Ex. ___ (MAW-T)

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 U S 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

REBUTTAL TESTIMONY

OF

MICHAEL A. WILLIAMS

April 25, 1997

WUTC DOCKET NO. UT-960369
EXHIBIT NO. T78
ADMIT ☒ W/D ☐ REJECT ☐

Ex. ___ (MAW-T)

GTE NORTHWEST INCORPORATED

REBUTTAL TESTIMONY OF

MICHAEL A. WILLIAMS

WUTC UT-960369, 960370, 960371

Q. PLEASE STATE YOUR FULL NAME AND BUSINESS ADDRESS.

A. My name is Michael A. Williams. My business address is Two Embarcadero Center, Suite 1160, San Francisco, CA 94111.

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

A. I am employed by Analysis Group Economics as a Vice President.

Q. DID YOU PREVIOUSLY PROVIDE DIRECT TESTIMONY BEFORE THIS REGULATORY COMMISSION IN THE CURRENT DOCKET?

A. Yes. I prefiled Direct Testimony on the subjects of (1) the types of costs that GTE should be allowed to recover, and (2) a brief discussion of how these costs could be recovered.[1]

Q. WHAT IS THE PURPOSE OF THIS REBUTTAL TESTIMONY?

A. This testimony responds to the Direct Testimonies of Dr. Glenn Blackmon, who testified on behalf of the Washington Utilities and Transportation Commission Staff;[2] Dr. Nina Cornell, who testified on behalf of AT&T and MCI;[3] and Mr. Timothy Peters, who testified on behalf of Sprint.[4]

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[1] *Testimony of Michael A. Williams before the Washington Utilities and Transportation Commission,* Docket Nos. UT-960369, UT-960370, and UT-960371.

[2] *Testimony of Glenn Blackmon, Ph.D. before the Washington Utilities and Transportation Commission,* Docket Nos. UT-960369, UT-960370, and UT-960371 (hereinafter "Blackmon Testimony").

Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.

A. Although I agree with certain positions taken by Dr. Blackmon in his Direct Testimony, his testimony fails to consider several critical economic issues. My rebuttal testimony elaborates on the economic implications of Dr. Blackmon's methodology for establishing the prices of unbundled network elements. In particular, Dr. Blackmon's proposed pricing methodology will not enable an incumbent local exchange carrier to cover its total actual costs. In addition, Dr. Blackmon's proposed pricing methodology fails to recognize that current retail prices contain cross subsidies that must first be removed by rebalancing rates. I also disagree with Dr. Cornell's suggestion that rates for unbundled network elements be set equal to TELRIC and Mr. Peters' proposal to mark-up unbundled network elements by a uniform percentage.

Q. PLEASE SUMMARIZE DR. BLACKMON'S PROPOSED METHODOLOGY FOR SETTING THE PRICES OF UNBUNDLED NETWORK ELEMENTS.

A. Dr. Blackmon proposes that the prices for unbundled network elements be set to "achieve rough parity with the incumbent's resale rates for bundled retail services."[5] As Dr. Blackmon correctly notes: "[f]inshed services and wholesale elements are generally close substitutes for each other, since the latter are piece parts of the former. Pricing one below the other sends the market incorrect signals that distort the choices of both consumers and competitors and it could

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[3] *Testimony of Nina W. Cornell before the Washington Utilities and Transportation Commission,* Docket Nos. UT-960369, UT-960370, and UT-960371 (hereinafter "Cornell Testimony").

[4] *Testimony of Timothy H. Peters before the Washington Utilities and Transportation Commission,* Docket Nos. UT-960369, UT-960370, and UT-960371 (hereinafter "Peters Testimony").

[5] Blackmon Testimony, page 7, line 2.

constitute undue discrimination."[6] Thus, if the prices of unbundled network elements were set so that (1) the effective discount off retail rates exceeded (2) the discount in resale rates, alternative local exchange carriers would arbitrage this price difference by purchasing unbundled network elements. This incorrect price signal would distort the alternative local exchange carrier's entry decision by biasing entry towards subsidized unbundled network elements and away from resale and efficient facilities-based entry.

Q. DOES DR. BLACKMON STATE THAT A PRICING PROPOSAL FOR UNBUNDLED NETWORK ELEMENTS SHOULD ALLOW THE INCUMBENT CARRIER TO RECOVER ITS COMMON COSTS?

