, based upon periodic traffic studies of peak usage. If, for example, the traffic study shows that at peak usage Carrier A is sending 60 percent of the traffic over the trunk that terminates to a particular port, then Carrier A would pay 60 percent of the capacity charge. Clearly, the closer traffic is to being in balance, the more

(…continued)
require CLEC to install end office trunks and remove tandem trunks when the volume of traffic to any ILECs end office exceeds 512 CCS (centum or hundred call seconds) per month.

this compensation arrangement resembles bill and keep.[12] If traffic is not in balance, the flat-rate charge would provide a net compensation to one carrier, while still offering both carriers incentives to stimulate off peak traffic.

Interim Number Portability

Q. Can you summarize the issues concerning interim telephone number portability for this phase?

A. Yes. At paragraphs 434 through 436 of the Eighth Order, the Commission specified the monthly cost of interim number portability (INP) using remote call forwarding to be $1.50. It reserved the question of how this cost should be recovered for this phase. USWC reported to the FCC that it was porting about 7,000 numbers as of the end of 1997, so at that time the aggregate cost would have been approximately $11,000 per month. GTNW had only 70 ported numbers. There are probably more ported numbers now, but clearly the aggregate cost is relatively small. Other USWC cost studies confirm this.[13]

Thus, INP cost recovery raises two issues. First, how can these costs be recovered in a competitively neutral manner? Second, given the small size of the costs in question how can they be recovered in the most administratively simple manner?

[12] Like bill and keep arrangements, the flat rated charges avoid the need for smaller, rural incumbent LECs to install real time measuring equipment.

[13] For example, in Colorado USWC recovers INP costs equally from each active ILEC and CLEC NNX code. The company was required to "trueup" the INP cost initially established by the Colorado Commission. USWC's trueup cost study shows that its actual costs per NNX are less that 3% as high as the company first estimated. USWC Advice Letter 2720, June 15, 1998.

Q. What solution best satisfies these two requirements?

A. The best solution is for the Commission to adopt the same methodology for INP costs that the FCC recently adopted for allocating the costs of regional databases and functions related to permanent number portability. The FCC found this method to be competitively neutral. In contrast, the FCC previously found that requiring all interim number portability costs to be collected only from CLECs was not competitively neutral.[14] In addition, by requiring Washington ILECs and CLECs to apply the same administrative mechanism to the intrastate INP costs, the Commission will avoid having to create a second mechanism for spreading these costs.

Finally, by applying the same cost allocation method as permanent LNP to INP at the state level, this Commission will eliminate any possible incentives for one category of LEC, either ILECs or CLECs, to favor one form of number portability over another.

Q. Can you summarize how the FCC defined" competitive neutrality" for number portability costs?

A. Yes. The FCC itself summarized its earlier conclusions in the recent order regarding the cost recovery for the permanent LNP system:

> Observing that some states had already adopted cost recovery mechanisms for interim number portability, the Commission specified that to be competitively neutral any state-designed allocators for sharing the incremental costs of interim number portability: (1) must not give one service provider an appreciable, incremental cost advantage over another service provider when competing for a specific subscriber, and (2) must not disparately affect the ability of competing service providers to earn a normal return.

[14] Telephone Number Portability, CC Docket No. 95-116 / RM 8535, First Report and Order & Further Notice of Proposed Rulemaking, 11 FCC Rcd. 8352 at ¶s 132, 135

> The Commission explained in discussing the first of these two requirements that, if a facilities-based LEC wins another facility-based LEC's customer, an incremental cost of interim number portability is created that equals the cost of forwarding calls to that customer in the future. At the outset, these incremental, interim number-portability costs will fall predominantly on incumbent LECs that lose customers to facilities-based entrants. Shifting all these incremental costs to the competitive LEC would not be competitively neutral, however, because the competitive LEC could suffer a competitive disadvantage when competing with the incumbent LEC for that subscriber.
>
> [T]he second prong of the test [recognizes] that, if a carrier's cost of providing number portability were too large in relation to its expected profits, it might choose not to participate in the local service market. For example, if an incumbent LEC and a new entrant were to be assessed the same amount of number portability costs, the small entrant's costs might be sufficiently large when compared to its projected profit to drive the entrant out of the market or even prevent it from entering in the first place. Thus, the Commission concluded that the second prong should require that the costs of interim number portability not disparately affect the ability of competing carriers to earn a normal return.[15]

Q. What cost allocation mechanism did the FCC specify for LNP?

A. The FCC defined an allocator by which the LNP costs would be spread among all telecommunications carriers in an area. This allocator is defined as the ratio of the sum of the intrastate, interstate, and international end-user telecommunications revenues that such telecommunications carrier derives from providing telecommunications service in an area; to the sum of the intrastate, interstate, and international end-user telecommunications revenues that all telecommunications carriers derive from providing telecommunications service in the same area.