A. Yes. Dr. Blackmon correctly states that: "Common costs are real costs and need to be recovered in prices for the firm to stay in business. They arise from economies of scope in a multi-product firm. A firm could have revenues sufficient to cover the TELRIC/TSLRIC of all the services it offers and still go out of business, if its revenues are not sufficient to cover its common costs."[7] I agree with Dr. Blackmon on this point.

Q. DOES DR. BLACKMON CONCLUDE THAT HIS PRICING PROPOSAL FOR UNBUNDLED NETWORK ELEMENTS WILL ALLOW THE INCUMBENT CARRIER TO RECOVER ITS COMMON COSTS?

A. Yes. He states that prices for unbundled network elements should be set "to achieve rough parity with the incumbent's resale rates for bundled retail services. Common costs are already included in retail rates, and it is appropriate to set wholesale prices with the same overall level of contribution to common costs."[8]

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[6] Blackmon Testimony, page 9, lines 9-13.

[7] Blackmon Testimony, page 5, lines 8-11.

[8] Blackmon Testimony, page 7, lines 2-4.

Q. WHAT DOES DR. BLACKMON'S STATEMENT IMPLY ABOUT THE PROPER MEASUREMENT OF COMMON COSTS?

A. Since Dr. Blackmon agrees that common costs are included in retail rates, it necessarily follows that by subtracting non-common costs, i.e., incremental costs, from retail rates, the remainder equals common costs. This is the procedure for measuring an incumbent carrier's common costs that I advocated in my direct testimony before this Commission in the GTE/Sprint arbitration proceeding.[9] That is, an incumbent local exchange carrier's forward-looking common costs can be estimated by subtracting the sum of its incremental costs from its total retail revenues. Common costs, however, cannot be calculated on a service by service basis because some services may be priced below cost. Only by subtracting the sum of all incremental costs from total retail revenues can one properly calculate the common costs. As discussed in my report for the arbitration proceeding,[10] a regulated firm's total revenues approximately equal its forward-looking total costs.

There are several reasons why this relation holds. Regulation prevents an incumbent carrier from earning economic profits, but it does allow the carrier to earn sufficient revenues to remain in business. More precisely, regulation provides a firm with sufficient cash flows so that its expected earnings provide a fair (i.e., competitive) rate of return on invested capital. Since the firm must

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[9] *Direct Testimony of Michael A. Williams (adopting the testimony of Michael J. Doane) before the Washington Utilities and Transportation Commission, In the Matter of the Petition of Sprint Communications Company L.P. for Arbitration of Interconnection Rates, Terms, Conditions, and Related Arrangements with GTE Northwest Incorporated*, Docket No. UT-9603485.

[10] Doane, M., Sibley, D., Sidak, G., Spulber, D., and Williams, M. (1996), AN ECONOMIC FRAMEWORK FOR IMPLEMENTING THE PRICING PROVISIONS OF THE TELECOMMUNICATIONS ACT OF 1996, Chapter III, pp. III-6 to III-8.

replace its capital on an on-going basis, its cash flows must approximately equal those that would result from the use of forward-looking total replacement costs rather than book costs. Since, as Dr. Blackmon states, common costs are included in retail rates, it follows that by subtracting all non-common costs from the sum of retail revenues, the remainder equals the firm's common costs.

Q. IN THIS REGARD, DOES DR. BLACKMON AGREE THAT REGULATION RESULTS IN RATES BASED ON A FIRM'S PRUDENTLY INCURRED, ACTUAL COSTS?

A. Yes. As he states: "Under regulation, rates are based on reasonable, prudently incurred actual expenses and investment."[11] I agree with Dr. Blackmon on this point, which leads to the above finding regarding the proper measurement of the firm's common costs. That is, since the firm's retail rates are based on its total actual costs, its common costs can be estimated by subtracting its incremental costs from total retail revenues.

Q. UNDER DR. BLACKMON'S PRICING PROPOSAL, ARE THE PRICES OF UNBUNDLED NETWORK ELEMENTS ULTIMATELY ESTABLISHED BY THE MARKET?

A. Yes. As Dr. Blackmon notes: "Once rates for unbundled network elements are established, the market can impose cost-minimizing discipline on the incumbents. To the extent an incumbent's unbundled network element rates are above economic costs, facilities-based competitors will be able to compete away that excess. Rather than increase the degree of regulatory scrutiny by trying to use cost models to set various unbundled element rates, Staff proposes to let competition determine what an efficient firm will charge."[12]

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[11] Blackmon Testimony, page 7, lines 16-17.