[15] Telephone Number Portability, CC Docket No. 95-116 / RM 8535, Third Report and Order, May 12 1998, FCC 98-82, ¶s 42-44. Footnotes omitted.

Q. Can this methodology be adapted for INP in Washington State?

A. Yes. I understand that the Washington Exchange Carrier Association ("WECA") is currently using a nearly identical end user revenue allocator to spread the costs of number portability in this state. One might simply use the same percentage or proportional allocator derived from all service providers' end user revenues in Washington that are used to derive the LNP cost allocation factor. Alternatively, the revenue allocator could be based only on intrastate revenues, as a feasible way of adjusting the FCC method for conditions in this state. Either way, essentially the same data will be used for both calculations and no service provider will have to collect additional or different data for the Washington State calculation.

Q. Did the FCC apply its competitive neutrality tests to this specific form of number portability cost allocation?

A. Yes, it did. The FCC found that:

> The end-user telecommunications revenue allocator meets the two-prong competitive neutrality test. First, the allocator will not give one service provider an appreciable, incremental cost advantage when competing for a subscriber. Because the end-user telecommunications revenue allocator will distribute the shared costs of the regional databases to each carrier in proportion to that carrier's end-user revenues, it will cost carriers approximately the same increase in shared costs to win a specific subscriber.... Furthermore, any difference will not be caused by providing number portability, but by differences in the underlying efficiency, services, and rates of each of the carriers. Thus we believe the allocator will not itself create an appreciable, incremental cost advantage that was not already present even absent number portability.
>
> Second, allocating shared costs in proportion to end-user revenues will prevent the shared costs from disparately affecting the ability of carriers to earn a normal return. Because carriers' allocations of the shared costs will vary directly with their end-user revenues, their share of the ...costs will increase in proportion to their customer base.... Consequently, the end-user

revenues allocator will not disparately affect competing carriers' abilities to earn a normal return. An end-user revenues allocator will also be easy to administer because carriers already track their sales to end-users for billing purposes, and will be familiar with the end-user revenues allocator from its use for universal service support contributions.[16]

Q. Did the FCC specify how the costs would actually be recovered as opposed to how the costs were allocated?

A. It specified only limited cost recovery rules applicable to incumbent LECs in the form of an end user surcharge, excluding from the charge all unbundled local loops used by CLECs. All telecommunications carriers other than ILECs are allowed recover their number portability costs in any manner consistent with applicable state and federal laws and regulations.

Q. Are you advocating that the Commission adopt one INP cost recovery method in this proceeding?

A. The Commission should adopt the cost allocation method used by the FCC to distribute INP among carriers. At this juncture, the INP costs appear to be so small that the Commission may not have to establish a specific cost recovery rule such as an all end user surcharge. It should allow USWC and GTNW, as well as CLECs, to recover the cost in any just and reasonable manner. Recovery for a particular ILEC might also be limited to specific services, classes of customers or particular geographic areas of the state, and, to the extent that the ILECs remain subject to cost and price regulation, that ILECs' cost recovery be consistent with other cost of service or pricing rules.

[16] Third Report and Order op. cit, ¶s 106-107.

Tariff Filings

Q. Another Phase II issue concerns the relationship, if any, between the terms and conditions in USWC's and GTNW's interconnection tariffs and negotiated or arbitrated interconnection agreements. How should the Commission address this issue?

A. Rather than addressing terms and conditions in this proceeding the Commission should require the ILECs to file a price schedule that only indicates the definition of the UNEs as adopted by the Commission, and the final UNE recurring and nonrecurring prices.