[12] Blackmon Testimony, page 8, line 15 to page 9, line 1.

Thus, competitive, facilities-based suppliers of local exchange services and unbundled network elements will constrain the incumbent's unbundled network element prices. Suppliers of unbundled network elements such as switches, transport, signaling, and loops include many companies. For example, with respect to switches, AT&T recently announced that it had signed contracts with six competitive access providers for unbundled switching services to be provided in 80 cities in the U.S.[13] The primary manufacturers of switches are Lucent Technologies, Siemens Stromberg-Carlson, and Northern Telecom, but Fujitsu, DSC, and other companies also supply switches that have applications in local exchange telecommunications. It might be argued that these companies manufacture switches as opposed to offering unbundled switching services. But this is only the difference between owning the switches by purchasing them from manufactures versus leasing the switching services from competitive access providers. From an economic standpoint, both owning and leasing unbundled switching services offer competitive substitutes to the unbundled switching services offered by incumbent local exchange carriers.

With respect to transport services, AT&T recently announced that it signed agreements with five companies (American Communications Services, Inc., Brooks Fiber, IntelCom Group, Hyperion, and Time Warner) for unbundled transport services in 70 U.S. cities.[14] Alternative local exchange carriers, therefore, are not dependent on incumbent local exchange carriers for their supply of unbundled transport services.

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[13] *AT&T: Will the Bad News Ever End?* (October 7, 1996), BUSINESS WEEK, page 128.

[14] *Telecommunications Reports* (April 15, 1996), page 11.

Unbundled signaling services are available from Illuminet, MCI, and Sprint. Indeed, recently GTE's long-distance subsidiary selected Sprint as its provider of signaling services.

Finally, unbundled loops currently are offered by competitive access providers, cable companies, and increasingly by wireless providers. As noted in a recent article, AT&T, "which became the nation's largest cellular operator with the purchase of McCaw Cellular Communications, Inc. in 1994, is furiously working on a technology that would allow it to bypass the wired network in cities and towns across the nation."[15] Indeed, shortly after publication of this article, AT&T announced plans to use wireless communications equipment to provide local exchange service.[16] Customers using AT&T's new service will continue to use their existing home or business phones, but rather than calls traveling across the incumbent local exchange carrier's local exchange network, they will be routed to a radio transceiver box mounted to the side of the home or business. The box would then transmit voice and data to a base station which would route the call across AT&T's wireless system to its switching centers to route the calls/data to their appropriate destinations.[17] Thus, competitive alternatives are available to alternative local exchange carriers for unbundled loops.

Q. WHAT IS THE ECONOMIC IMPLICATION OF HAVING THE PRICES OF UNBUNDLED NETWORK ELEMENTS DETERMINED BY THE MARKET?

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[15] *Vaulting the Walls with Wireless: AT&T May Use Cellular to Invade the Bells' Local-Phone Turf* (January 20, 1997), BUSINESS WEEK, page 85.

[16] *AT&T Steps Up Fight for Local Markets: Wireless Network System Aimed at Baby Bells Will Undergo Testing* (February 24, 1997), WALL STREET JOURNAL, page A-3.

[17] *AT&T to Test Wireless Homes* (February 26, 1997), NEW YORK TIMES, page C-1; *AT&T Phone-Link Plan to Come at High Cost* (February 25, 1997), WALL STREET JOURNAL.

A. Depending on the nature and extent of competition offered by facilities-based providers of local exchange services and unbundled network elements, a likely outcome is that the incumbent local exchange carrier would be unable to cover its total actual costs. That is, efficient, facilities-based suppliers of unbundled network elements may offer services at rates below the initial rates established under Dr. Blackmon's proposal, which are set "at rough parity with the incumbent's resale rates for bundled services."[18] Since some of these resale rates contain cross subsidies that allow GTE to offer other services at prices below TSLRIC, facilities-based providers of unbundled network elements likely will offer services at prices below rates set at rough parity with resale rates that are the source of cross subsidies. In this case, the incumbent supplier will be forced by the market to decrease the prices of the relevant unbundled network elements, which likely would eliminate the source of the cross subsidy funds and, thus, prevent the incumbent carrier from covering its total actual costs.