Experience with local competition has shown that negotiated interconnection agreements may include highly "customized" terms involving the operational arrangements between different ILECs and CLECs. Different CLECs have different business plans and networking strategies. It could be quite infeasible to design a single tariff that appropriately incorporates all operational terms and conditions. Moreover, even if such a "one size fits all" tariff could be designed, it might well become a de facto barrier to negotiating customized agreements. Therefore, different CLECs' operational requirements may best be addressed in the interconnection agreements. The price schedule can then be folded into individual interconnection agreements.

The approach makes sense from the perspective of administrative efficiency as well. State proceedings where regulators attempted to define full fledged UNE terms and conditions have proved to be time consuming and to require numerous revisions to draft tariffs. Given the pendency of new rounds of interconnection negotiations as the first set of agreements expires, this approach will make more efficient use of the Commission's

resources. The Commission, of course, will retain it power to review and approve (or modify) such agreements.

Q. Have some state regulators prescribed UNE prices lists, without adopting the position that all interconnection rates and conditions should be confined solely to bilateral agreements?

A. Yes. Several states have adopted schedules of final UNE prices, including descriptions of the application of those prices — that is, defining the UNEs and specifying price terms such as monthly recurring rates or non recurring rates. The prices set forth in the schedule would be the values that are used in price floor and imputation tests. This provides a reference point that may not be available to the Commission if prices are reflected only in a variety of bilateral interconnection agreements between ILECs and CLECs. Having many such "customized" sets of prices would make imputation tests much harder to carry out. By publishing such a pricing schedule, the Commission would maintain fundamental control over the core economic terms of local competition — interconnection prices.

Q. Does the existence of a baseline price schedule of this type provide CLECs with any ability to "game" the negotiated interconnection agreements, as some ILECs have asserted?

A. No. Some ILECs have stated that having any kind of a tariff, even one containing just prices, would provide opportunities for CLECs to "pick and choose," in ways said to be precluded by Eighth Count US Court opinions. This notion is not correct. The existence of a price schedule formally adopted by the Commission presents no conflict with

negotiated agreements because the price schedule does not present any new opportunity to pick and choose — beyond the options to which parties may mutually agree in existing or renegotiated contracts. Simply put, one of two things will occur with the prices adopted in this proceeding. The prices will either be folded into existing interconnection agreements, or they will not be folded in. The terms of the individual agreements themselves will determine which outcome applies. In the first case, if the prices are folded in, there will be no difference in the price terms of an agreement and the Commission's published schedule used for imputation tests. If the approved prices are not folded into an existing agreement, it will be because the parties to the agreement have elected to negotiate different prices, subject to the Commission's approval.

UNE Markups

Q. You noted that the Commission made extensive use of economic models for establishing UNE costs in Phase I. Was the Commission's approach consistent with that of other state commissions?

A. Yes. Most commissions have proceeded in essentially the same manner with respect to UNE prices, although many regulatory agencies have set actual UNE prices simultaneously with their determinations of forward looking economic costs. Using forward looking costs is consistent with the requirement in Section 252(d)(1) of the Telecommunications Act that "the just and reasonable rate for network elements…shall be based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element." It is always possible to put a "spin" on this language, but it is more instructive and useful to read the language as literally as possible. A rate base is a set of historical costs on a utility's regulated

books of account; a rate base proceeding is one that makes pricing decisions based on such costs.

Thus, taken literally, the Act specifically says to avoid using historical costs for pricing one particular type of telecommunications functions, i.e., interconnection and network elements that are offered to competing service providers. Clearly, nothing in the Act requires that ILEC's retail rates be modified or treated differently, even if those rates were set in a rate base proceeding or were derived using a price cap mechanism that started out with rates created in an earlier rate base proceeding. However, UNE costs and price cannot be derived in the same manner as ILECs' retail end user rates.

Q. Can the allocation of an ILEC's common costs be based on a commission's determinations in a prior rate base proceeding?

A. Clearly not. The Act's specification in this regard in entirely consistent with the encouragement of economically efficient competition. If a firm is operating efficiently, its common costs should be similar to an equally efficient rival of approximately the same size. Indeed, because common costs have a large fixed component, a larger firm may realize scale efficiencies and thus enjoy a lower percentage of common costs than a smaller rival. In telecommunications, this property should favor the ILECs, even if they were not allowed to recover all booked common costs from prices for UNEs.