Q. IF THE PRICES OF UNBUNDLED NETWORK ELEMENTS DO NOT ALLOW THE INCUMBENT CARRIER TO COVER ITS TOTAL ACTUAL COSTS, WHAT DO YOU RECOMMEND?

A. As discussed in my Direct Testimony, such a shortfall "should be recovered with a competitively neutral charge, which could be implemented in a variety of ways. For example, a charge could be placed on end users, alternative local exchange carriers, or both. The important point is that the effect of the charge would be pro-competitive in that it would allow the incumbent local exchange carrier to offer the services demanded by end users and alternative local exchange carriers. Conversely, the failure to impose such a charge necessarily would have the

[18] Blackmon Testimony, page 7, line 2.

anticompetitive result of preventing the incumbent carrier from offering the services demanded by end users and alternative local exchange carriers."[19]

Q. IS THERE A POSSIBLE CONFLICT BETWEEN DR. BLACKMON'S RECOMMENDATIONS THAT PRICES FOR UNBUNDLED NETWORK ELEMENTS BE SET (1) NO LOWER THAN TELRIC AND (2) IN ROUGH PARITY WITH THE INCUMBENT'S RESALE RATES?

A. Yes. If the existing retail rate for a service is subsidized, i.e., less than its TSLRIC, then the corresponding resale rate also will be subsidized. Under Dr. Blackmon's pricing proposal, the corresponding unbundled network element prices would be set in rough parity with these below-cost rates. Dr. Blackmon recognizes this possible conflict and recommends that in no cases should the price of an unbundled network element be set below TELRIC.[20]

This problem could be solved by rebalancing rates to remove cross subsidies. As discussed in the Direct Testimony of Mr. Seaman, one beneficial effect of such rate rebalancing is that it reduces the ability of entrants to "cream skim" by offering local exchange services to customers paying rates that subsidize below-cost services.[21] In addition, rate rebalancing increases the desirable aspects of Dr. Blackmon's pricing proposal for unbundled network elements.

Suppose the prices of unbundled network elements were in rough parity with resale rates for services that subsidize below-cost services. In this case,

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[19] *Testimony of Michael A. Williams before the Washington Utilities and Transportation Commission,* Docket Nos. UT-960369, UT-960370, and UT-960371, page 6, lines 13-21.

[20] Blackmon Testimony, page 10, lines 3-4.

[21] *Testimony of Meade C. Seaman before the Washington Utilities and Transportation Commission,* Docket Nos. UT-960369, UT-960370, and UT-960371.

even an inefficient facilities-based entrant could enter profitably. By rebalancing rates, the amount of cost recovery collected in retail rates from services that subsidize below-cost services will be reduced so that the initial rates of the corresponding unbundled network elements also will decline. This will make it less likely that inefficient suppliers of unbundled network elements could enter profitably. The net effect of rate rebalancing is that the resulting prices of unbundled network elements will recover the maximum amount of the incumbent's common costs, given market constraints.

Q. DOES DR. BLACKMON ARGUE THAT RATES FOR UNBUNDLED NETWORK ELEMENTS SHOULD BE SET AT TELRIC IF THOSE ELEMENTS HAVE NO RETAIL COUNTERPART?

A. Yes. For example, Dr. Blackmon cites interim and permanent number portability as network elements with no retail counterparts and concludes that their prices should be set at TELRIC.[22]

Q. DO YOU AGREE WITH DR. BLACKMON ON THIS POINT?

A. No. Assuming, *arguendo*, that some network element did not have a retail counterpart, the price of that element still should be established by market forces rather than constrained to equal TELRIC. Such a constraint would reduce the incumbent local exchange carriers' ability to recover its common costs, which necessarily would result in larger competitively neutral payments by others to cover the firm's total actual costs.

Q. DOES DR. CORNELL AGREE WITH DR. BLACKMON THAT PRICES FOR UNBUNDLED NETWORK ELEMENTS SHOULD BE SET TO ACHIEVE ROUGH PARITY WITH THE INCUMBENT'S RESALE RATES AND THEN, ONCE RATES

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[22] Blackmon Testimony, page 11, line 12 to page 12, line 3.

ARE ESTABLISHED, COMPETITION WILL DETERMINE WHAT AN EFFICIENT FIRM WILL CHARGE?