On the other hand, if the firm is not operating efficiently, its common costs may be higher than those incurred even by a smaller rival. The firm's only option is to reduce its common costs, and through this process market competition creates the mechanism to

eliminate excess, inefficient costs. This process occurs unless, by virtue of its control of inputs needed by a rival firm, a firm could leverage its market power to impose its high costs onto the rival. Thus, if an ILEC has inefficiently high common costs and is allowed to transfer those costs to local market entrants, the incumbent LEC would be spared the necessity of adjusting its own cost structure.

Thus, the proscription against using a past or present rate base proceeding to set UNE prices has a sound economic foundation, in addition to being the most literal reading of the Act itself.

Q. Are USWC's and GTNW's Phase II pricing proposals consistent with the Act or sound economic policy?

A. No, they are not, for several reasons. Both ILECs want to apply markups to the Phase I ordered costs that are based on their retail regulated rate base costs and other adjustments unrelated to any cost at all. GTNW wants to increase its Commission-ordered costs by nearly 69% — a proposal that would essentially nullify the Commission's work in Phase I. USWC at least avoids the pretense of trying to define these costs; it refers to the additives merely as the "additional markup." GTNW, on the other hand, continues that company's practice of referring euphemistically to its "actual costs." In neither case, however, do the ILEC markup proposals relate to costs identified by the economic models, or even costs that could be traced to the companies' financial books of account. If there is any "cost" basis for the additional markups it would be found only on the ILECs' regulated books of account — i.e., the retail rate base.

Q. Is there a significant difference between the ILECs regulated rate base and their actual costs?

A. Yes. USWC has written off over $5.2 billion in plant assets over the last several years, and GTE Corp. has written off equipment and facilities worth about $7.6 billion on a pretax basis. In GTE's case, for example, this writeoff eliminated about 35% of its regulated rate base and on average reduced its monthly cost of service per customer access line by $8.00 to $10.00. GTE's annual reports note that the writeoff was made "in response to legislation and the increasingly competitive environment in which its telephone subsidiaries expect to operate."[17] Indeed, the applicable financial accounting standard states explicitly that if the effects of competition limit a utility's expectation of recovering any costs that regulators might have approved, such writeoffs are necessary in order to provide investors with accurate financial information. It notes, among other things, that "recent developments -- such as…increasing competition in the telecommunications industry -- [show] that the environment of a regulated enterprise can change rapidly."[18]

Thus, regardless of whether these "costs" continue to affect the ILECs rate base, the values cannot be recovered from UNE prices without confounding the very requirement that led to the writeoffs in the first place. The ILECs would be sending mixed signals to the investor community, stating on one hand that their expectation of recovering these asset values is uncertain, but on the other hand that regulators must reward them with full reimbursement nevertheless. In addition, a regulator's failure to allow an ILEC to

[17] Notes to Consolidated Final Statements, p. 34.

[18] FAS 71, Appendix C ¶s 66-69.

recover these values by marking up UNE costs cannot "confiscate" the ILEC's "property," because the asset values in question no longer exist.

Q. But the pricing narrative that GTNW filed on May 18 claims that its "actual costs" are not the same as its embedded costs or retail rate base. Is this claim relevant to the issues in Phase II?

A. Not really, it is a distinction of no particular significance. GTNW calculates its "actual costs" for purposes of its proposed 69% markup factor as the sum of the total value of its services and UNEs at the TELRIC cost plus the bulk of its incurred common and other costs.[19] Excluding the TELRIC associated with interstate access (times the relevant numbers of access lines), the total cost is about $388 million. In comparison, GTNW total intrastate expenses, taxes and net income were for 1996 was about $395.2 million.[20] Thus, there is approximately a 2% difference between GTNW's reckoning of its "actual" costs and its embedded costs.

GTNW's actual pricing proposal for its unbundled loop is about 22% above its total current unseparated non-traffic sensitive revenue requirement per access line (USWC's pricing proposal is over 11% above it equivalent unseparated unit embedded revenue requirement).[21]

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[19] GTNW pricing narrative, Table 1.

[20] FCC Joint Board Monitoring Report, May 1997, section 6 (including both GTE and Contel in Washington).

[21] Id., Table 3-13. The unseparated revenue requirement includes the ILECs' retail costs and switch costs as well.

Q. What other factors are proposed by the ILECs to increase the Commission ordered costs that are not cost related at all?

A. GTNW has taken USWC's previous proposals for a "sham unbundling" charge and carried that idea to its illogical extreme. GTNW proposes to apply a $26.67 monthly surcharge to all UNEs to prevent CLECs from realizing what the company incorrectly refers to as an "arbitrage opportunity." The correct term is price competition. GTNW calculates the surcharge based upon the cost of a CLEC's reselling GTNW's retail service in lieu of using its UNEs.[22] The Commission should reject this type of proposal categorically — unless it wants to virtually foreclose the Washington telecommunications market to further competition.

Q. Is GTNW's proposal anti-competitive?

A. Extremely. In the first place, there is no basis in the Telecommunications Act to substitute the separate statutory requirement for discounted resale of an ILECs retail services, in place of the pricing requirements for UNEs. Equally important, the companies that devoted the most time and resources to resale, AT&T and MCI, have both concluded that resale is not an economically viable strategy at this time.[23] This conclusion relates to an environment where the average resale discount is about 22%, significantly higher than the 14.69% and 12.77% discounts adopted by this Commission for USWC and GTNW respectively. Therefore, any UNE markup factor that is based,

[22] GTNW Pricing Narrative, Exhibit 1 page 2.

[23] See MCI Press Release dated January 22, 1998 and the speech by AT&T CEO Michael Armstrong on February 10, 1998.

even in part, on adopted resale discounts will ultimately make UNE based competition as unprofitable as resale has proven to be.

Q. Can you state what type of markup to TELRIC costs might be allowed to reflect recovery of USWC's or GTNW's non-retail common costs?

A. I have not completely reviewed the more recent state UNE pricing decisions, but the range of allowed markups in other states appears to fall between 8% and 15%. The Commission should not consider any markups above the upper end of this range and should, in fact, apply relatively more weight to the lower end.

Q. Should a markup of the same magnitude be applied to the Commission ordered costs for USWC's unbundled loops?

A. No. No additional markup for USWC's unbundled loops is warranted based on the methodology used to develop the ordered cost. The Commission considered three cost models and three cost values to determine the $17.00 per month ordered cost for USWC. After the Commission's analysis and modifications, these models produced direct cost estimates of $13.53, $13.76 and $17.23. It is, of course, not uncommon for different analytical processes to produce different results; one would see such results in equity cost determinations for regulated utilities, for example. The regulator's job is to choose among the possible values. In this instance, the values might have simply been averaged; the resulting cost would have been $14.84 per month. On the other hand, given the similarly of two of the three estimates, the higher estimate could have been treated as an outlier and excluded from the average cost. The monthly cost would have been $13.65.

Therefore, the cost value actually selected by the Commission includes an additional margin of about 25% over the average of the two closest cost estimates,[24] or a margin of about 15% over the simple average of the three cost estimates. In other words, while these markups are not explicitly cost related, i.e., they are derived from the combination of cost estimates not from the economic cost models themselves, they do provide additional compensation to USWC that has the same financial and economic effect as a markup designed to allow recovery of efficiently incurred wholesale common costs. USWC thus will have sufficient additional cash flow to offset reasonable levels of common costs and possibly other costs as well.

Conclusion

Q. Will you summarize your testimony?

A. Yes. I have recommended that the Commission implement a unified policy regarding transport and termination of all calls. I propose that all number portability costs be allocated in the manner adopted by the FCC for permanent number portability and by the WECA in this state. I have discussed why the Commission should seek to avoid prescribing a single set of operational terms and conditions in an interconnection tariff, which should contain only the final ordered rates in this proceeding.

Finally, I have shown that the ILECs' proposals to apply significant additional markups to the Commission ordered costs from Phase I should not be adopted. The Commission should limit any UNE markups to the ranges adopted by most other state regulators, i.e., approximately in the range of 8% to 15% above direct costs. Unbundled loops should

[24] ($17.00-$13.65)/$13.65 = 24.6%

not be subject to such markups, because the method used by the Commission to set USWC's loop cost already involves an large implied markup.

Q. Do you have any additional testimony at this time?

A. No.