A. No. Dr. Cornell advocates that rates for unbundled network elements be set equal to TELRIC.[23] As Dr. Blackmon correctly notes, this pricing proposal fails to recognize the presence of non-incremental (i.e., common) costs. Indeed, this is the reason why the Federal Communications Commission ("FCC") also rejected setting prices for unbundled network elements equal to TELRIC and instead concluded: "Because forward-looking common costs are consistent with our forward-looking, economic cost paradigm, a reasonable measure of such costs shall be included in the prices for interconnection and access to network elements."[24] Moreover, the FCC defined a "reasonable" allocation of common costs as follows: "The sum of the allocation of forward-looking common costs for all elements and services shall equal the total forward-looking common costs, exclusive of retail costs, attributable to operating the incumbent [local exchange carrier's] total network, so as to provide all the elements and services offered."[25] Thus, according to the FCC, the prices of unbundled network elements should recover all common costs, exclusive of retail costs.

Furthermore, since TELRIC pricing fails to recover the firm's total actual costs, exclusive of retail costs, it violates section 252(d) of the *Telecommunications Act of 1996*, which specifies that the prices of unbundled

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[23] Cornell Testimony, page 21, line 13 to page 22, line 11.

[24] Federal Communications Commission, *First Report and Order*, CC Docket Nos. 96-98 and 95-185, ¶ 694.

[25] Federal Communications Commission, *Amendments to the Code of Federal Regulations*, § 51.505(c)(2)(B).

network elements shall be based on the cost of providing the elements and may include a reasonable profit.[26]

In addition, TELRIC pricing is discriminatory because it creates cross subsidies for entrants whenever two unbundled network elements share non-incremental costs. For example, consider the costs of the following three unbundled network elements:

- Incremental cost of element *A* equals $1
- Incremental cost of element *B* equals $1
- Incremental cost of element *C* equals $1
- Non-incremental, shared cost of elements *A* and *B* equals $5
- Total cost of all services equals $8.

In this case, TELRIC pricing would yield revenues of $2 for services *A* and *B*, but the incremental cost of *A* and *B* together equals $7. Thus, TELRIC pricing creates a cross subsidy to entrants that effectively discriminates against incumbent local exchange carriers who necessarily incur these non-incremental costs.

These subsidized rates also will prevent the entry of efficient, facilities-based carriers. Suppose an efficient facilities-based entrant could supply unbundled elements *A* and *B* at a cost of $6, i.e., less than the incumbent's cost of $7. In this case, entry would not occur due to the availability of services *A* and *B* at the subsidized TELRIC price of $2. Thus, consumers would be denied the benefits of a lower-cost source of supply of unbundled network elements.

Finally, Dr. Cornell's proposal is inefficient since every rate change would require a costly, time-consuming cost proceeding. Instead, Dr. Blackmon's

[26] 47 U.S.C. § 252(d)(1).

proposal allows the market to determine efficient prices, which could change rapidly, perhaps even on a daily basis. Dr. Blackmon's proposal allows the Commission to avoid the regulatory burden of endless cost dockets having the futile purpose of attempting to establish efficient prices that ultimately will be determined by the market.

Q. DOES DR. BLACKMON AGREE WITH MR. PETERS THAT PRICES FOR UNBUNDLED NETWORK ELEMENTS SHOULD HAVE A UNIFORM MARKUP TO RECOVER COMMON COSTS?

A. No. Mr. Peters advocates that the prices of unbundled network elements be marked up by a uniform percentage not to exceed 15 percent.[27] Dr. Blackmon correctly rejects such a uniform markup, noting that "[j]ust as retail prices are not uniformly marked up above incremental cost, a uniform markup of wholesale prices is inappropriate. Neither economic efficiency nor the public interest would be advanced by recovering common costs of the firm uniformly across all elements."[28]

A uniform markup is, by construction, *ad hoc* and therefore cannot result in prices that respond to market forces. For example, some prices may be set too high, i.e., in excess of entrants' stand-alone costs. This would encourage entry by inefficient facilities-based carriers. Moreover, there is no reason to expect that the incumbent's non-incremental costs are necessarily less than or equal to 15 percent of its incremental costs. Thus, there is no reason to expect that such a markup would enable the incumbent to cover its total actual costs.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

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[27] Peters Testimony, page 16, lines 16-21.

[28] Blackmon Testimony, page 6, lines 6-9.

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